

# ETSI TS 118 118 V2.13.1 (2020-12)



**oneM2M;  
Test Suite Structure and Test Purposes;  
(oneM2M TS-0018 version 2.13.1 Release 2)**



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Reference

RTS/oneM2M-000018v2

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Keywords

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***ETSI***

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# Foreword

This Technical Specification (TS) has been produced by ETSI Partnership Project oneM2M (oneM2M).

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# 1 Scope

The present document specifies oneM2M test suite structure and test purposes that are designed to evaluate the conformity of oneM2M implementations to the oneM2M specifications. It also specifies:

- guidelines for description of test behaviours and definition of test purpose structure;
  - notations to define a test purpose for conformance testing; and
  - test configurations for conformance testing.
- 

# 2 References

## 2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

The following referenced documents are necessary for the application of the present document.

- [1] ETSI TS 118 101: "oneM2M Functional Architecture" (oneM2M TS-0001).
- [2] ETSI TS 118 104: "oneM2M Service Layer Core Protocol Specification" (oneM2M TS-0004).
- [3] ETSI TS 118 115: "oneM2M Testing Framework" (oneM2M TS-0015).
- [4] oneM2M TS-0017: "Implementation Conformance Statements".
- [5] ETSI TS 118 110: "oneM2M MQTT-protocol-binding" (oneM2M TS-0010).

## 2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] oneM2M Drafting Rules.

NOTE: Available at <http://www.onem2m.org/images/files/oneM2M-Drafting-Rules.pdf>.

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# 3 Definition of terms, symbols and abbreviations

## 3.1 Terms

For the purposes of the present document, the terms given in ETSI TS 118 115 [3] Testing Framework and the following apply:

**valid <OPERATION> Request:** oneM2M Request primitive that only contains all mandatory primitive parameters with correct values which are not required to be explicitly specified in the test purpose

NOTE: If specific values need to be specified, parameters need to be explicitly indicated in the test purpose. Operation parameter is set to <OPERATION>.

**valid Response:** oneM2M Response primitive that only contains all mandatory primitive parameters with correct values which are not required to be explicitly specified in the test purpose

NOTE: If specific values need to be specified, parameters need to be explicitly indicated in the test purpose.  
Request Identifier parameter contains the Request Identifier value of the corresponding Request.

**valid <ATTRIBUTE\_NAME>:** correct value for the <ATTRIBUTE\_NAME> attribute which is not required to be explicitly specified in the test purpose

## 3.2 Symbols

Void.

## 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in ETSI TS 118 101 [1] and the following apply:

ADN	Application Dedicated Node
ADN-AE	AE which resides in the Application Dedicated Node
AE	Application Entity
AE-ID	Application Entity-IDentifier
APP-ID	APPlication IDentifier
ASN	Application Service Node
BR	BlockingRequest
CMDH	Communication Management and Delivery Handling
CSE	Common Service Entity
CSE-ID	Common Service Entity Identifier
CSF	Common Service Function
DIS	DIScovery
DMR	Data Management and Repository
DUT	Device Under Test
FLXC	FLeXContainer
FQDN	Fully Qualified Domain Name
GEN	GENeral capability
GMG	Group ManaGement
ICS	Implementation Conformance Statements
IN	Infrastructure Node
IN-CSE	CSE which resides in the Infrastructure Node
IP	Internet Protocol
IUT	Implementation Under Test
MA	MAndatory
MN	Middle Node
MN-CSE	CSE which resides in the Middle Node
NA	Not Applicable
NBA	NonBlockingrequestAsynch
NBR	NonBlockingRequest
NBS	NonBlockingrequestSynch
PCH	Request Message Polling
PICS	Protocol Implementation Conformance Statements
PX_POA	Protocol implementation eXtra information for testing_ PointOfAccess
PX_SRT	Protocol implementation eXtra information for testing_ SupportedResourceType
REG	REGistration
REQ	REQuest
RT	Response Type
RW	Read Write
SCEF	Service Capability Exposure Function
SEC	SECurity
SUB	SUBscription and Notification
SUT	System Under Test
TP	Test Purposes

TS	Technical Specification
TSS	Test Suite Structure
TTCN	Testing and Test Control Notation
URI	Uniform Resource Identifier
URL	Uniform Resource Locator

## 4 Conventions

The key words "Shall", "Shall not", "May", "Need not", "Should", "Should not" in the present document are to be interpreted as described in the oneM2M Drafting Rules [i.1].

## 5 Prerequisites and Test Configurations

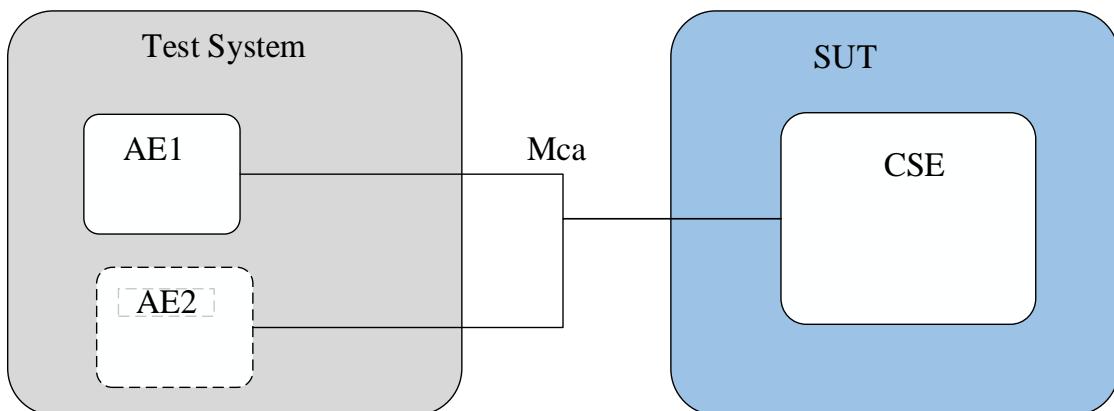
### 5.1 Test Configurations

Test configurations are defined to test different entities such as CSE and AE etc.

Figure 5.1-1 and Figure 5.1-2 show CSE test configurations where CSE as a IUT can be tested against TTCN-3 Test System, which is acting as AE or AE and CSE respectively. Test system may include as well other entities which are necessary for each configuration, i.e. a second AE (AE2) for receiving notifications These entities are represented with dashed rectangles.

Figure 5.1-3 shows AE test configuration (CF03) for ADN-AE testing scenario where ADN-AE is IUT and TTCN-3 Test System is acting as a CSE.

Figure 5.1-4 depicts test configurations between two CSEs, where one CSE is acting as a Test System, the other is SUT.



**Figure 5.1-1: Test configuration 1 (CF01)**

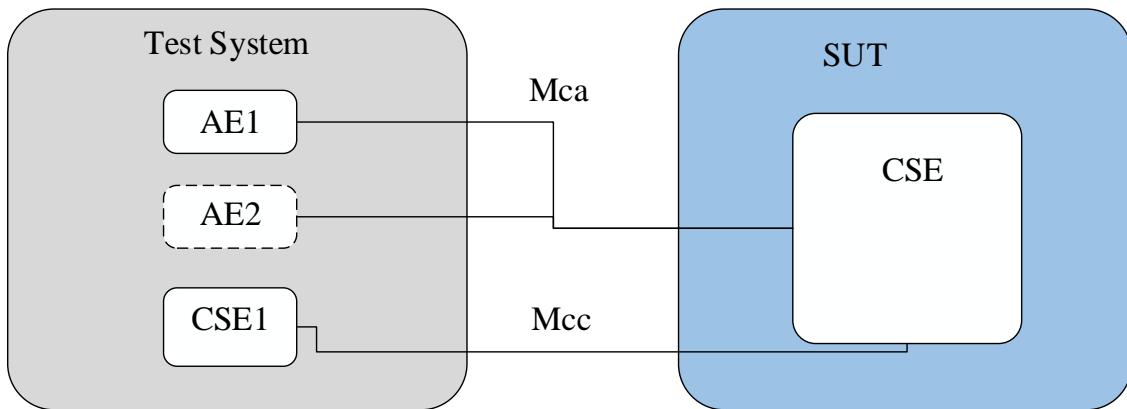


Figure 5.1-2: Test configuration 2 (CF02)

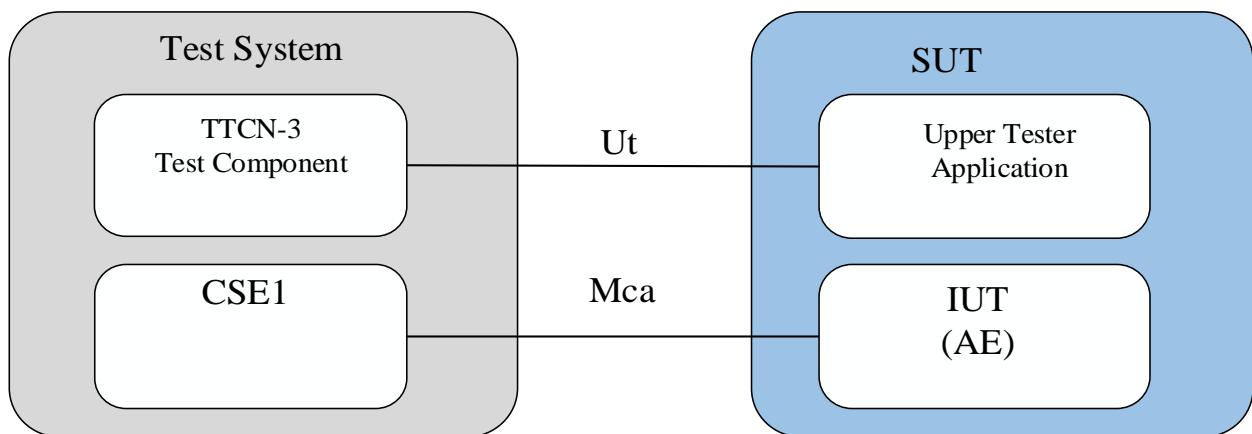


Figure 5.1-3: Test configuration 3 (CF03)

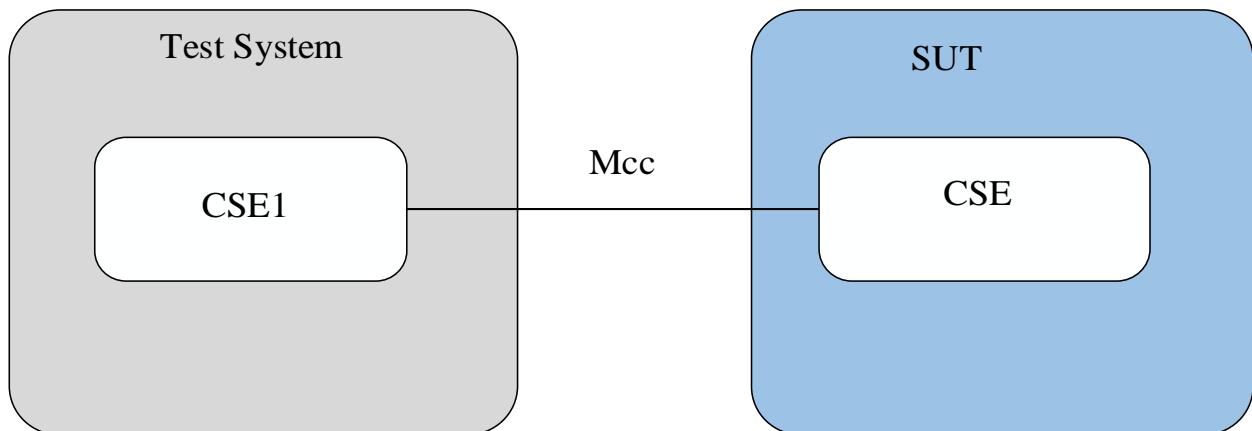


Figure 5.1-4: Test configuration 4 (CF04)

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## 6 Test Suite Structure (TSS)

### 6.1 Test groups

#### 6.1.0 Overview

The test groups are organized in 2 levels. The first level defines the functional entity of oneM2M. The second level defines the common services functions which are represented in oneM2M functional architecture.

#### 6.1.1 Functional Entity Groups

The functional entity groups identify the types of entity which are specified in oneM2M functional architecture (ETSI TS 118 101 [1]):

- AE
- CSE

#### 6.1.2 Common Services Functions Subgroups

The common services functions subgroups identify the general procedures in each common services functions specified in oneM2M functional architecture (ETSI TS 118 101 [1]):

- Registration
- Data Management and Repository
- Subscription and Notification
- Group Management
- Discovery
- Location
- Device Management
- Communication Management and Delivery Handling
- Security

#### 6.1.3 oneM2M Resource Primitives specific Operations

A group of resource type specific procedures are defined in oneM2M functional architecture (ETSI TS 118 101 [1]) and service layer core protocol (ETSI TS 118 104 [2]). Those procedures can be potentially abstracted with requirements for generating test purposes for conformance testing purpose. Those resource type specific procedures are the complementary procedures to the general procedures defined in oneM2M Common Service Functions (CSF) and will use for subgroups of structures for oneM2M tests. A list of those procedures are including:

- pollingChannel
- non-blocking communication
- retargeting
- FlexContainer

## 6.2 Test Suite Structure (TSS) for oneM2M

The Test Suite Structure (TSS) for oneM2M will be present as below:

- Group 1: General Capability (GEN):
  - Subgroup 1.1: Protocol Bindings
  - Subgroup 1.2: Serializations
- Group 2: AE(AE):
  - Subgroup 2.1: General Capability (GEN)
  - Subgroup 2.2: Registration(REG)
  - Subgroup 2.3: Data Management and Repository(DMR)
  - Subgroup 2.4: Subscription and Notification(SUB)
  - Subgroup 2.5: Communication Management and Delivery Handling(CMDH)
  - Subgroup 2.5.1: Request Message Polling(PCH)
- Group 3: CSE(CE):
  - Subgroup 3.1: General Capability (GEN)
  - Subgroup 3.2: Registration(REG)
  - Subgroup 3.3: Data Management and Repository(DMR)
  - Subgroup 3.4: Subscription and Notification(SUB)
  - Subgroup 3.5: Group Management(GMG)
  - Subgroup 3.6: Discovery(DIS)
  - Subgroup 3.7: Communication Management and Delivery Handling(CMDH)
  - Subgroup 3.7.1: Request Message Polling(PCH)
  - Subgroup 3.7.2: Response Type(RT)
  - Subgroup 3.8: Security(SEC)
  - Subgroup 3.9: FlexContainer (FLXC)

## 7 Test Purposes (TP)

### 7.1 Introduction

#### 7.1.1 TP definition conventions

The TP definition is constructed according to Test Suite Structure & Test Purposes(TSS&TP) in Testing Framework (ETSI TS 118 115 [3]).

#### 7.1.2 TP Identifier naming conventions

The identifier of the TP is constructed according to table 7.1.2-1.

**Table 7.1.2-1: TP naming convention for oneM2M**

Name	Option	Interpretation
TP/<root>/<ent>/<gr>[<sgr>][<opr>]<nnn>_<pmu>		
<root> = root	oneM2M	oneM2M
<ent> = entity	AE	Application Entity
	CSE	Common Services Entity
<gr> = group	GEN	Common Service Function
	REG	
	DMR	
	SUB	
	GMG	
	DIS	
	SEC	
	FLXC	
<sgr> = sub-group	ACP	AccessControlPolicy
<opr> = operation	CRE	Create
	UPD	Update
	RET	Retrieve
	DEL	Delete
	NTF	Notify
<nnn> = sequential number	001 to 999	023
<pmu> = permutation part	May be number, short name of attribute or resource type depend on the permuted part in the TP. If there are more than one permuted variables, they should be separated by slash '/'.	Enumerated type attribute and its value is represented as <VARIABLE_1>/<VALUE>, e.g. TP/oneM2M/CSE/DMR/RET/020_RCN/0 When resourceType attribute is involved in a TP Id, the resourceType shall be put in first order followed by any other attribute(s), if any, <RESOURCE_TYPE>/<VARIABLE_1>/<VARIABLE_2> e.g. TP/oneM2M/CSE/DMR/CRE/015_CNT/ACPI

### 7.1.3 Rules for the behaviour description

The description of the TP is built according to ETSI TS 118 115 [3] Testing Framework.

In addition, the following rules apply:

- 1) Primitive parameters shall use their *Parameter name* as indicated in ETSI TS 118 104 [2] table 8.2.2-1.
- 2) Resource attributes shall use their *Attribute name* as indicated in ETSI TS 118 104 [2] table 8.2.3 followed by "attribute".
- 3) When *Content* request parameter contains a resource representation, such representation shall contain all mandatory attributes and could contain some optional attributes. Only those attributes and/or child resources required by the test purpose will be explicitly indicated.
- 4) When *Content* response parameter contains a resource representation, such representation shall contain attributes and/or child resources according to the Result Content parameter of the corresponding request. Only those attributes and/or child resources required by the test purpose will be explicitly indicated.

### 7.1.4 ICS reference

**Table 7.1.4-1: Node**

Item	Name of field	Reference	Status	Support
1	ASN (Application Service Node)	5.1.2	o.1	
2	ADN (Application Dedicated Node)	5.1.2	o.1	
3	IN (Infrastructure Node)	5.1.2	o.1	
4	MN (Middle Node)	5.1.2	o.1	
o.1: Exactly one item shall be supported				

**Table 7.1.4-2: Functional entity type**

Prerequisite: A.1				
Item	Name of field	Reference	Status	Support
1	AE	5.1.1	c.1	
2	CSE	5.1.1	c.2	
c.1: If A.1-1 or A.1-2 then m else o				
c.2: If A.1-2 x else m				

**Table 7.1.4-3: Mnemonics for PICS reference**

Mnemonic	PICS item
PICS_AE	oneM2M TS-0017 [4], table A.5.1-1
PICS_CSE	oneM2M TS-0017 [4], table A.5.1-1
PICS ASN_CSE	oneM2M TS-0017 [4], table A.5.1-2
PICS_ADN	oneM2M TS-0017 [4], table A.5.1-2
PICS_IN_CSE	oneM2M TS-0017 [4], table A.5.1-2
PICS_MN_CSE	oneM2M TS-0017 [4], table A.5.1-2
PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	oneM2M TS-0017 [4], table A.5.2-1
PICS_UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	oneM2M TS-0017 [4], table A.5.2-1
PICS_SP_RELATIVE_RESOURCE_ID	oneM2M TS-0017 [4], table A.5.2-1
PICS_ABSOLUTE_RESOURCE_ID	oneM2M TS-0017 [4], table A.5.2-1
PICS_ACP_SUPPORT	oneM2M TS-0017 [4], table A.5.6-1
PICS_CB_CST	oneM2M TS-0017 [4], table A.5.7-1
PICS_CB_NL	oneM2M TS-0017 [4], table A.5.7-1
PICS_CSR_RN	oneM2M TS-0017 [4], table A.5.7-2
PICS_CSR_ET	oneM2M TS-0017 [4], table A.5.7-2
PICS_CSR_LBL	oneM2M TS-0017 [4], table A.5.7-2
PICS_CSR_POA	oneM2M TS-0017 [4], table A.5.7-2
PICS_CSR_NL	oneM2M TS-0017 [4], table A.5.7-2
PICS_CSR_CST	oneM2M TS-0017 [4], table A.5.7-2
PICS_CSR_RR	oneM2M TS-0017 [4], table A.5.7-2
PICS_AE_LBL	oneM2M TS-0017 [4], table A.5.7-3
PICS_AE_APN	oneM2M TS-0017 [4], table A.5.7-3
PICS_AE_POA	oneM2M TS-0017 [4], table A.5.7-3
PICS_AE_NL	oneM2M TS-0017 [4], table A.5.7-3
PICS_AE_CSZ	oneM2M TS-0017 [4], table A.5.7-3
PICS_CNT ACPI	oneM2M TS-0017 [4], table A.5.7-5
PICS_CNT_MNI	oneM2M TS-0017 [4], table A.5.7-5
PICS_CNT_MBS	oneM2M TS-0017 [4], table A.5.7-5
PICS_CNT_MIA	oneM2M TS-0017 [4], table A.5.7-5
Mnemonic	PICS item
PICS_CNT_OR	oneM2M TS-0017 [4], table A.5.7-5
PICS_CNT_LI	oneM2M TS-0017 [4], table A.5.7-5
PICS_CNT_RN	oneM2M TS-0017 [4], table A.5.7-5

PICS_CNT_ET	oneM2M TS-0017 [4], table A.5.7-5
PICS_CNT_LBL	oneM2M TS-0017 [4], table A.5.7-5
PICS_CNT_CR	oneM2M TS-0017 [4], table A.5.7-5
PICS_CIN_CNF	oneM2M TS-0017 [4], table A.5.7-6
PICS_CIN_RN	oneM2M TS-0017 [4], table A.5.7-6
PICS_CIN_ET	oneM2M TS-0017 [4], table A.5.7-6
PICS_CIN_LBL	oneM2M TS-0017 [4], table A.5.7-6
PICS_CIN_CR	oneM2M TS-0017 [4], table A.5.7-6
PICS_ACP_LBL	oneM2M TS-0017 [4], table A.5.7-4
PICS_SUB ACPI	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_LBL	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_ENC	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_EXC	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_GPI	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_NFU	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_BN	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_RL	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_PN	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_NSP	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_LN	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_NCT	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_NE	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_CR	oneM2M TS-0017 [4], table A.5.7-7
PICS_SUB_SU	oneM2M TS-0017 [4], table A.5.7-7
PICS_GRP_LBL	oneM2M TS-0017 [4], table A.5.7-8
PICS_GRP ACPI	oneM2M TS-0017 [4], table A.5.7-8
PICS_GRP_MACP	oneM2M TS-0017 [4], table A.5.7-8
PICS_GRP_GN	oneM2M TS-0017 [4], table A.5.7-8

## 7.2 Test Purposes for oneM2M Service Primitives

### 7.2.1 Group AE (AE)

#### 7.2.1.1 General Capability (GEN)

##### 7.2.1.1.1 CREATE Operation

TP/oneM2M/AE/GEN/CRE/001

<b>TP Id</b>	TP/oneM2M/AE/GEN/CRE/001	
<b>Test objective</b>	Check that the IUT sends the creation of a <container> resource using unstructured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE, PICS_UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> registered <b>and</b> the IUT <b>being</b> switched on <b>and</b> the IUT <b>being configured</b> to use <b>NON_HIERARCHICAL_RESOURCE_ADDRESS</b> <b>and</b> the IUT <b>having</b> privileges to perform CREATE operation on resource <b>TARGET_RESOURCE_ADDRESS</b> <b>}</b>	
<b>Test behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b> <b>To set to</b> <b>NON_HIERARCHICAL_RESOURCE_ADDRESS</b> <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Container CREATE Request <b>to CSE containing</b> <b>To set to</b> <b>NON_HIERARCHICAL_RESOURCE_ADDRESS</b> <b>and</b> <b>From set to</b> <b>AE_ID</b> <b>}</b>	<b>Direction</b> NA CSE ← IUT

<b>TP Id</b>	<b>NON_HIERARCHICAL_RESOURCE_ADDRESS</b>
TP/oneM2M/AE/GEN/CRE/001_CSR	UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/AE/GEN/CRE/001_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/AE/GEN/CRE/001_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID.

## TP/oneM2M/AE/GEN/CRE/002

<b>TP Id</b>	TP/oneM2M/AE/GEN/CRE/002							
<b>Test objective</b>	Check that the IUT sends the creation of a <container> resource using structured resource identifier							
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1							
<b>Config Id</b>	CF03							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_AE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT							
<b>Initial conditions</b>	<p>with {</p> <p style="padding-left: 20px;">the IUT <b>being</b> registered <b>and</b>            the IUT <b>being</b> switched on <b>and</b>            the IUT <b>being configured</b> to use <i>HIERARCHICAL_RESOURCE_ADDRESS</i> <b>and</b>            the IUT <b>having</b> privileges to perform CREATE operation on resource            TARGET_RESOURCE_ADDRESS            }</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {            the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b>            To <b>set to</b> <i>HIERARCHICAL_RESOURCE_ADDRESS</i> <b>and</b>            Resource Type <b>set to</b> 3 (container) <b>and</b>            From <b>set to</b> AE_ID <b>and</b>            Content <b>containing</b>            container resource representation            }         </td><td>NA</td></tr> <tr> <td> <b>then</b> {            the IUT <b>sends</b> a valid CREATE Request <b>to</b> CSE <b>containing</b>            To <b>set to</b> <i>HIERARCHICAL_RESOURCE_ADDRESS</i> <b>and</b>            Resource Type <b>set to</b> 3 (container) <b>and</b>            From <b>set to</b> AE_ID <b>and</b>            Content <b>containing</b>            container resource representation            }         </td><td>CSE ← IUT</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when</b> { the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b> To <b>set to</b> <i>HIERARCHICAL_RESOURCE_ADDRESS</i> <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> container resource representation }	NA	<b>then</b> { the IUT <b>sends</b> a valid CREATE Request <b>to</b> CSE <b>containing</b> To <b>set to</b> <i>HIERARCHICAL_RESOURCE_ADDRESS</i> <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> container resource representation }	CSE ← IUT	
<b>Test events</b>	<b>Direction</b>							
<b>when</b> { the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b> To <b>set to</b> <i>HIERARCHICAL_RESOURCE_ADDRESS</i> <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> container resource representation }	NA							
<b>then</b> { the IUT <b>sends</b> a valid CREATE Request <b>to</b> CSE <b>containing</b> To <b>set to</b> <i>HIERARCHICAL_RESOURCE_ADDRESS</i> <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> container resource representation }	CSE ← IUT							

<b>TP Id</b>	<b>HIERARCHICAL_RESOURCE_ADDRESS</b>
TP/oneM2M/AE/GEN/CRE/002_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/AE/GEN/CRE/002_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/AE/GEN/CRE/002_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID.

### 7.2.1.1.2 UPDATE Operation

TP/oneM2M/AE/GEN/UPD/001

<b>TP Id</b>	TP/oneM2M/AE/GEN/UPD/001	
<b>Test objective</b>	Check that the IUT sends the update of a <container> resource using unstructured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE, PICS_UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<pre>with {     the IUT being registered and     the IUT being switched on and     the IUT being configured to use NON_HIERARCHICAL_RESOURCE_ADDRESS and     the IUT having created a container resource CONTAINER_RESOURCE_ADDRESS and     the IUT having privileges to perform UPDATE operation on resource CONTAINER_RESOURCE_ADDRESS }</pre>	
<b>Expected behaviour</b>	<b>Test events</b> <pre>when {     the IUT is triggered to send a valid UPDATE Request containing         To set to CONTAINER_RESOURCE_ADDRESS and         Content containing             container resource containing                 valid labels attribute }</pre> <pre>then {     the IUT sends a valid UPDATE request to CSE containing         To set to NON_HIERARCHICAL_RESOURCE_ADDRESS and         From set to AE_ID and         Content containing             container resource containing                 valid labels attribute }</pre>	<b>Direction</b> NA IUT → CSE

TP Id	NON_HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/AE/GEN/UPD/001_CSR	UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/AE/GEN/UPD/001_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/AE/GEN/UPD/001_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID.

## TP/oneM2M/AE/GEN/UPD/002

<b>TP Id</b>	TP/oneM2M/AE/GEN/UPD/002	
<b>Test objective</b>	Check that the IUT sends the update of a <container> resource using structured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> registered <b>and</b> the IUT <b>being</b> switched on <b>and</b> the IUT <b>being configured</b> to use <i>HIERARCHICAL_RESOURCE_ADDRESS</i> <b>and</b> the IUT <b>having</b> created a container resource <i>CONTAINER_RESOURCE_ADDRESS</i> <b>and</b> the IUT <b>having</b> privileges to perform UPDATE operation on resource <i>CONTAINER_RESOURCE_ADDRESS</i> <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>is triggered to send</b> a valid UPDATE Request <b>containing</b> To <b>set to</b> <i>CONTAINER_RESOURCE_ADDRESS</i> <b>and</b> Content <b>containing</b> container resource <b>containing</b> valid labels attribute <b>}</b>	NA
	<b>then {</b> the IUT <b>sends</b> a valid UPDATE request <b>to</b> CSE <b>containing</b> To <b>set to</b> <i>HIERARCHICAL_RESOURCE_ADDRESS</i> <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> Container resource <b>containing</b> valid labels attribute <b>}</b>	IUT → CSE

<b>TP Id</b>	<b>HIERARCHICAL_RESOURCE_ADDRESS</b>
TP/oneM2M/AE/GEN/UPD/002_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/AE/GEN/UPD/002_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/AE/GEN/UPD/002_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID.

### 7.2.1.1.3 RETRIEVE Operation

TP/oneM2M/AE/GEN/RET/001

<b>TP Id</b>	TP/oneM2M/AE/GEN/RET/001	
<b>Test objective</b>	Check that the IUT sends the retrieval of a <container> resource using unstructured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE, PICS_UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being registered and</b> the IUT <b>being switched on and</b> the IUT <b>being configured</b> to use <b>NON_HIERARCHICAL_RESOURCE_ADDRESS</b> <b>and</b> the IUT <b>having</b> created a container resource <b>CONTAINER_RESOURCE_ADDRESS</b> <b>and</b> the IUT <b>having</b> privileges to perform RETRIEVE operation on container resource <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid RETRIEVE request <b>to CSE containing</b> To <b>set to</b> NON_HIERARCHICAL_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>}</b>	<b>Direction</b> NA IUT → CSE

TP Id	NON_HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/AE/GEN/RET/001_CSR	UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/AE/GEN/RET/001_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/AE/GEN/RET/001_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID.

TP/oneM2M/AE/GEN/RET/002

<b>TP Id</b>	TP/oneM2M/AE/GEN/RET/002	
<b>Test objective</b>	Check that the IUT sends the retrieval of a <container> resource using structured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being registered and</b> the IUT <b>being switched on and</b> the IUT <b>being configured</b> to use <b>HIERARCHICAL_RESOURCE_ADDRESS</b> <b>and</b> the IUT <b>having</b> created a container resource <b>CONTAINER_RESOURCE_ADDRESS</b> <b>and</b> the IUT <b>having</b> privileges to perform RETRIEVE operation on container resource <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid RETRIEVE request <b>to CSE containing</b> To <b>set to</b> HIERARCHICAL_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>}</b>	<b>Direction</b> NA IUT → CSE

TP Id	HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/AE/GEN/RET/002_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/AE/GEN/RET/002_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/AE/GEN/RET/002_ABS	ABSOLUTE_RESOURCE_ID, (see note)
NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID.	

### 7.2.1.1.4 DELETE Operation

TP/oneM2M/AE/GEN/DEL/001

TP Id	TP/oneM2M/AE/GEN/DEL/001	
Test objective	Check that the IUT sends the deletion of a <container> resource using unstructured resource identifier	
Reference	ETSI TS 118 101 [1], table 9.3.1-1	
Config Id	CF03	
Parent Release	Release 1	
PICS Selection	PICS_AE, PICS_UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
Initial conditions	<b>with {</b> the IUT <b>being</b> registered <b>and</b> the IUT <b>being</b> switched on <b>and</b> the IUT <b>being configured</b> to use <b>NON_HIERARCHICAL_RESOURCE_ADDRESS</b> <b>and</b> the IUT <b>having</b> created a container resource <b>CONTAINER_RESOURCE_ADDRESS</b> <b>and</b> the IUT <b>having</b> privileges to perform <b>DELETE</b> operation on container resource <b>}</b>	
Expected behaviour	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid <b>DELETE Request</b> <b>containing</b> To <b>set to</b> <b>CONTAINER_RESOURCE_ADDRESS</b> <b>}</b>	Direction NA
	<b>then {</b> the IUT <b>sends</b> a valid <b>DELETE request</b> <b>to CSE</b> <b>containing</b> To <b>set to</b> <b>NON_HIERARCHICAL_RESOURCE_ADDRESS</b> <b>and</b> From <b>set to</b> <b>AE_ID</b> <b>}</b>	IUT → CSE

TP Id	NON_HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/AE/GEN/DEL/001_CSR	UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/AE/GEN/DEL/001_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/AE/GEN/DEL/001_ABS	ABSOLUTE_RESOURCE_ID, (see note)
NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID.	

TP/oneM2M/AE/GEN/DEL/002

<b>TP Id</b>	TP/oneM2M/AE/GEN/DEL/002	
<b>Test objective</b>	Check that the IUT sends the deletion of a <container> resource using structured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<p>with {</p> <p style="padding-left: 20px;">the IUT <b>being</b> registered <b>and</b>            the IUT <b>being</b> switched on <b>and</b>            the IUT <b>being configured</b> to use <i>HIERARCHICAL_RESOURCE_ADDRESS</i> <b>and</b>            the IUT <b>having</b> created a container resource <i>CONTAINER_RESOURCE_ADDRESS</i> <b>and</b>            the IUT <b>having</b> privileges to perform DELETE operation on container resource            }</p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>is triggered to send</b> a valid DELETE Request <b>containing</b> To <b>set to</b> <i>CONTAINER_RESOURCE_ADDRESS</i> <b>}</b>	NA
	<b>then {</b> the IUT <b>sends</b> a valid DELETE request <b>to</b> CSE <b>containing</b> To <b>set to</b> <i>HIERARCHICAL_RESOURCE_ADDRESS</i> <b>and</b> From <b>set to</b> <i>AE_ID</i> <b>}</b>	IUT → CSE

<b>TP Id</b>	<b>HIERARCHICAL_RESOURCE_ADDRESS</b>
TP/oneM2M/AE/GEN/DEL/002_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/AE/GEN/DEL/002_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/AE/GEN/DEL/002_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID.

## 7.2.1.2 Registration (REG)

### 7.2.1.2.1 CREATE Operation

TP/oneM2M/AE/REG/CRE/001

<b>TP Id</b>	TP/oneM2M/AE/REG/CRE/001	
<b>Test objective</b>	Check that the IUT sends an AE initial registration request with no AE-ID-STEM provided when it is started	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 - case C, and clause 9.6.19	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>never being</b> registered <b>and</b> the IUT <b>being</b> switched off <b>and</b> the IUT <b>having got</b> a valid APP-ID <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b> To <b>set to</b> CSE_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 2 (AE) <b>and</b> Content <b>containing</b> AE resource representation <b>}</b>	NA
	<b>then {</b> the IUT <b>sends</b> a valid CREATE Request <b>to</b> CSE <b>containing</b> Resource Type <b>set to</b> 2 (AE) <b>and</b> To <b>set to</b> CSE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> empty <b>and</b> Content <b>containing</b> AE resource representation <b>}</b>	CSE ← IUT

TP/oneM2M/AE/REG/CRE/002

<b>TP Id</b>	TP/oneM2M/AE/REG/CRE/002	
<b>Test objective</b>	Check that the IUT sends a registration CREATE Request with the value of the attribute <b>ATTRIBUTE_NAME</b> of the AE resource	
<b>Reference</b>	ETSI TS 118 104 [2], clause 7.4.5.1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>never being</b> registered <b>and</b> the IUT <b>being</b> switched off <b>and</b> the IUT <b>having got</b> a valid APP-ID <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 2 (AE) <b>and</b> Content <b>containing</b> AE resource <b>containing</b> ATTRIBUTE_NAME attribute <b>}</b>	NA

	<pre> <b>then {</b>     the IUT <b>sends</b> a valid CREATE Request <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID <b>and</b>         Content <b>containing</b>             AE resource <b>containing</b>                 valid ATTRIBUTE_NAME attribute <b>}</b> </pre>	IUT → CSE
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TP Id	Reference	ATTRIBUTE_NAME
TP/oneM2M/AE/REG/CRE/002_RN	ETSI TS 118 104 [2], clause 7.4.5.1	resourceName
TP/oneM2M/AE/REG/CRE/002_ET	ETSI TS 118 104 [2], clause 7.4.5.1	expirationTime
TP/oneM2M/AE/REG/CRE/002_LBL	ETSI TS 118 104 [2], clause 7.4.5.1	labels
TP/oneM2M/AE/REG/CRE/002_APN	ETSI TS 118 104 [2], clause 7.4.5.1	appName
TP/oneM2M/AE/REG/CRE/002_API	ETSI TS 118 104 [2], clause 7.4.5.1	App-ID
TP/oneM2M/AE/REG/CRE/002_POA	ETSI TS 118 104 [2], clause 7.4.5.1	pointOfAccess
TP/oneM2M/AE/REG/CRE/002_OR	ETSI TS 118 104 [2], clause 7.4.5.1	ontologyRef
TP/oneM2M/AE/REG/CRE/002_NL	ETSI TS 118 104 [2], clause 7.4.5.1	nodeLink
TP/oneM2M/AE/REG/CRE/002_RR	ETSI TS 118 104 [2], clause 7.4.5.1	requestReachability
TP/oneM2M/AE/REG/CRE/002_CSZ	ETSI TS 118 104 [2], clause 7.4.5.1	contentSerialization

### 7.2.1.2.2 DELETE Operation

TP/oneM2M/AE/REG/DEL/001

TP Id	TP/oneM2M/AE/REG/DEL/001	
Test objective	Check that the IUT sends AE deregistration request to CSE	
Reference	ETSI TS 118 101 [1], clause 10.1.4.2.2	
Config Id	CF03	
Parent Release	Release 1	
PICS Selection	PICS_AE	
Initial conditions	<b>with {</b> the IUT <b>being</b> in the "initial state"           the IUT <b>having registered</b> to CSE <b>and</b> the IUT <b>having</b> privileges to perform DELETE operation on the resource AE to CSE <b>}</b>	
Expected behaviour	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid DELETE Request <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid DELETE Request <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>}</b>	<b>Direction</b> NA CSE ← IUT

### 7.2.1.3 Data Management and Repository (DMR)

#### 7.2.1.3.1 CREATE Operation

TP/oneM2M/AE/DMR/CRE/001

<b>TP Id</b>	TP/oneM2M/AE/DMR/CRE/001	
<b>Test objective</b>	Check that the IUT sends a Container creation request when it is triggered	
<b>Reference</b>	ETSI TS 118 101 [1], clauses 10.1.1.1 and 10.2.4.1, ETSI TS 118 104 [2], clauses 7.2.2.1 and 7.4.6.1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE.	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> registered <b>and</b> the IUT <b>being</b> switched on <b>and</b> the IUT <b>having</b> privileges to perform CREATE operation on resource AE_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>when {</b> the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> container resource representation <b>}</b>	NA
	<b>then {</b> the IUT <b>sends</b> a valid CREATE Request <b>to</b> CSE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> container resource representation <b>}</b>	CSE ← IUT

TP/oneM2M/AE/DMR/CRE/002

<b>TP Id</b>	TP/oneM2M/AE/DMR/CRE/002	
<b>Test objective</b>	Check that the IUT sends a ContentInstance creation request when it is triggered	
<b>Reference</b>	ETSI TS 118 101 [1], clauses 10.1.1.1 and 10.2.4.1, ETSI TS 118 104 [2], clauses 7.2.2.1 and 7.4.7.2.1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE.	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> registered <b>and</b> the IUT <b>having</b> created a container resource CONTAINER_RESOURCE_ADDRESS <b>and</b> the IUT <b>having</b> privileges to perform CREATE operation on resource CONTAINER_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>when {</b> the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 4 (contentinstance) <b>and</b> Content <b>containing</b> contentinstance resource representation <b>}</b>	NA

	<pre> <b>then {</b>     the IUT <b>sends</b> a valid CREATE Request <b>to</b> CSE <b>containing</b>         To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b>         Resource Type <b>set to</b> 4 (contentInstance) <b>and</b>         From <b>set to</b> AE_ID <b>and</b>         Content <b>containing</b>             contentInstance resource representation <b>}</b> </pre>	CSE ← IUT
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TP/oneM2M/AE/DMR/CRE/003

TP Id	TP/oneM2M/AE/DMR/CRE/003	
Test objective	Check that the IUT sends a ContentInstance creation request with optional attribute ATTRIBUTE_NAME	
Reference	ETSI TS 118 101 [1], clauses 10.1.1.1 and 10.2.4.1, ETSI TS 118 104 [2], clauses 7.2.2.1 and 7.4.7.2.1	
Config Id	CF03	
Parent Release	Release 1	
PICS Selection	PICS_AE	
Initial conditions	<b>with {</b> the IUT <b>being registered and</b> the IUT <b>having</b> created a container resource CONTAINER_RESOURCE_ADDRESS through preconfiguration request <b>and</b> the IUT <b>having</b> privileges to perform CREATE operation on resource CONTAINER_RESOURCE_ADDRESS <b>}</b>	
Expected behaviour	Test events	Direction
	<b>when {</b> the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 4 (contentInstance) <b>and</b> Content <b>containing</b> ContentInstance resource <b>containing</b> valid ATTRIBUTE_NAME attribute <b>}</b>	NA
	<b>then {</b> the IUT <b>sends</b> a valid CREATE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 4 (contentInstance) <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> ContentInstance resource <b>containing</b> valid ATTRIBUTE_NAME attribute <b>}</b>	CSE ← IUT

TP Id	PICS Selection	ATTRIBUTE_NAME
TP/oneM2M/AE/DMR/CRE/003_CNF	PICS_CIN_CNF	contentInfo
TP/oneM2M/AE/DMR/CRE/003_RN	PICS_CIN_RN	resourceName
TP/oneM2M/AE/DMR/CRE/003_ET	PICS_CIN_ET	expirationTime
TP/oneM2M/AE/DMR/CRE/003_LBL	PICS_CIN_LBL	labels
TP/oneM2M/AE/DMR/CRE/003_CR	PICS_CIN_CR	creator

## TP/oneM2M/AE/DMR/CRE/004

<b>TP Id</b>	TP/oneM2M/AE/DMR/CRE/004	
<b>Test objective</b>	Check that the IUT sends a Container creation request with optional attribute ATTRIBUTE_NAME when it is triggered	
<b>Reference</b>	ETSI TS 118 101 [1], clauses 10.1.1.1 and 10.2.4.1, ETSI TS 118 104 [2], clauses 7.2.2.1 and 7.4.6.1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE.	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> registered <b>and</b> the IUT <b>having</b> privileges to perform CREATE operation on resource AE_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>is triggered to</b> send a valid CREATE Request <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> Content <b>containing</b> container resource <b>containing</b> valid ATTRIBUTE_NAME attribute <b>}</b>	NA
	<b>then {</b> the IUT <b>sends</b> a valid CREATE Request <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> container resource <b>containing</b> valid ATTRIBUTE_NAME attribute <b>}</b>	CSE ← IUT

<b>TP Id</b>	<b>PICS Selection</b>	<b>ATTRIBUTE_NAME</b>
TP/oneM2M/AE/DMR/CRE/004 ACPI	PICS_CNT ACPI	accessControlPolicyIDs
TP/oneM2M/AE/DMR/CRE/004_MNI	PICS_CNT_MNI	maxNrOfInstances
TP/oneM2M/AE/DMR/CRE/004_MBS	PICS_CNT_MBS	maxByteSize
TP/oneM2M/AE/DMR/CRE/004_MIA	PICS_CNT_MIA	maxInstanceAge
TP/oneM2M/AE/DMR/CRE/004_OR	PICS_CNT_OR	ontologyRef
TP/oneM2M/AE/DMR/CRE/004_LI	PICS_CNT_LI	locationID
TP/oneM2M/AE/DMR/CRE/004_RN	PICS_CNT_RN	resourceName
TP/oneM2M/AE/DMR/CRE/004_ET	PICS_CNT_ET	expirationTime
TP/oneM2M/AE/DMR/CRE/004_LBL	PICS_CNT_LBL	labels
TP/oneM2M/AE/DMR/CRE/004_CR	PICS_CNT_CR	creator

### 7.2.1.3.2 UPDATE Operation

TP/oneM2M/AE/DMR/UPD/001

<b>TP Id</b>	TP/oneM2M/AE/DMR/UPD/001	
<b>Test objective</b>	Check that the IUT sends an UPDATE Request with the value of the attribute <i>ATTRIBUTE_NAME</i> of the AE resource	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE	
<b>Initial conditions</b>	<pre>with {     the IUT <b>being</b> registered <b>containing</b>     a RW attribute <i>ATTRIBUTE_NAME</i> }</pre>	
<b>Expected behaviour</b>	<b>Test events</b> <pre>when {     the IUT <b>is triggered to send</b> a valid UPDATE Request <b>containing</b>     To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>     Content <b>containing</b>     AE resource <b>containing</b>     valid <i>ATTRIBUTE_NAME</i> attribute }  then {     the IUT <b>sends</b> a valid UPDATE Request <b>containing</b>     To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>     From <b>set to</b> AE_ID <b>and</b>     Content <b>containing</b>     AE resource <b>containing</b>     valid <i>ATTRIBUTE_NAME</i> attribute }</pre>	<b>Direction</b> NA IUT → CSE

<b>TP Id</b>	<b>Reference</b>	<b>ATTRIBUTE_NAME</b>
TP/oneM2M/AE/DMR/UPD/001_ET	ETSI TS 118 104 [2], clause 7.4.5.1	expirationTime
TP/oneM2M/AE/DMR/UPD/001_LBL	ETSI TS 118 104 [2], clause 7.4.5.1	labels
TP/oneM2M/AE/DMR/UPD/001_APN	ETSI TS 118 104 [2], clause 7.4.5.1	appName
TP/oneM2M/AE/DMR/UPD/001_POA	ETSI TS 118 104 [2], clause 7.4.5.1	pointOfAccess
TP/oneM2M/AE/DMR/UPD/001_OR	ETSI TS 118 104 [2], clause 7.4.5.1	ontologyRef
TP/oneM2M/AE/DMR/UPD/001_NL	ETSI TS 118 104 [2], clause 7.4.5.1	nodeLink
TP/oneM2M/AE/DMR/UPD/001_RR	ETSI TS 118 104 [2], clause 7.4.5.1	requestReachability
TP/oneM2M/AE/DMR/UPD/001_CSZ	ETSI TS 118 104 [2], clause 7.4.5.1	contentSerialization

## TP/oneM2M/AE/DMR/UPD/002

<b>TP Id</b>	TP/oneM2M/AE/DMR/UPD/002							
<b>Test objective</b>	Check that the IUT sends an UPDATE Request with the value of the attribute <i>ATTRIBUTE_NAME</i> of the <container> resource							
<b>Reference</b>	ETSI TS 118 104 [2], clause 7.4.6.2.3							
<b>Config Id</b>	CF03							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_AE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> registered <b>containing</b>            the IUT <b>having</b> created a container resource CONTAINER_RESOURCE_ADDRESS <b>and</b>            the IUT <b>having</b> privileges to perform UPDATE operation on resource            CONTAINER_RESOURCE_ADDRESS  <b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>is triggered to send</b> a valid UPDATE Request <b>containing</b>            To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b>            Content <b>containing</b>            container resource <b>containing</b>            valid <i>ATTRIBUTE_NAME</i> attribute  <b>}</b> </td><td>NA</td></tr> <tr> <td> <b>then {</b>            the IUT <b>sends</b> a valid UPDATE Request <b>containing</b>            To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE_ID <b>and</b>            Content <b>containing</b>            container resource <b>containing</b>            valid <i>ATTRIBUTE_NAME</i> attribute  <b>}</b> </td><td>IUT → CSE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>is triggered to send</b> a valid UPDATE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b> Content <b>containing</b> container resource <b>containing</b> valid <i>ATTRIBUTE_NAME</i> attribute <b>}</b>	NA	<b>then {</b> the IUT <b>sends</b> a valid UPDATE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> container resource <b>containing</b> valid <i>ATTRIBUTE_NAME</i> attribute <b>}</b>	IUT → CSE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>is triggered to send</b> a valid UPDATE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b> Content <b>containing</b> container resource <b>containing</b> valid <i>ATTRIBUTE_NAME</i> attribute <b>}</b>	NA							
<b>then {</b> the IUT <b>sends</b> a valid UPDATE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> container resource <b>containing</b> valid <i>ATTRIBUTE_NAME</i> attribute <b>}</b>	IUT → CSE							

<b>TP Id</b>	<b>Reference</b>	<b>ATTRIBUTE_NAME</b>
TP/oneM2M/AE/DMR/UPD/002_ET	ETSI TS 118 104 [2], clause 7.4.6.2.3	expirationTime
TP/oneM2M/AE/DMR/UPD/002_LBL	ETSI TS 118 104 [2], clause 7.4.6.2.3	labels
TP/oneM2M/AE/DMR/UPD/002_MNI	ETSI TS 118 104 [2], clause 7.4.6.2.3	maxNrOfInstances
TP/oneM2M/AE/DMR/UPD/002_MBS	ETSI TS 118 104 [2], clause 7.4.6.2.3	maxByteSize
TP/oneM2M/AE/DMR/UPD/002_MIA	ETSI TS 118 104 [2], clause 7.4.6.2.3	maxInstanceAge

### 7.2.1.3.3 RETRIEVE Operation

TP/oneM2M/AE/DMR/RET/001

<b>TP Id</b>	TP/oneM2M/AE/DMR/RET/001	
<b>Test objective</b>	Check that the IUT sends a RETRIEVE Request on the TARGET_RESOURCE_ADDRESS to CSE	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2, ETSI TS 118 104 [2], clause 7.2.2.1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE.	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> registered  <b>and</b> the IUT <b>being</b> switched on  <b>and</b> the CSE <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE  <b>and</b> the IUT <b>having</b> privileges to perform RETRIEVE operation on resource TARGET_RESOURCE_ADDRESS  }</p>	
<b>Expected behaviour</b>	<p><b>Test events</b></p> <p><b>when {</b>  the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS  <b>}</b></p> <p><b>then {</b>  the IUT <b>sends</b> a valid RETRIEVE Request <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID  <b>}</b></p>	<b>Direction</b>  NA  IUT → CSE

TP Id	Reference	RESOURCE_TYPE
TP/oneM2M/AE/DMR/RET/001_CB	ETSI TS 118 101 [1], clause 10.2.3.2	5 (CSEBase)
TP/oneM2M/AE/DMR/RET/001_AE	ETSI TS 118 101 [1], clause 10.2.1.2	2 (AE)
TP/oneM2M/AE/DMR/RET/001_CNT	ETSI TS 118 101 [1], clause 10.2.4.2	3 (Container)

TP/oneM2M/AE/DMR/RET/002

<b>TP Id</b>	TP/oneM2M/AE/DMR/RET/002	
<b>Test objective</b>	Check that the IUT sends a RETRIEVE Request of oldest virtual resource.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.23.1, ETSI TS 118 104 [2], clause 7.4.28.2.3	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> registered  <b>and</b> the IUT <b>being</b> switched on  <b>and</b> the CSE <b>having created</b> a container resource  <b>and</b> the CSE <b>having created</b> a contentInstance resource under container resource  <b>and</b> the IUT <b>having</b> privileges to perform RETRIEVE operation on contentInstance resource  }</p>	
<b>Expected behaviour</b>	<p><b>Test events</b></p> <p><b>when {</b>  the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b>  To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/oldest  <b>}</b></p> <p><b>then {</b>  the IUT <b>sends</b> a valid RETRIEVE Request <b>containing</b>  To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/oldest <b>and</b>  From <b>set to</b> AE_ID  <b>}</b></p>	<b>Direction</b>  NA  IUT → CSE

## TP/oneM2M/AE/DMR/RET/003

<b>TP Id</b>	TP/oneM2M/AE/DMR/RET/003	
<b>Test objective</b>	Check that the IUT sends a RETRIEVE Request of latest virtual resource.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.22.1, ETSI TS 118 104 [2], clause 7.4.27.2.3	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> registered <b>and the IUT being</b> switched on <b>and the CSE having created</b> a container resource <b>and the CSE having created</b> a contentInstance resource under container resource <b>and the IUT having</b> privileges to perform RETRIEVE operation on contentInstance resource <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/latest <b>}</b>	NA
	<b>then {</b> the IUT <b>sends</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/latest <b>and</b> From <b>set to</b> AE_ID <b>}</b>	IUT → CSE

## TP/oneM2M/AE/DMR/RET/004

<b>TP Id</b>	TP/oneM2M/AE/DMR/RET/004	
<b>Test objective</b>	Check that the IUT sends a <container> resource RETRIEVE Request to CSE	
<b>Reference</b>	ETSI TS 118 104 [2], clause 7.4.6.2.2	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE.	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> registered <b>and the IUT being</b> switched on <b>and the IUT having</b> created a container resource CONTAINER_RESOURCE_ADDRESS <b>and the IUT having</b> privileges to perform RETRIEVE operation on container resource <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>}</b>	NA
	<b>then {</b> the IUT <b>sends</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>}</b>	IUT → CSE

## TP/oneM2M/AE/DMR/RET/005

<b>TP Id</b>	TP/oneM2M/AE/DMR/RET/005							
<b>Test objective</b>	Check that the IUT sends a <contentInstance> resource RETRIEVE Request to CSE							
<b>Reference</b>	ETSI TS 118 104 [2], clause 7.4.7.2.2							
<b>Config Id</b>	CF03							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_AE.							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> registered  <b>and</b> the IUT <b>being</b> switched on  <b>and</b> the CSE <b>having created</b> a container resource  <b>and</b> the CSE <b>having created</b> a contentInstance resource under container resource  <b>and</b> the IUT <b>having</b> privileges to perform RETRIEVE operation on contentInstance resource</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {                       the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b>             To <b>set to</b> CONTENTINSTANCE_RESOURCE_ADDRESS         }       </td><td>NA</td></tr> <tr> <td> <b>then</b> {                       the IUT <b>sends</b> a valid RETRIEVE Request <b>containing</b>             To <b>set to</b> CONTENTINSTANCE_RESOURCE_ADDRESS <b>and</b>             From <b>set to</b> AE_ID         }       </td><td>IUT → CSE</td></tr> </tbody> </table>	Test events	Direction	<b>when</b> { the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> CONTENTINSTANCE_RESOURCE_ADDRESS         }	NA	<b>then</b> { the IUT <b>sends</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> CONTENTINSTANCE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID         }	IUT → CSE	
Test events	Direction							
<b>when</b> { the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> CONTENTINSTANCE_RESOURCE_ADDRESS         }	NA							
<b>then</b> { the IUT <b>sends</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> CONTENTINSTANCE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID         }	IUT → CSE							

## 7.2.1.3.4 DELETE Operation

## TP/oneM2M/AE/DMR/DEL/001

<b>TP Id</b>	TP/oneM2M/AE/DMR/DEL/001							
<b>Test objective</b>	Check that the IUT sends a DELETE Request of oldest virtual resource.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.23.2, ETSI TS 118 104 [2], clause 7.4.28.2.5							
<b>Config Id</b>	CF03							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_AE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> registered  <b>and</b> the IUT <b>being</b> switched on  <b>and</b> the CSE <b>having created</b> a container resource  <b>and</b> the CSE <b>having created</b> a contentInstance resource under container resource  <b>and</b> the IUT <b>having</b> privileges to perform DELETE operation on contentInstance resource</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {                       the IUT <b>is triggered to send</b> a valid DELETE Request <b>containing</b>             To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/oldest         }       </td><td>NA</td></tr> <tr> <td> <b>then</b> {                       the IUT <b>sends</b> a valid DELETE Request <b>containing</b>             To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/oldest <b>and</b>             From <b>set to</b> AE_ID         }       </td><td>IUT → CSE</td></tr> </tbody> </table>	Test events	Direction	<b>when</b> { the IUT <b>is triggered to send</b> a valid DELETE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/oldest         }	NA	<b>then</b> { the IUT <b>sends</b> a valid DELETE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/oldest <b>and</b> From <b>set to</b> AE_ID         }	IUT → CSE	
Test events	Direction							
<b>when</b> { the IUT <b>is triggered to send</b> a valid DELETE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/oldest         }	NA							
<b>then</b> { the IUT <b>sends</b> a valid DELETE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/oldest <b>and</b> From <b>set to</b> AE_ID         }	IUT → CSE							

## TP/oneM2M/AE/DMR/DEL/002

<b>TP Id</b>	TP/oneM2M/AE/DMR/DEL/002	
<b>Test objective</b>	Check that the IUT sends a DELETE Request of latest virtual resource.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.22.2, ETSI TS 118 104 [2], clause 7.4.27.2.5	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> registered and the IUT <b>being</b> switched on and the CSE <b>having created</b> a container resource and the CSE <b>having created</b> a contentInstance resource under container resource and the IUT <b>having</b> privileges to perform DELETE operation on contentInstance resource <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid DELETE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/oldest <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid DELETE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/latest <b>and</b> From <b>set to</b> AE_ID <b>}</b>	<b>Direction</b> NA IUT → CSE

## TP/oneM2M/AE/DMR/DEL/003

<b>TP Id</b>	TP/oneM2M/AE/DMR/DEL/003	
<b>Test objective</b>	Check that the IUT sends a <container> resource DELETE request to CSE	
<b>Reference</b>	ETSI TS 118 104 [2], clause 7.4.6.2.4	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> registered <b>and</b> and the IUT <b>being</b> switched on and the IUT <b>having</b> created a container resource CONTAINER_RESOURCE_ADDRESS and the IUT <b>having</b> privileges to perform DELETE operation on container resource <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid DELETE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid DELETE Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>}</b>	<b>Direction</b> NA CSE ← IUT

TP/oneM2M/AE/DMR/DEL/004

<b>TP Id</b>	TP/oneM2M/AE/DMR/DEL/004	
<b>Test objective</b>	Check that the IUT sends a <contentInstance> resource DELETE request to CSE	
<b>Reference</b>	ETSI TS 118 104 [2], clause 7.4.7.2.4	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> registered and the IUT <b>being</b> switched on and the CSE <b>having created</b> a container resource and the CSE <b>having created</b> a contentInstance resource under container resource and the IUT <b>having</b> privileges to perform DELETE operation on contentInstance resource <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid DELETE Request <b>containing</b> To <b>set to</b> CONTENTINSTANCE_RESOURCE_ADDRESS <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid DELETE Request <b>containing</b> To <b>set to</b> CONTENTINSTANCE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>}</b>	<b>Direction</b> NA CSE ← IUT

## 7.2.1.4 Subscription and Notification (SUB)

### 7.2.1.4.1 CREATE Operation

TP/oneM2M/AE/SUB/CRE/001

<b>TP Id</b>	TP/oneM2M/AE/SUB/CRE/001	
<b>Test objective</b>	Check that the IUT sends a subscription creation request	
<b>Reference</b>	ETSI TS 118 101 [1], clauses 10.1.1.1 and 10.2.4.1, ETSI TS 118 104 [2], clauses 7.2.2.1 and 7.4.8.2.1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE.	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> registered <b>and</b> the IUT <b>being</b> switched off <b>and</b> the IUT <b>having</b> privileges to perform CREATE operation on resource AE_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b> Resource Type <b>set to</b> 23 (subscription) <b>and</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> Content <b>containing</b> subscription resource representation <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid CREATE Request <b>to</b> CSE <b>containing</b> Resource Type <b>set to</b> 23 (subscription) <b>and</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> subscription resource representation <b>}</b>	<b>Direction</b> NA CSE ← IUT

TP/oneM2M/AE/SUB/CRE/002

<b>TP Id</b>	TP/oneM2M/AE/SUB/CRE/002	
<b>Test objective</b>	Check that the IUT sends a subscription creation request with optional attribute ATTRIBUTE_NAME when it is triggered	
<b>Reference</b>	ETSI TS 118 101 [1], clauses 10.1.1.1 and 10.2.11.2, ETSI TS 118 104 [2], clauses 7.2.2.1 and 7.4.8.2.1	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE.	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> registered <b>and</b> the IUT <b>having</b> privileges to perform CREATE operation on resource AE_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 23 (subscription) <b>and</b> Content <b>containing</b> subscription resource <b>containing</b> notificationURI attribute <b>and</b> valid ATTRIBUTE_NAME attribute <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid CREATE Request <b>to</b> CSE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 23 (subscription) <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> subscription resource <b>containing</b> notificationURI attribute <b>and</b> valid ATTRIBUTE_NAME attribute <b>}</b>	<b>Direction</b> NA CSE ← IUT

<b>TP Id</b>	<b>PICS Selection</b>	<b>Reference</b>	<b>ATTRIBUTE_NAME</b>
TP/oneM2M/AE/SUB/CRE/002 ACPI	PICS_SUB ACPI	ETSI TS 118 101 [1], clause 9.6.8, ETSI TS 118 104 [2], clause 7.4.8.1	accessControlPolicyIDs
TP/oneM2M/AE/SUB/CRE/002 ENC	PICS_SUB ENC	ETSI TS 118 101 [1], clause 9.6.8, ETSI TS 118 104 [2], clause 7.4.8.1	eventNotificationCriteria
TP/oneM2M/AE/SUB/CRE/002 EXC	PICS_SUB EXC	ETSI TS 118 101 [1], clause 9.6.8, ETSI TS 118 104 [2], clause 7.4.8.1	expirationCounter
TP/oneM2M/AE/SUB/CRE/002 NFU	PICS_SUB NFU	ETSI TS 118 101 [1], clause 9.6.8, ETSI TS 118 104 [2], clause 7.4.8.1	notificationForwardingURI
TP/oneM2M/AE/SUB/CRE/002 NCT	PICS_SUB NCT	ETSI TS 118 101 [1], clause 9.6.8, ETSI TS 118 104 [2], clause 7.4.8.1	notificationContentType
TP/oneM2M/AE/SUB/CRE/002 NEC	PICS_SUB NEC	ETSI TS 118 101 [1], clause 9.6.8, ETSI TS 118 104 [2], clause 7.4.8.1	notificationEventCat
TP/oneM2M/AE/SUB/CRE/002 SU	PICS_SUB SU	ETSI TS 118 101 [1], clause 9.6.8, ETSI TS 118 104 [2], clause 7.4.8.1	subscriberURI

### 7.2.1.4.2 NOTIFY Operation

TP/oneM2M/AE/SUB/NTF/001

<b>TP Id</b>	TP/oneM2M/AE/SUB/NTF/001	
<b>Test objective</b>	Check that the IUT sends a Notify Response to the hosting CSE when receiving a Notify request containing a single notification	
<b>Reference</b>	ETSI TS 118 101 [1], clause 6.1.12, ETSI TS 118 104 [2], clause 7.5.1.2	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE	
<b>Initial conditions</b>	<pre>with {     the IUT having been registered and     the IUT having created subscription resource under the CSE and     the IUT being reachable through a URL ACCESSIBLE_URL }</pre>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<pre>when {     the IUT receives a NOTIFY Request from hosting CSE containing     Content containing         notification message representation }</pre>	IUT ← CSE
	<pre>then {     the IUT sends a valid NOTIFY Response to the hosting CSE containing         Response Status Code set to RESPONSE_STATUS_CODE }</pre>	CSE ← IUT

TP/oneM2M/AE/SUB/NTF/002

<b>TP Id</b>	TP/oneM2M/AE/SUB/NTF/002	
<b>Test objective</b>	Check that the IUT sends a Notify Response to the hosting CSE when receiving a Notify request containing aggregated notifications	
<b>Reference</b>	ETSI TS 118 101 [1], clause 6.2.12, ETSI TS 118 104 [2], clause 7.5.1.2	
<b>Config Id</b>	CF03	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_AE	
<b>Initial conditions</b>	<pre>with {     the IUT having been registered and     the IUT having created subscription resource under the CSE and     the IUT being reachable through a URL ACCESSIBLE_URL }</pre>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<pre>when {     the IUT receives a NOTIFY Request from hosting CSE containing     Content containing         aggregatedNotification message representation }</pre>	IUT ← CSE
	<pre>then {     the IUT sends a valid Response to the hosting CSE containing         Response Status Code set to RESPONSE_STATUS_CODE }</pre>	CSE ← IUT

### 7.2.1.5 Communication Management and Delivery Handling (CMDH)

#### 7.2.1.5.1 Resource pollingChannel (PCH)

TP/oneM2M/AE/PCH/001

<b>TP Id</b>	TP/oneM2M/AE/PCH/001							
<b>Test objective</b>	Check that the IUT which performs polling sends the Notify request to <pollingChannelURI> Hosting CSE after receiving response using polling channel							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.13.8 ETSI TS 118 104 [2], clause 7.4.22.2.5							
<b>Config Id</b>	CF03							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_PCH							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> to a CSE1  <b>and the IUT having a</b> &lt;pollingChannel&gt; <b>resource</b>  <b>and the IUT having sent</b> a retrieve Request to the CSE  To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS  <b>and the CSE having received</b> the Request <b>from</b> Originator <b>containing</b>  To <b>set to</b> AE_RESOURCE_ADDRESS and  From <b>set to</b> ORIGINATOR_ID</p> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>receives</b> a polling Response <b>from</b> the CSE <b>containing</b>  Response Status Code <b>set to</b> 2000 (OK)  <b>}</b> </td><td>IUT ← CSE</td></tr> <tr> <td> <b>then {</b>  the IUT <b>sends</b> a NOTIFY Request <b>to</b> the CSE <b>containing</b>  To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS <b>and</b>  Content <b>containing</b>  Response Status Code <b>set to</b>  RESPONSE_STATUS_CODE  <b>}</b> </td><td>IUT → CSE</td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a polling Response <b>from</b> the CSE <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>}</b>	IUT ← CSE	<b>then {</b> the IUT <b>sends</b> a NOTIFY Request <b>to</b> the CSE <b>containing</b> To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS <b>and</b> Content <b>containing</b> Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>}</b>	IUT → CSE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a polling Response <b>from</b> the CSE <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>}</b>	IUT ← CSE							
<b>then {</b> the IUT <b>sends</b> a NOTIFY Request <b>to</b> the CSE <b>containing</b> To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS <b>and</b> Content <b>containing</b> Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>}</b>	IUT → CSE							

NOTE: Based on figure 10.2.13.1-1 in ETSI TS 118 101 [1] step 004 and 005.

TP/oneM2M/AE/PCH/002

<b>TP Id</b>	TP/oneM2M/AE/PCH/002							
<b>Test objective</b>	Check that the IUT sends an RETRIEVE Request to <pollingChannelURI> resource See the note below.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.13.6, ETSI TS 118 104 [2], clause 7.4.22.2.2							
<b>Config Id</b>	CF02							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_PCH							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> registered  <b>and the IUT being</b> switched on  <b>and the AE having a child</b> &lt;pollingChannel&gt; <b>resource</b></p> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b>  To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS  <b>}</b> </td><td>NA</td></tr> <tr> <td> <b>then {</b>  the IUT <b>sends</b> a valid RETRIEVE Request <b>containing</b>  To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS  From <b>set to</b> AE_ID  <b>}</b> </td><td>IUT → CSE</td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS <b>}</b>	NA	<b>then {</b> the IUT <b>sends</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS From <b>set to</b> AE_ID <b>}</b>	IUT → CSE	
Test events	Direction							
<b>when {</b> the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS <b>}</b>	NA							
<b>then {</b> the IUT <b>sends</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS From <b>set to</b> AE_ID <b>}</b>	IUT → CSE							

NOTE: Based on figure 10.2.5.12-1 in ETSI TS 118 101 [1] step 001.

## 7.2.2 Group CSE (CE)

### 7.2.2.1 General Capability (GEN)

#### 7.2.2.1.1 CREATE Operation

TP/oneM2M/CSE/GEN/CRE/001

<b>TP Id</b>	TP/oneM2M/CSE/GEN/CRE/001	
<b>Test objective</b>	Check that the IUT accepts the creation of a <container> resource using unstructured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE, PICS_UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having created</b> a <container> resource TARGET_RESOURCE_ADDRESS <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid CREATE request <b>from</b> AE <b>containing</b> To <b>set to</b> NON_HIERARCHICAL_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> Content <b>containing</b> container resource representation <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a Response message <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>}</b>	IUT → AE

<b>TP Id</b>	<b>NON_HIERARCHICAL_RESOURCE_ADDRESS</b>
TP/oneM2M/CSE/GEN/CRE/001_CSR	UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/CRE/001_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/CRE/001_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID.

## TP/oneM2M/CSE/GEN/CRE/002

<b>TP Id</b>	TP/oneM2M/CSE/GEN/CRE/002	
<b>Test objective</b>	Check that the IUT accepts the creation of a <container> resource using structured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having created</b> a <container> resource TARGET_RESOURCE_ADDRESS <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid CREATE request <b>from</b> AE <b>containing</b> To <b>set to</b> HIERARCHICAL_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> Content <b>containing</b> container resource representation <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a Response message <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>}</b>	IUT → AE

<b>TP Id</b>	<b>HIERARCHICAL_RESOURCE_ADDRESS</b>
TP/oneM2M/CSE/GEN/CRE/002_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/CRE/002_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/CRE/002_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID.

## TP/oneM2M/CSE/GEN/CRE/003

<b>TP Id</b>	TP/oneM2M/CSE/GEN/CRE/003	
<b>Test objective</b>	Check that the IUT accepts the creation of a <container> resource using shortcut structured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having created</b> a <container> resource TARGET_RESOURCE_ADDRESS <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid CREATE request <b>from</b> AE <b>containing</b> To <b>set to</b> SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> Content <b>containing</b> container resource representation <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a Response message <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>}</b>	IUT → AE

<b>TP Id</b>	<b>SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS</b>
TP/oneM2M/CSE/GEN/CRE/003_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/CRE/003_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/CRE/003_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID.

## TP/oneM2M/CSE/GEN/CRE/004

<b>TP Id</b>	TP/oneM2M/CSE/GEN/CRE/004	
<b>Test objective</b>	Check that the IUT accepts the creation of a <container> resource using structured resource identifier with hybrid addressing.	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having created</b> a <container> resource TARGET_RESOURCE_ADDRESS <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid CREATE request <b>from</b> AE <b>containing</b> To <b>set to</b> HYBRID_HIERARCHICAL_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> Content <b>containing</b> container resource representation <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a Response message <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>}</b>	IUT → AE

TP Id	HYBRID_HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/CSE/GEN/CRE/004_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/CRE/004_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/CRE/004_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID.

### 7.2.2.1.2 UPDATE Operation

TP/oneM2M/CSE/GEN/UPD/001

<b>TP Id</b>	TP/oneM2M/CSE/GEN/UPD/001	
<b>Test objective</b>	Check that the IUT accepts the update of a <container> resource using unstructured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE, PICS_UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>and the IUT having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE <b>and the AE having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid UPDATE request <b>from</b> AE <b>containing</b> To <b>set to</b> NON_HIERARCHICAL_RESOURCE_ADDRESS and From <b>set to</b> AE_ID and Content <b>containing</b> container resource <b>containing</b> valid labels attribute <b>}</b> <b>then {</b> the IUT <b>sends</b> a Response message <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

TP Id	NON_HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/CSE/GEN/UPD/001_CSR	UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/UPD/001_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/UPD/001_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID.

## TP/oneM2M/CSE/GEN/UPD/002

<b>TP Id</b>	TP/oneM2M/CSE/GEN/UPD/002	
<b>Test objective</b>	Check that the IUT accepts the update of a <container> resource using structured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type <i>RESOURCE_TYPE</i> <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid UPDATE request <b>from</b> AE <b>containing</b> To <b>set to</b> HIERARCHICAL_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> container resource <b>containing</b> valid labels attribute <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a Response message <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>}</b>	IUT → AE

<b>TP Id</b>	<b>HIERARCHICAL_RESOURCE_ADDRESS</b>
TP/oneM2M/CSE/GEN/UPD/002_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/UPD/002_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/UPD/002_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID.

## TP/oneM2M/CSE/GEN/UPD/003

<b>TP Id</b>	TP/oneM2M/CSE/GEN/UPD/003	
<b>Test objective</b>	Check that the IUT accepts the update of a <container> resource using shortcut structured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS  <b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid UPDATE request <b>from</b> AE <b>containing</b> To <b>set to</b> SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> container resource <b>containing</b> valid labels attribute <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a Response message <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>}</b>	IUT → AE

<b>TP Id</b>	<b>SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS</b>
TP/oneM2M/CSE/GEN/UPD/003_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/UPD/003_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/UPD/003_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID.

## TP/oneM2M/CSE/GEN/UPD/004

<b>TP Id</b>	TP/oneM2M/CSE/GEN/UPD/004	
<b>Test objective</b>	Check that the IUT accepts the update of a <container> resource using structured resource identifier with hybrid addressing.	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS  <b>}</b></p>	
<b>Expected behaviour</b>	<p><b>Test events</b></p> <p><b>when {</b></p> <p>the IUT <b>receives</b> a valid UPDATE request <b>from</b> AE <b>containing</b>  <b>To set to</b> HYBRID_HIERARCHICAL_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>Content containing</b>  <b>container resource containing</b>  <b>valid labels attribute</b>  <b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>sends</b> a Response message <b>containing</b>  <b>Response Status Code set to</b> 2004 (UPDATED)  <b>}</b></p>	<p><b>Direction</b></p> <p>IUT ← AE</p> <p>IUT → AE</p>

TP Id	HYBRID_HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/CSE/GEN/UPD/004_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/UPD/004_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/UPD/004_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID.

## 7.2.2.1.3 RETRIEVE Operation

## TP/oneM2M/CSE/GEN/RET/001

<b>TP Id</b>	TP/oneM2M/CSE/GEN/RET/001	
<b>Test objective</b>	Check that the IUT accepts the retrieval of a <container> resource using unstructured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE, PICS_UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a &lt;container&gt; resource TARGET_RESOURCE_ADDRESS  <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS  <b>}</b></p>	

Expected behaviour	Test events	Direction
	<b>when {</b> the IUT receives a valid RETRIEVE request from AE containing To set to NON_HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID and no Content <b>}</b>	IUT ← AE
	<b>then {</b> the IUT sends a Response message containing Response Status Code set to 2000 (OK) and Content containing container resource representation <b>}</b>	IUT → AE

TP Id	NON_HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/CSE/GEN/RET/001_CSR	UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/RET/001_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/RET/001_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID.

## TP/oneM2M/CSE/GEN/RET/002

TP Id	TP/oneM2M/CSE/GEN/RET/002	
Test objective	Check that the IUT accepts the retrieval of a <container> resource using structured resource identifier	
Reference	ETSI TS 118 101 [1], table 9.3.1-1	
Config Id	CF01	
Parent Release	PARENT_RELEASE	
PICS Selection	PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
Initial conditions	<b>with {</b> the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a <container> resource TARGET_RESOURCE_ADDRESS and the AE having privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
Expected behaviour	Test events	Direction
	<b>when {</b> the IUT receives a valid RETRIEVE request from AE containing To set to HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID and no Content <b>}</b>	IUT ← AE
	<b>then {</b> the IUT sends a Response message containing Response Status Code set to 2000 (OK) and Content containing container resource representation <b>}</b>	IUT → AE

TP Id	HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/CSE/GEN/RET/002_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/RET/002_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/RET/002_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID.

## TP/oneM2M/CSE/GEN/RET/003

<b>TP Id</b>	TP/oneM2M/CSE/GEN/RET/003							
<b>Test objective</b>	Check that the IUT accepts the retrieval of a <container> resource using shortcut structured resource identifier							
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>PICS Selection</b>	PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT							
<b>Initial conditions</b>	<p>with {</p> <p style="padding-left: 20px;">the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a &lt;container&gt; resource TARGET_RESOURCE_ADDRESS  <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS  }</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <p><b>when {</b></p> <p style="padding-left: 20px;">the IUT <b>receives</b> a valid RETRIEVE request <b>from</b> AE <b>containing</b>  To <b>set to</b> SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS  <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  <b>no</b> Content  <b>}</b></p> </td><td>IUT ← AE</td></tr> <tr> <td> <p><b>then {</b></p> <p style="padding-left: 20px;">the IUT <b>sends</b> a Response message <b>containing</b>  Response Status Code <b>set to</b> 2000 (OK) <b>and</b>  Content <b>containing</b>  container resource representation  <b>}</b></p> </td><td>IUT → AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<p><b>when {</b></p> <p style="padding-left: 20px;">the IUT <b>receives</b> a valid RETRIEVE request <b>from</b> AE <b>containing</b>  To <b>set to</b> SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS  <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  <b>no</b> Content  <b>}</b></p>	IUT ← AE	<p><b>then {</b></p> <p style="padding-left: 20px;">the IUT <b>sends</b> a Response message <b>containing</b>  Response Status Code <b>set to</b> 2000 (OK) <b>and</b>  Content <b>containing</b>  container resource representation  <b>}</b></p>	IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<p><b>when {</b></p> <p style="padding-left: 20px;">the IUT <b>receives</b> a valid RETRIEVE request <b>from</b> AE <b>containing</b>  To <b>set to</b> SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS  <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  <b>no</b> Content  <b>}</b></p>	IUT ← AE							
<p><b>then {</b></p> <p style="padding-left: 20px;">the IUT <b>sends</b> a Response message <b>containing</b>  Response Status Code <b>set to</b> 2000 (OK) <b>and</b>  Content <b>containing</b>  container resource representation  <b>}</b></p>	IUT → AE							

<b>TP Id</b>	<b>SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS</b>
TP/oneM2M/CSE/GEN/RET/003_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/RET/003_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/RET/003_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID.

## TP/oneM2M/CSE/GEN/RET/004

<b>TP Id</b>	TP/oneM2M/CSE/GEN/RET/004	
<b>Test objective</b>	Check that the IUT accepts the retrieval of a <container> resource using structured resource identifier with hybrid addressing.	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<p>with {</p> <p style="padding-left: 20px;">the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a &lt;container&gt; resource TARGET_RESOURCE_ADDRESS  <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS  }</p>	

Expected behaviour	Test events	Direction
	<b>when {</b> the IUT receives a valid RETRIEVE request from AE containing To set to HYBRID_HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID and no Content <b>}</b>	IUT ← AE
	<b>then {</b> the IUT sends a Response message containing Response Status Code set to 2000 (OK) and Content containing container resource representation <b>}</b>	IUT → AE

TP Id	HYBRID_HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/CSE/GEN/RET/004_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/RET/004_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/RET/004_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the STRUCTURED\_CSE\_RELATIVE\_RESOURCE\_ID.

#### 7.2.2.1.4 DELETE Operation

TP/oneM2M/CSE/GEN/DEL/001

TP Id	TP/oneM2M/CSE/GEN/DEL/001	
Test objective	Check that the IUT accepts the deletion of a <container> resource using unstructured resource identifier	
Reference	ETSI TS 118 101 [1], table 9.3.1-1	
Config Id	CF01	
Parent Release	Release 1	
PICS Selection	PICS_CSE, PICS_UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
Initial conditions	<b>with {</b> the IUT being in the "initial state" and the IUT having registered the AE and the IUT having created a <container> resource TARGET_RESOURCE_ADDRESS and the AE having privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
Expected behaviour	Test events	Direction
	<b>when {</b> the IUT receives a valid DELETE request from AE containing To set to NON_HIERARCHICAL_RESOURCE_ADDRESS and From set to AE_ID and no Content <b>}</b>	IUT ← AE
	<b>then {</b> the IUT sends a Response message containing Response Status Code set to 2002 (DELETED) <b>}</b>	IUT → AE

TP Id	NON_HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/CSE/GEN/DEL/001_CSR	UNSTRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/DEL/001_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/DEL/001_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Unstructured-CSE-Relative-Resource-ID.

## TP/oneM2M/CSE/GEN/DEL/002

<b>TP Id</b>	TP/oneM2M/CSE/GEN/DEL/002	
<b>Test objective</b>	Check that the IUT accepts the deletion of a <container> resource using structured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having created</b> a <container> resource TARGET_RESOURCE_ADDRESS <b>and</b> the AE <b>having</b> privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid DELETE request <b>from</b> AE <b>containing</b> To <b>set to</b> HIERARCHICAL_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a Response message <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>}</b>	IUT → AE

TP Id	HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/CSE/GEN/DEL/002_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/DEL/002_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/DEL/002_ABS	ABSOLUTE_RESOURCE_ID, (see note)

NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID.

## TP/oneM2M/CSE/GEN/DEL/003

<b>TP Id</b>	TP/oneM2M/CSE/GEN/DEL/003	
<b>Test objective</b>	Check that the IUT accepts the deletion of a <container> resource using shortcut structured resource identifier	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.3.1-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having created</b> a <container> resource TARGET_RESOURCE_ADDRESS <b>and</b> the AE <b>having</b> privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid DELETE request <b>from</b> AE <b>containing</b> To <b>set to</b> SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a Response message <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>}</b>	IUT → AE

TP Id	SHORTCUT_HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/CSE/GEN/DEL/003_CSR/	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/DEL/003_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/DEL/003_ABS	ABSOLUTE_RESOURCE_ID, (see note)
NOTE: These addresses are constructed with the Structured-CSE-Relative-Resource-ID.	

TP/oneM2M/CSE/GEN/DEL/004

TP Id	TP/oneM2M/CSE/GEN/DEL/004	
Test objective	Check that the IUT accepts the deletion of a <container> resource using structured resource identifier with hybrid addressing.	
Reference	ETSI TS 118 101 [1], table 9.3.1-1	
Config Id	CF01	
Parent Release	Release 2	
PICS Selection	PICS_CSE, PICS_STRUCTURED_CSE_RELATIVE_RESOURCE_ID_FORMAT	
Initial conditions	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having created</b> a <container> resource TARGET_RESOURCE_ADDRESS <b>and</b> the AE <b>having</b> privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
Expected behaviour	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid DELETE request <b>from</b> AE <b>containing</b> To <b>set to</b> HYBRID_HIERARCHICAL_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b> <b>then {</b> the IUT <b>sends</b> a Response message <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

TP Id	HYBRID_HIERARCHICAL_RESOURCE_ADDRESS
TP/oneM2M/CSE/GEN/DEL/004_CSR	STRUCTURED_CSE_RELATIVE_RESOURCE_ID
TP/oneM2M/CSE/GEN/DEL/004_SPR	SP_RELATIVE_RESOURCE_ID, (see note)
TP/oneM2M/CSE/GEN/DEL/004_ABS	ABSOLUTE_RESOURCE_ID, (see note)
NOTE: These addresses are constructed with the STRUCTURED_CSE_RELATIVE_RESOURCE_ID.	

## 7.2.2.2 Registration (REG)

### 7.2.2.2.1 RETRIEVE Operation

TP/oneM2M/CSE/REG/RET/001

TP Id	TP/oneM2M/CSE/REG/RET/001	
Test objective	Check that the IUT accepts a retrieval request of <CSEBase> resource and responds with all attributes that have multiplicity equals to 1.	
Reference	ETSI TS 118 101 [1], clause 10.2.3.2 and clause 9.6.3, ETSI TS 118 104 [2], clause 7.4.3.2.2	
Config Id	CF01	
Parent Release	Release 1	
PICS Selection	PICS_CSE	
Initial conditions	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the CSEBase resource <b>}</b>	

Expected behaviour	Test events	Direction
	<pre> <b>when {</b>     the IUT <b>receives</b> a valid RETRIEVE Request <b>from AE containing</b>     To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b>     From <b>set to</b> AE_ID <b>and</b>     <b>no Content</b> <b>}</b> </pre>	IUT ← AE
	<pre> <b>then {</b>     the IUT <b>sends</b> a valid Response <b>containing</b>     Response Status Code <b>set to</b> 2000 (OK) <b>and</b>     Content <b>containing</b>         CSEBase resource representation <b>}</b> </pre>	IUT → AE

TP/oneM2M/CSE/REG/RET/002

TP Id	TP/oneM2M/CSE/REG/RET/002	
Test objective	Check that the IUT accepts a retrieval request of <CSEBase> resource with the optional ATTRIBUTE.	
Reference	ETSI TS 118 101 [1], clause 10.2.3.2 and clause 9.6.3, ETSI TS 118 104 [2], clause 7.4.3.2.2	
Config Id	CF01	
Parent Release	Release 1	
PICS Selection	PICS_CSE	
Initial conditions	<pre> <b>with {</b>     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the CSEBase resource     <b>and</b> the IUT <b>having</b> a CSEBase resource <b>containing</b>         the valid ATTRIBUTE attribute <b>}</b> </pre>	
Expected behaviour	Test events	Direction
	<pre> <b>when {</b>     the IUT <b>receives</b> a valid RETRIEVE Request <b>from AE containing</b>     To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b>     From <b>set to</b> AE_ID <b>and</b>     <b>no Content</b> <b>}</b> </pre>	IUT ← AE
	<pre> <b>then {</b>     the IUT <b>sends</b> a valid Response <b>containing</b>     Response Status Code <b>set to</b> 2000 (OK) <b>and</b>     Content <b>containing</b>         CSEBase resource <b>containing</b>             valid ATTRIBUTE attribute <b>}</b> </pre>	IUT → AE

TP Id	PICS Selection	Reference	ATTRIBUTE
TP/oneM2M/CSE/REG/RET/002_CST	PICS_CB_CST	ETSI TS 118 101, clause 9.6.3	cseType
TP/oneM2M/CSE/REG/RET/002_NL	PICS_CB_NL	ETSI TS 118 101, clause 9.6.3	nodeLink

TP/oneM2M/CSE/REG/RET/003

TP Id	TP/oneM2M/CSE/REG/RET/003	
Test objective	Check that the IUT accepts a retrieval request of <AE> resource with attributes multiplicity equals to 1.	
Reference	ETSI TS 118 101 [1], clause 10.2.1 and clause 9.6.5, ETSI TS 118 104 [2], clause 7.4.5.2.2	
Config Id	CF01	
Parent Release	Release 1	
PICS Selection	PICS_CSE	
Initial conditions	<pre> <b>with {</b>     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the AE resource <b>}</b> </pre>	

Expected behaviour	Test events	Direction
	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from AE containing</b> <b>To set to AE_RESOURCE_ADDRESS and</b> <b>From set to AE_ID</b> <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> <b>Response Status Code set to 2000 (OK) and</b> <b>Content containing</b> <b>AE resource representation</b> <b>}</b>	IUT → AE

TP/oneM2M/CSE/REG/RET/004

TP Id	TP/oneM2M/CSE/REG/RET/004		
Test objective	Check that the IUT accepts a retrieval request of <AE> resource with optional ATTRIBUTE.		
Reference	ETSI TS 118 101 [1], clause 10.2.1.2 and clause 9.6.5, ETSI TS 118 104 [2], clause 7.4.5.2.2		
Config Id	CF01		
Parent Release	Release 1		
PICS Selection	PICS_CSE		
Initial conditions	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>containing</b> valid ATTRIBUTE attribute <b>and the AE having</b> privileges to perform RETRIEVE operation on the AE resource <b>}</b>		
Expected behaviour	Test events	Direction	
	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from AE containing</b> <b>To set to AE_RESOURCE_ADDRESS and</b> <b>From set to AE_ID</b> <b>}</b>	IUT ← AE	
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> <b>Response Status Code set to 2000 (OK) and</b> <b>Content containing</b> <b>AE resource containing ATTRIBUTE attribute</b> <b>}</b>	IUT → AE	

TP Id	PICS Selection	Reference	ATTRIBUTE
TP/oneM2M/CSE/REG/RET/004_LBL	PICS_AE_LBL	ETSI TS 118 101 [1], clause 9.6.5	labels
TP/oneM2M/CSE/REG/RET/004_APN	PICS_AE_APN	ETSI TS 118 101 [1], clause 9.6.5	appName
TP/oneM2M/CSE/REG/RET/004_POA	PICS_AE_POA	ETSI TS 118 101 [1], clause 9.6.5	pointOfAccess
TP/oneM2M/CSE/REG/RET/004_NL	PICS_AE_NL	ETSI TS 118 101 [1], clause 9.6.5	nodeLink
TP/oneM2M/CSE/REG/RET/004_CSZ	PICS_AE_CSZ	ETSI TS 118 101 [1], clause 9.6.5	contentSerialization

TP/oneM2M/CSE/REG/RET/005

TP Id	TP/oneM2M/CSE/REG/RET/005		
Test objective	Check that the IUT accepts a retrieval request of <CSEBase> resource including the cseType attribute		
Reference	ETSI TS 118 101 [1], clause 10.2.3.2 and clause 9.6.3, ETSI TS 118 104 [2], clause 7.4.3.2.2		
Config Id	CF01		
Parent Release	Release 1		
PICS Selection	PICS_IN_CSE		
Initial conditions	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>and the AE having</b> privileges to perform RETRIEVE operation on the CSEBase resource <b>}</b>		

Expected behaviour	Test events	Direction
	<pre> <b>when {</b>     the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>     To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b>     From <b>set to</b> AE_ID <b>}</b> </pre>	IUT ← AE
	<pre> <b>then {</b>     the IUT <b>sends</b> a valid Response <b>containing</b>     Response Status Code <b>set to</b> 2000 (OK) <b>and</b>     Content <b>containing</b>         CSEBase resource <b>containing</b>             cseType attribute set to 1 (IN_CSE) <b>}</b> </pre>	IUT → AE

TP/oneM2M/CSE/REG/RET/006

TP Id	TP/oneM2M/CSE/REG/RET/006							
Test objective	Check that the IUT accepts a retrieval request of <remoteCSE> resource.							
Reference	ETSI TS 118 101 [1], clause 10.1.1.2.1 and clause 9.6.4 ETSI TS 118 104 [2], clause 7.4.4.2.1							
Config Id	CF01							
Parent Release	Release 1							
PICS Selection	PICS_CSE							
Initial conditions	<pre> <b>with {</b>     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the ORIGINATOR     <b>and</b> the ORIGINATOR <b>having</b> privileges to perform RETRIEVE operation on the     remoteCSE resource <b>}</b> </pre>							
Expected behaviour	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>         the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> ORIGINATOR <b>containing</b>         To <b>set to</b> REMOTECSE_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> ORIGINATOR_ID <b>}</b> </td><td>IUT ← ORIGINATOR</td></tr> <tr> <td> <b>then {</b>         the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2000 (OK) <b>and</b>         Content <b>containing</b>             remoteCSE resource representation <b>}</b> </td><td>IUT → ORIGINATOR</td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> ORIGINATOR <b>containing</b> To <b>set to</b> REMOTECSE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> ORIGINATOR_ID <b>}</b>	IUT ← ORIGINATOR	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> remoteCSE resource representation <b>}</b>	IUT → ORIGINATOR	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> ORIGINATOR <b>containing</b> To <b>set to</b> REMOTECSE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> ORIGINATOR_ID <b>}</b>	IUT ← ORIGINATOR							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> remoteCSE resource representation <b>}</b>	IUT → ORIGINATOR							

## TP/oneM2M/CSE/REG/RET/007

<b>TP Id</b>	TP/oneM2M/CSE/REG/RET/007		
<b>Test objective</b>	Check that the IUT accepts a retrieval request of <remoteCSE> resource with optional <b>ATTRIBUTE</b>		
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.1 and clause 9.6.4, ETSI TS 118 104 [2], clause 7.4.4.2.1		
<b>Config Id</b>	CF01		
<b>Parent Release</b>	Release 1		
<b>PICS Selection</b>	PICS_CSE		
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and</b> the IUT <b>having registered</b> the ORIGINATOR</p> <p><b>and</b> the ORIGINATOR <b>having</b> privileges to perform RETRIEVE operation on the remoteCSE resource</p> <p>}</p>		
<b>Expected behaviour</b>	<b>Test events</b>		<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> ORIGINATOR <b>containing</b> To <b>set to</b> REMOTECSE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> ORIGINATOR_ID <b>}</b>		IUT ← ORIGINATOR
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> remoteCSE resource <b>containing</b> <b>ATTRIBUTE</b> attribute <b>}</b>		IUT → ORIGINATOR

<b>TP Id</b>	<b>PICS Selection</b>	<b>Reference</b>	<b>ATTRIBUTE</b>
TP/oneM2M/CSE/REG/RET/007_LBL	PICS_CSR_LBL	ETSI TS 118 101 [1], clause 9.6.4	labels
TP/oneM2M/CSE/REG/RET/007_CST	PICS_CSR_CST	ETSI TS 118 101 [1], clause 9.6.4	cseType
TP/oneM2M/CSE/REG/RET/007_POA	PICS_CSR_POA	ETSI TS 118 101 [1], clause 9.6.4	pointOfAccess
TP/oneM2M/CSE/REG/RET/007_NL	PICS_CSR_NL	ETSI TS 118 101 [1], clause 9.6.4	nodeLink

## TP/oneM2M/CSE/REG/RET/008

<b>TP Id</b>	TP/oneM2M/CSE/REG/RET/008	
<b>Test objective</b>	Check that the IUT accepts a retrieval request of <CSEBase> resource and responds with supportedResourceTypes attribute containing a list of the supported resources and pointOfAccess containing the list of physical addresses to be used by Registrant to connect to this CSE (e.g. IP address, FQDN).	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.3.2 and clause 9.6.3, ETSI TS 118 104 [2], clause 7.4.3.2.2	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the CSEBase resource <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> <b>To set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b> <b>From set to</b> AE_ID <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> CSEBase resource <b>containing</b> supportedResourceType <b>set to</b> PX_SRT pointOfAccess <b>set to</b> PX_POA <b>}</b>	IUT → AE

## TP/oneM2M/CSE/REG/RET/009

<b>TP Id</b>	TP/oneM2M/CSE/REG/RET/009	
<b>Test objective</b>	Check that IUT sends a <remoteCSE> retrieve request on TARGET_REMOTE_CSE_ADDRESS	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.2.2, ETSI TS 118 104 [2], clause 7.4.5.2.3	
<b>Config Id</b>	CF04	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having created</b> a resource TARGET_REMOTE_CSE_ADDRESS <b>and</b> the IUT <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_REMOTE_CSE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>is triggered to send</b> a valid RETRIEVE Request <b>containing</b> <b>To set to</b> TARGET_REMOTE_CSE_ADDRESS <b>}</b>	NA
	<b>then {</b> the IUT <b>sends</b> a valid RETRIEVE Request <b>containing</b> <b>To set to</b> TARGET_REMOTE_CSE_ADDRESS <b>and</b> <b>From set to</b> CSE_ID <b>and</b> <b>no Content</b> <b>}</b>	IUT → CSE

## TP/oneM2M/CSE/REG/RET/010

<b>TP Id</b>	TP/oneM2M/CSE/REG/RET/010	
<b>Test objective</b>	Check that IUT accepts a <remoteCSE> retrieve request	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.2.2, ETSI TS 118 104 [2], clause 7.4.5.2.3	
<b>Config Id</b>	CF04	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having created</b> a resource TARGET_REMOTE_CSE_ADDRESS <b>and the IUT having</b> privileges to perform RETRIEVE operation on the resource TARGET_REMOTE_CSE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>containing</b> To <b>set to</b> TARGET_REMOTE_CSE_ADDRESS <b>and</b> From <b>set to</b> CSE_ID <b>and</b> <b>no Content</b> <b>}</b>	IUT $\leftarrow$ CSE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> remoteCSE resource representation <b>}</b>	IUT $\rightarrow$ CSE

## 7.2.2.2.2 CREATE Operation

## TP/oneM2M/CSE/REG/CRE/001

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/001	
<b>Test objective</b>	Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 and provided preprovisioned SP_RELATIVE_AE_ID	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case b, ETSI TS 118 104 [2], clause 7.4.5.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	PARENT_RELEASE	
<b>PICS Selection</b>	PICS_SELECTION	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having</b> preconfigured AE_ID_stem <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> SP_RELATIVE_AE_ID <b>and</b> Resource Type <b>set to</b> 2(AE) <b>and</b> Content <b>containing</b> AE resource representation <b>}</b>	IUT $\leftarrow$ AE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> AE resource representation <b>}</b>	IUT $\rightarrow$ AE

TP Id	PARENT_RELEASE	SP_RELATIVE_AE_ID	PICS_SELECTION
TP/oneM2M/CSE/REG/CRE/001_CAE	Release 1	Starting with "C"	PICS_CSE
TP/oneM2M/CSE/REG/CRE/001_SAE	Release 2	Starting with "S"	PICS_IN_CSE

## TP/oneM2M/CSE/REG/CRE/002

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/002		
<b>Test objective</b>	Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 and provided preprovisioned AE_ID_STEM of AE-ID-Stem format		
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case d, ETSI TS 118 104 [2], clause 7.4.5.2.1		
<b>Config Id</b>	CF01		
<b>Parent Release</b>	<i>PARENT_RELEASE</i>		
<b>PICS Selection</b>	<i>PICS_SELECTION</i>		
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state" and the IUT <b>having</b> preconfigured AE_ID_stem</p> <p><b>}</b></p>		
<b>Expected behaviour</b>	<b>Test events</b> <pre>when {     the IUT receives a valid CREATE Request from AE containing     To set to CSEBASE_RESOURCE_ADDRESS and     From set to AE_ID_STEM and     Resource Type set to 2 (AE) and     Content containing         AE resource representation }</pre>		<b>Direction</b>
	<pre>then {     the IUT sends a valid Response containing     Response Status Code set to 2001 (CREATED) and     Content containing         AE resource representation }</pre>		IUT → AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>AE_ID_STEM</b>	<b>PICS_SELECTION</b>
TP/oneM2M/CSE/REG/CRE/002_CAE	Release 1	Starting with "C"	PICS_CSE
TP/oneM2M/CSE/REG/CRE/002_SAE	Release 2	Starting with "S"	PICS_IN_CSE

## TP/oneM2M/CSE/REG/CRE/003

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/003		
<b>Test objective</b>	Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 and provided preprovisioned S-AE-ID-STEM		
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case b, ETSI TS 118 104 [2], clause 7.4.5.2.1		
<b>Config Id</b>	CF02		
<b>Parent Release</b>	Release 2		
<b>PICS Selection</b>	<i>PICS_MN_CSE</i>		
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> to the IN-CSE</p> <p><b>}</b></p>		
<b>Expected behaviour</b>	<b>Test events</b> <pre>when {     the IUT receives a valid CREATE Request from AE containing     From set to S-AE-ID-STEM and     Resource Type set to 2(AE) and     Content containing         AE resource representation }</pre>		<b>Direction</b>
	<pre>then{     the IUT sends a valid CREATE Request to IN-CSE containing     From set to SP-RELATIVE-AE-ID and     Content containing         AEAnn resource containing             link attribute set to SP-RELATIVE-AE-ID <b>and</b>             labels attribute set to "Credential-ID:None"     }</pre>		IUT → IN-CSE

NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/(S-AE-ID-STEM )  
 S-AE-ID-STEM = Valid AE-ID-STEM starting with "S".

## TP/oneM2M/CSE/REG/CRE/004

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/004							
<b>Test objective</b>	Check that the IUT rejects an AE registration (allowed App-ID, not allowed C-AE-ID-STEM provided by AE)							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 step 3 and clause 9.6.19							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and</b> the IUT <b>not allowing to</b> register an AE <b>containing</b></p> <p>    <b>allowed</b> App-ID attribute <b>indicating</b> APP-ID <b>and</b></p> <p>    <b>not allowed</b> AE-ID attribute <b>indicating</b> C-AE-ID-STEM</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>Resource Type <b>set to</b> 2 (AE) <b>and</b></p> <p>    From <b>set to</b> C-AE-ID-STEM <b>and</b></p> <p>    Content <b>containing</b></p> <p>        AE resource <b>containing</b></p> <p>            App-ID attribute <b>set to</b> APP-ID</p> <p><b>}</b></p> </td><td>IUT ← AE</td></tr> <tr> <td> <p><b>then {</b></p> <p>the IUT <b>does not create</b> the AE resource</p> <p><b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4107</p> <p>(SECURITY_ASSOCIATION_REQUIRED)</p> <p><b>}</b></p> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>Resource Type <b>set to</b> 2 (AE) <b>and</b></p> <p>    From <b>set to</b> C-AE-ID-STEM <b>and</b></p> <p>    Content <b>containing</b></p> <p>        AE resource <b>containing</b></p> <p>            App-ID attribute <b>set to</b> APP-ID</p> <p><b>}</b></p>	IUT ← AE	<p><b>then {</b></p> <p>the IUT <b>does not create</b> the AE resource</p> <p><b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4107</p> <p>(SECURITY_ASSOCIATION_REQUIRED)</p> <p><b>}</b></p>	IUT → AE	
Test events	Direction							
<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>Resource Type <b>set to</b> 2 (AE) <b>and</b></p> <p>    From <b>set to</b> C-AE-ID-STEM <b>and</b></p> <p>    Content <b>containing</b></p> <p>        AE resource <b>containing</b></p> <p>            App-ID attribute <b>set to</b> APP-ID</p> <p><b>}</b></p>	IUT ← AE							
<p><b>then {</b></p> <p>the IUT <b>does not create</b> the AE resource</p> <p><b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4107</p> <p>(SECURITY_ASSOCIATION_REQUIRED)</p> <p><b>}</b></p>	IUT → AE							

## TP/oneM2M/CSE/REG/CRE/005

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/005							
<b>Test objective</b>	Check that the IUT accepts an AE registration (allowed App-ID, S-AE-ID-STEM not provided by AE)							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case a, and clause 9.6.19							
<b>Config Id</b>	CF02							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_MN_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state" <b>and</b></p> <p>the IUT <b>having registered</b> to the IN-CSE <b>and</b></p> <p><b>and</b> the IUT <b>allowing to</b> register an AE <b>containing</b></p> <p>    App-ID attribute <b>set to</b> APP-ID</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>Resource Type <b>set to</b> 2 (AE) <b>and</b></p> <p>    From <b>set to</b> "S" <b>and</b></p> <p>    Content <b>containing</b></p> <p>        AE resource <b>containing</b></p> <p>            App-ID attribute <b>set to</b> APP-ID</p> <p><b>}</b></p> </td><td>IUT ← AE</td></tr> <tr> <td> <p><b>then {</b></p> <p>the IUT <b>sends</b> a valid CREATE Request <b>to</b> the IN-CSE <b>containing</b></p> <p>    Resource Type <b>set to</b> 10002 (AEAnnC) <b>and</b></p> <p>    From <b>set to</b> SP-RELATIVE-CSE-ID followed by '/S' <b>and</b></p> <p>    Content <b>containing</b></p> <p>        AEAnnC resource <b>containing</b></p> <p>            App-ID attribute <b>set to</b> APP-ID <b>and</b></p> <p>            valid link attribute <b>and</b></p> <p>            labels attribute <b>indicating</b> 'Credential-ID:None'</p> <p><b>}</b></p> </td><td>IUT → IN-CSE</td></tr> </tbody> </table>	Test events	Direction	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>Resource Type <b>set to</b> 2 (AE) <b>and</b></p> <p>    From <b>set to</b> "S" <b>and</b></p> <p>    Content <b>containing</b></p> <p>        AE resource <b>containing</b></p> <p>            App-ID attribute <b>set to</b> APP-ID</p> <p><b>}</b></p>	IUT ← AE	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid CREATE Request <b>to</b> the IN-CSE <b>containing</b></p> <p>    Resource Type <b>set to</b> 10002 (AEAnnC) <b>and</b></p> <p>    From <b>set to</b> SP-RELATIVE-CSE-ID followed by '/S' <b>and</b></p> <p>    Content <b>containing</b></p> <p>        AEAnnC resource <b>containing</b></p> <p>            App-ID attribute <b>set to</b> APP-ID <b>and</b></p> <p>            valid link attribute <b>and</b></p> <p>            labels attribute <b>indicating</b> 'Credential-ID:None'</p> <p><b>}</b></p>	IUT → IN-CSE	
Test events	Direction							
<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>Resource Type <b>set to</b> 2 (AE) <b>and</b></p> <p>    From <b>set to</b> "S" <b>and</b></p> <p>    Content <b>containing</b></p> <p>        AE resource <b>containing</b></p> <p>            App-ID attribute <b>set to</b> APP-ID</p> <p><b>}</b></p>	IUT ← AE							
<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid CREATE Request <b>to</b> the IN-CSE <b>containing</b></p> <p>    Resource Type <b>set to</b> 10002 (AEAnnC) <b>and</b></p> <p>    From <b>set to</b> SP-RELATIVE-CSE-ID followed by '/S' <b>and</b></p> <p>    Content <b>containing</b></p> <p>        AEAnnC resource <b>containing</b></p> <p>            App-ID attribute <b>set to</b> APP-ID <b>and</b></p> <p>            valid link attribute <b>and</b></p> <p>            labels attribute <b>indicating</b> 'Credential-ID:None'</p> <p><b>}</b></p>	IUT → IN-CSE							

## TP/oneM2M/CSE/REG/CRE/006

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/006	
<b>Test objective</b>	Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 and provided character 'S' in AE_ID_Stem	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case a, ETSI TS 118 104 [2], clause 7.4.5.2.1	
<b>Config Id</b>	CF02	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_MN_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state" <b>and</b></p> <p>the IUT <b>having registered</b> to the IN-CSE</p> }	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>From <b>set to</b> character 'S' <b>and</b></p> <p>Resource Type <b>set to</b> 2(AE) <b>and</b></p> <p>Content <b>containing</b></p> <p>AE resource representation</p> }	IUT ← AE
	<p><b>then{</b></p> <p>the IUT <b>sends</b> a valid CREATE Request <b>to</b> IN_CSE <b>containing</b></p> <p>From <b>set to</b> SP-RELATIVE-CSE-ID followed by '/S' <b>and</b></p> <p>Content <b>containing</b></p> <p>AEAnnc resource <b>containing</b></p> <p>link attribute <b>set to</b> SP-RELATIVE-AE-ID</p> }	IUT → IN-CSE
<p>NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{AE_ID_Stem}</p> <p>AE_ID_Stem = "S".</p>		

## TP/oneM2M/CSE/REG/CRE/007

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/007	
<b>Test objective</b>	Check that the IUT accepts an response of AEANNC create request during AE registration with provided character 'S' in AE_ID_Stem	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case a, ETSI TS 118 104 [2], clause 7.4.5.2.1	
<b>Config Id</b>	CF02	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_MN_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state" <b>and</b></p> <p>the IUT <b>having registered</b> to the IN-CSE <b>and</b></p> <p>the IUT <b>having received</b> a valid AE create request <b>containing</b></p> <p>From <b>set to</b> "S" <b>and</b></p> <p>the IUT <b>having sent</b> a valid AEANNC create to IN_CSE</p> }	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when{</b></p> <p>the IUT <b>receives</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b></p> <p>Content <b>containing</b></p> <p>AEAnnc resource <b>containing</b></p> <p>link attribute <b>set to</b> SP-RELATIVE-AE-ID</p> }	IUT <- IN-CSE
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b></p> <p>Content <b>containing</b></p> <p>AE resource <b>containing</b></p> <p>ResourceID attribute <b>set to</b> S-AE-ID-STEM <b>and</b></p> <p>AE-ID attribute <b>set to</b> S-AE-ID-STEM</p> }	IUT → AE
<p>NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM}</p> <p>S-AE-ID-STEM = Valid AE-ID-Stem assigned by IN-CSE.</p>		

## TP/oneM2M/CSE/REG/CRE/008

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/008							
<b>Test objective</b>	Check that the IUT accepts an AE re-registration (allowed M2M-SP-assigned AE-ID, S-AE-ID-STEM provided by AE), transfer request to the IN-CSE							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case b, step 5 and clause 9.6.19							
<b>Config Id</b>	CF02							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_MN_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>the IUT <b>having registered</b> to the IN-CSE <b>and</b></p> <p>the AE <b>having already been registered containing</b></p> <p style="padding-left: 20px;">AE-ID <b>set to</b> S-AE-ID-STEM <b>and</b></p> <p style="padding-left: 20px;">the AE <b>having deregistered</b></p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>            Resource Type <b>set to</b> 2 (AE) <b>and</b>            From <b>set to</b> S-AE-ID-STEM <b>and</b>            Content <b>containing</b>            AE resource representation  <b>}</b> </td><td>IUT ← AE</td></tr> <tr> <td> <b>then {</b>            the IUT <b>sends</b> a valid UPDATE Request <b>to</b> the IN-CSE <b>containing</b>            From <b>set to</b> SP-RELATIVE-AE-ID <b>and</b>            Content <b>containing</b>            AEAnn resource <b>containing</b>            App-ID attribute <b>set to</b> APP-ID <b>and</b>            link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b>            labels attribute <b>indicating</b> 'Credential-ID:None'  <b>}</b> </td><td>IUT → IN-CSE</td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> Resource Type <b>set to</b> 2 (AE) <b>and</b> From <b>set to</b> S-AE-ID-STEM <b>and</b> Content <b>containing</b> AE resource representation <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid UPDATE Request <b>to</b> the IN-CSE <b>containing</b> From <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> Content <b>containing</b> AEAnn resource <b>containing</b> App-ID attribute <b>set to</b> APP-ID <b>and</b> link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> labels attribute <b>indicating</b> 'Credential-ID:None' <b>}</b>	IUT → IN-CSE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> Resource Type <b>set to</b> 2 (AE) <b>and</b> From <b>set to</b> S-AE-ID-STEM <b>and</b> Content <b>containing</b> AE resource representation <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>sends</b> a valid UPDATE Request <b>to</b> the IN-CSE <b>containing</b> From <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> Content <b>containing</b> AEAnn resource <b>containing</b> App-ID attribute <b>set to</b> APP-ID <b>and</b> link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> labels attribute <b>indicating</b> 'Credential-ID:None' <b>}</b>	IUT → IN-CSE							
NOTE:	$\text{SP-RELATIVE-AE-ID} = \{\text{SP-RELATIVE-CSE-ID}\}/\{\text{S-AE-ID-STEM}\}$ $\text{S-AE-ID-STEM} = \text{Value starting with "S" assigned by IN-CSE.}$							

## TP/oneM2M/CSE/REG/CRE/009

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/009							
<b>Test objective</b>	Check that the IUT accepts an AE re-registration (allowed M2M-SP-assigned AE-ID, S-AE-ID-STEM provided by AE), communication between MN-CSE and IN-CSE							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case b, step 5-8							
<b>Config Id</b>	CF03							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_IN_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state" <b>and</b>      the IUT <b>having registered</b> the MN-CSE <b>and</b>      the AE <b>having already been registered containing</b>  <b>AE-ID set to S-AE-ID-STEM and</b>  <b>the AE having deregistered</b></p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid UPDATE Request <b>from</b> the MN-CSE <b>containing</b>  <b>To set to AEANNC_RESOURCE_ADDRESS and</b>  <b>From set to SP-RELATIVE-AE-ID and</b>  <b>Content containing</b>  <b>AEAnn resource containing</b>  <b>link attribute set to SP-RELATIVE-AE-ID and</b>  <b>labels attribute indicating 'Credential-ID:None'</b>  <b>}</b> </td><td>IUT← MN-CSE</td></tr> <tr> <td> <b>then {</b>            the IUT <b>updates</b> the AEANNC_RESOURCE_ADDRESS resource  <b>and</b> the IUT <b>sends</b> a valid Response to MN-CSE <b>containing</b>  <b>Response Status Code set to 2004 (UPDATED) and</b>  <b>Content containing</b>  <b>AEAnn resource containing</b>  <b>link attribute set to SP-RELATIVE-AE-ID and</b>  <b>labels attribute indicating 'Credential-ID:None'</b>  <b>}</b> </td><td>IUT → MN-CSE</td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> the MN-CSE <b>containing</b> <b>To set to AEANNC_RESOURCE_ADDRESS and</b> <b>From set to SP-RELATIVE-AE-ID and</b> <b>Content containing</b> <b>AEAnn resource containing</b> <b>link attribute set to SP-RELATIVE-AE-ID and</b> <b>labels attribute indicating 'Credential-ID:None'</b> <b>}</b>	IUT← MN-CSE	<b>then {</b> the IUT <b>updates</b> the AEANNC_RESOURCE_ADDRESS resource <b>and</b> the IUT <b>sends</b> a valid Response to MN-CSE <b>containing</b> <b>Response Status Code set to 2004 (UPDATED) and</b> <b>Content containing</b> <b>AEAnn resource containing</b> <b>link attribute set to SP-RELATIVE-AE-ID and</b> <b>labels attribute indicating 'Credential-ID:None'</b> <b>}</b>	IUT → MN-CSE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> the MN-CSE <b>containing</b> <b>To set to AEANNC_RESOURCE_ADDRESS and</b> <b>From set to SP-RELATIVE-AE-ID and</b> <b>Content containing</b> <b>AEAnn resource containing</b> <b>link attribute set to SP-RELATIVE-AE-ID and</b> <b>labels attribute indicating 'Credential-ID:None'</b> <b>}</b>	IUT← MN-CSE							
<b>then {</b> the IUT <b>updates</b> the AEANNC_RESOURCE_ADDRESS resource <b>and</b> the IUT <b>sends</b> a valid Response to MN-CSE <b>containing</b> <b>Response Status Code set to 2004 (UPDATED) and</b> <b>Content containing</b> <b>AEAnn resource containing</b> <b>link attribute set to SP-RELATIVE-AE-ID and</b> <b>labels attribute indicating 'Credential-ID:None'</b> <b>}</b>	IUT → MN-CSE							
NOTE:	$SP\text{-}RELATIVE\text{-}AE\text{-}ID = \{SP\text{-}RELATIVE\text{-}CSE\text{-}ID\}/(S\text{-}AE\text{-}ID\text{-}STEM)$ $S\text{-}AE\text{-}ID\text{-}STEM = \text{Value starting with "S" assigned by IN-CSE.}$							

## TP/oneM2M/CSE/REG/CRE/010

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/010							
<b>Test objective</b>	Check that the IUT accepts an AE re-registration (allowed M2M-SP-assigned AE-ID, S-AE-ID-STEM provided by AE), transfer response to the AE							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case b, step 8							
<b>Config Id</b>	CF02							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_MN_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state" <b>and</b>            the IUT <b>having registered</b> the MN-CSE <b>and</b>            the AE <b>having already been registered containing</b>  <b>AE-ID set to S-AE-ID-STEM and</b>  <b>the AE having deregistered and</b>  <b>the AE having sent a registration containing</b>  <b>From set to S-AE-ID-STEM and</b>  <b>the IUT having sent a valid AEAnn UPDATE Request to IN-CSE</b></p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid UPDATE Response from IN-CSE <b>containing</b>  <b>Response Status Code set to 2004 (UPDATED) and</b>  <b>Content containing</b>  <b>AEAnn resource containing</b>  <b>link attribute set to SP-RELATIVE-AE-ID and</b>  <b>labels attribute indicating 'Credential-ID:None'</b>  <b>}</b> </td><td>IUT ← IN-CSE</td></tr> <tr> <td> <b>then {</b>            the IUT <b>sends</b> a valid Response <b>to</b> the AE <b>containing</b>  <b>Response Status Code set to 2001 (CREATED) and</b>  <b>Content containing</b>  <b>AE resource containing</b>  <b>AE-ID attribute set to S-AE-ID-STEM</b>  <b>}</b> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid UPDATE Response from IN-CSE <b>containing</b> <b>Response Status Code set to 2004 (UPDATED) and</b> <b>Content containing</b> <b>AEAnn resource containing</b> <b>link attribute set to SP-RELATIVE-AE-ID and</b> <b>labels attribute indicating 'Credential-ID:None'</b> <b>}</b>	IUT ← IN-CSE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>to</b> the AE <b>containing</b> <b>Response Status Code set to 2001 (CREATED) and</b> <b>Content containing</b> <b>AE resource containing</b> <b>AE-ID attribute set to S-AE-ID-STEM</b> <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid UPDATE Response from IN-CSE <b>containing</b> <b>Response Status Code set to 2004 (UPDATED) and</b> <b>Content containing</b> <b>AEAnn resource containing</b> <b>link attribute set to SP-RELATIVE-AE-ID and</b> <b>labels attribute indicating 'Credential-ID:None'</b> <b>}</b>	IUT ← IN-CSE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>to</b> the AE <b>containing</b> <b>Response Status Code set to 2001 (CREATED) and</b> <b>Content containing</b> <b>AE resource containing</b> <b>AE-ID attribute set to S-AE-ID-STEM</b> <b>}</b>	IUT → AE							
NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM } S-AE-ID-STEM = Value starting with "S" assigned by IN-CSE.								

## TP/oneM2M/CSE/REG/CRE/011

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/011	
<b>Test objective</b>	Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 and asking AE_ID_Stem by indicating AE_ID_Stem starting with character 'C'.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case c, ETSI TS 118 104 [2], clause 7.4.5.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state" <b>and</b></p> <p>the IUT <b>having</b> preconfigured AE_ID_stem</p> }	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request from AE containing To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> 'C' <b>and</b> Resource Type <b>set to</b> 2(AE) <b>and</b> Content <b>containing</b> AE resource representation <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> AE resource <b>containing</b> ResouceID attribute <b>indicating</b> a value starting with 'C' <b>}</b>	IUT → AE

## TP/oneM2M/CSE/REG/CRE/012

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/012	
<b>Test objective</b>	Check that the IUT accepts an AE registration with the optional attribute OPTIONAL_ATTRIBUTE provided	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 and table 9.6.5-2	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and</b> the IUT <b>having</b> a CSEBase resource</p> }	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request from AE containing Resource Type <b>set to</b> 2 (AE) <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> AE resource <b>containing</b> valid OPTIONAL_ATTRIBUTE attribute <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> AE resource <b>containing</b> valid OPTIONAL_ATTRIBUTE attribute <b>}</b>	IUT → AE

TP Id	PICS Selection	Reference	OPTIONAL_ATTRIBUTE
TP/oneM2M/CSE/REG/CRE/012_AE/LBL	PICS_AE_LBL	ETSI TS 118 101 [1], table 9.6.5-2	labels
TP/oneM2M/CSE/REG/CRE/012_AE/APN	PICS_AE_APN	ETSI TS 118 101 [1], table 9.6.5-2	AppName
TP/oneM2M/CSE/REG/CRE/012_AE/POA	PICS_AE_POA	ETSI TS 118 101 [1], table 9.6.5-2	pointOfAccess
TP/oneM2M/CSE/REG/CRE/012_AE/NL	PICS_AE_NL	ETSI TS 118 101 [1], table 9.6.5-2	nodeLink
TP/oneM2M/CSE/REG/CRE/012_AE/OR	PICS_AE_OR	ETSI TS 118 101 [1], table 9.6.5-2	ontologyRef

TP/oneM2M/CSE/REG/CRE/013

TP Id	TP/oneM2M/CSE/REG/CRE/013	
Test objective	Check that the IUT accepts a create request of <remoteCSE> resource with OPTIONAL_ATTRIBUTE.	
Reference	ETSI TS 118 101 [1], clause 10.1.1.2.1 and clause 9.6.4, ETSI TS 118 104 [2], clause 7.4.4.2.1	
Config Id	CF04	
Parent Release	Release 1	
PICS Selection	PICS_CSE	
Initial conditions	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>}</b>	
Expected behaviour	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> CSE <b>containing</b> To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> CSE_ID <b>and</b> Resource Type <b>set to</b> 16(remoteCSE) <b>and</b> Content <b>containing</b> remoteCSE resource representation <b>containing</b> OPTIONAL_ATTRIBUTE attribute <b>}</b>	IUT ← CSE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> remoteCSE resource representation <b>}</b>	IUT → CSE

TP Id	PICS Selection	Reference	OPTIONAL_ATTRIBUTE
TP/oneM2M/CSE/REG/CRE/013_LBL	PICS_CSR_LBL	ETSI TS 118 101 [1], clause 9.6.4	labels
TP/oneM2M/CSE/REG/CRE/013_CST	PICS_CSR_CST	ETSI TS 118 101 [1], clause 9.6.4	cseType
TP/oneM2M/CSE/REG/CRE/013_POA	PICS_CSR_POA	ETSI TS 118 101 [1], clause 9.6.4	pointOfAccess
TP/oneM2M/CSE/REG/CRE/013_NL	PICS_CSR_NL	ETSI TS 118 101 [1], clause 9.6.4	nodeLink

## TP/oneM2M/CSE/REG/CRE/014

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/014	
<b>Test objective</b>	Check that the IUT retargets the request to the remoteCSE according to pointOfAccess in the <remoteCSE> resource.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.4 and clause 9.3.2.2.3, ETSI TS 118 104 [2], clause 6.2.3	
<b>Config Id</b>	CF02	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state" <b>and</b>            the IUT <b>having</b> created the remoteCSE resource <b>containing</b>  <b>POINT_OF_ACCESS</b> attribute  <b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid REQUEST from Originator <b>containing</b> To <b>set to</b> RESOURCE_ADDRESS <b>and</b> From <b>set to</b> Originator_ID <b>}</b>	IUT ← Originator
	<b>then {</b> the IUT <b>sends</b> the REQUEST to POINT_OF_ACCESS <b>}</b>	IUT → CSE

## TP/oneM2M/CSE/REG/CRE/015

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/015	
<b>Test objective</b>	Check that the IUT retargets the request to the CSE according to pointOfAccess in the <remoteCSE> resource and forward the response back to the originator.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.4 and clause 9.3.2.2.3, ETSI TS 118 104 [2], clause 6.2.3	
<b>Config Id</b>	CF02	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE , PICS_SP_RELATIVE_RESOURCE_ID, PICS_ABSOLUTE_RESOURCE_ID	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state" <b>and</b>            the IUT <b>having</b> received a valid REQUEST from Originator <b>and</b>            The IUT <b>having</b> sent the REQUEST to the remoteCSE  <b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid RESPONSE from the remoteCSE <b>}</b>	IUT ← CSE
	<b>then {</b> the IUT <b>sends</b> the RESPONSE to the Originator <b>}</b>	IUT → Originator

## TP/oneM2M/CSE/REG/CRE/016

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/016	
<b>Test objective</b>	Check that the IUT rejects an AE registration (not allowed App-ID)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 step 3 and clause 9.6.19	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT not allowing to register an AE containing</b> <b>not allowed</b> App-ID attribute <b>indicating APP-ID</b> <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> Resource Type <b>set to</b> 2 (AE) <b>and</b> Content <b>containing</b> AE resource <b>containing</b> App-ID attribute <b>set to</b> APP-ID <b>}</b>	IUT $\leftarrow$ AE
	<b>then {</b> the IUT <b>does not create</b> the AE resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4107 (SECURITY_ASSOCIATION_REQUIRED) <b>}</b>	IUT $\rightarrow$ AE

## TP/oneM2M/CSE/REG/CRE/017

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/017	
<b>Test objective</b>	Check that the IUT rejects a create request of <AE> resource that does not include the MANDATORY_ATTRIBUTE.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2, ETSI TS 118 104 [2], clause 7.4.5.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having</b> preconfigured AE_ID_stem <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> 2(AE) <b>and</b> Content <b>containing</b> AE resource <b>containing</b> <b>no</b> MANDATORY_ATTRIBUTE attribute <b>}</b>	IUT $\leftarrow$ AE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4000 (BAD Request) <b>}</b>	IUT $\rightarrow$ AE

<b>TP Id</b>	<b>Reference</b>	<b>ATTRIBUTE</b>
TP/oneM2M/CSE/REG/CRE/017_API	ETSI TS 118 101 [1], clause 9.6.5	App-ID
TP/oneM2M/CSE/REG/CRE/017_RR	ETSI TS 118 101 [1], clause 9.6.5	requestReachability

## TP/oneM2M/CSE/REG/CRE/018

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/018							
<b>Test objective</b>	Check that the IUT accepts a create request of <remoteCSE> resource with attributes multiplicity equals to 1.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.1 and clause 9.6.4, ETSI TS 118 104 [2], clause 7.4.5.2.2							
<b>Config Id</b>	CF04							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {     the IUT <b>being</b> in the "initial state" }</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid CREATE Request <b>from CSE containing</b>  <b>To set to CSEBASE_RESOURCE_ADDRESS and</b>  <b>From set to CSE_ID and</b>  <b>Resource Type set to 16(remoteCSE) and</b>  <b>Content containing</b>            remoteCSE resource representation  <b>}</b> </td><td>IUT ← CSE</td></tr> <tr> <td> <b>then {</b>            the IUT <b>sends</b> a valid Response <b>containing</b>  <b>Response Status Code set to 2001 (CREATED) and</b>  <b>Content containing</b>            remoteCSE resource representation  <b>}</b> </td><td>IUT → CSE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from CSE containing</b> <b>To set to CSEBASE_RESOURCE_ADDRESS and</b> <b>From set to CSE_ID and</b> <b>Resource Type set to 16(remoteCSE) and</b> <b>Content containing</b> remoteCSE resource representation <b>}</b>	IUT ← CSE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> <b>Response Status Code set to 2001 (CREATED) and</b> <b>Content containing</b> remoteCSE resource representation <b>}</b>	IUT → CSE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from CSE containing</b> <b>To set to CSEBASE_RESOURCE_ADDRESS and</b> <b>From set to CSE_ID and</b> <b>Resource Type set to 16(remoteCSE) and</b> <b>Content containing</b> remoteCSE resource representation <b>}</b>	IUT ← CSE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> <b>Response Status Code set to 2001 (CREATED) and</b> <b>Content containing</b> remoteCSE resource representation <b>}</b>	IUT → CSE							

## TP/oneM2M/CSE/REG/CRE/019

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/019							
<b>Test objective</b>	Check that the IUT accepts a create request of <remoteCSE> resource with attributes multiplicity equals to 1 without the preconfigured CSE-ID.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.1 and clause 9.6.4, ETSI TS 118 104 [2], clause 7.4.5.2.2							
<b>Config Id</b>	CF04							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {     the IUT <b>being</b> in the "initial state" }</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid CREATE Request <b>from CSE containing</b>  <b>To set to CSEBASE_RESOURCE_ADDRESS and</b>  <b>no From and</b>  <b>Resource Type set to 16(remoteCSE) and</b>  <b>Content containing</b>            remoteCSE resource representation  <b>}</b> </td><td>IUT ← CSE</td></tr> <tr> <td> <b>then {</b>            the IUT <b>sends</b> a valid Response <b>containing</b>  <b>Response Status Code set to 2001 (CREATED) and</b>  <b>Content containing</b>            remoteCSE resource representation  <b>}</b> </td><td>IUT → CSE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from CSE containing</b> <b>To set to CSEBASE_RESOURCE_ADDRESS and</b> <b>no From and</b> <b>Resource Type set to 16(remoteCSE) and</b> <b>Content containing</b> remoteCSE resource representation <b>}</b>	IUT ← CSE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> <b>Response Status Code set to 2001 (CREATED) and</b> <b>Content containing</b> remoteCSE resource representation <b>}</b>	IUT → CSE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from CSE containing</b> <b>To set to CSEBASE_RESOURCE_ADDRESS and</b> <b>no From and</b> <b>Resource Type set to 16(remoteCSE) and</b> <b>Content containing</b> remoteCSE resource representation <b>}</b>	IUT ← CSE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> <b>Response Status Code set to 2001 (CREATED) and</b> <b>Content containing</b> remoteCSE resource representation <b>}</b>	IUT → CSE							

## TP/oneM2M/CSE/REG/CRE/020

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/020	
<b>Test objective</b>	Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 and asking AE_ID_Stem by indicating AE_ID_Stem starting with character 'S'.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case a, ETSI TS 118 104 [2], clause 7.4.5.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_IN_CSE	
<b>Initial conditions</b>	<p>with {     the IUT <b>being</b> in the "initial state" }</p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b>     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>         From <b>set to</b> 'S' <b>and</b>         Resource Type <b>set to</b> 2(AE) <b>and</b>         Content <b>containing</b>             AE resource representation <b>}</b></p>	IUT $\leftarrow$ AE
	<p><b>then {</b>     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>         Content <b>containing</b>             AE resource <b>containing</b>                 ResouceID attribute <b>set to</b> S-AE-ID-STEM <b>}</b></p>	IUT $\rightarrow$ AE
NOTE: S-AE-ID-STEM = Value starting with "S" assigned by IN-CSE.		

## TP/oneM2M/CSE/REG/CRE/021

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/021	
<b>Test objective</b>	Check that the IUT rejects the create request of <CSEBase> resource.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.3.1 and clause 9.6.3, ETSI TS 118 104 [2], clause 7.4.3.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE }</p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b>     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b>         Resource Type <b>set to</b> 5 (CSEBase) <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Content <b>containing</b>             CSEBase resource representation <b>}</b></p>	IUT $\leftarrow$ AE
	<p><b>then {</b>     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 4005 (OPERATION_NOT_ALLOWED) <b>}</b></p>	IUT $\rightarrow$ AE

## TP/oneM2M/CSE/REG/CRE/022

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/022	
<b>Test objective</b>	Check that the IUT accepts an AE registration (allowed App-ID, C-AE-ID-STEM not provided by AE)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case C and clause 9.6.19	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>allowing to</b> register an AE <b>containing</b>          App-ID attribute <b>indicating</b> APP-ID <b>and</b>          AE-ID attribute <b>indicating</b> C-AE-ID-STEM</p> <p>}</p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>          Resource Type <b>set to</b> 2 (AE) <b>and</b>          From <b>set to</b> 'C' <b>and</b>          Content <b>containing</b>          AE resource <b>containing</b>          App-ID attribute <b>set to</b> APP-ID</p> <p><b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>creates</b> the AE resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>          Response Status Code <b>set to</b> 2001 (CREATED)</p> <p><b>}</b></p>	IUT → AE

## TP/oneM2M/CSE/REG/CRE/023

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/023	
<b>Test objective</b>	Check that the IUT rejects registration of already registered AE (C-AE-ID-STEM provided by AE)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 step 4 and clause 9.6.19	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state" <b>and</b>          the IUT <b>having registered</b> the AE <b>with</b>          AE-ID attribute <b>set to</b> C-AE-ID-STEM</p> <p>}</p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>          Resource Type <b>set to</b> 2 (AE) <b>and</b>          To <b>set to</b> TARGET_CSE_RESOURCE_ADDRESS <b>and</b>          From <b>set to</b> C-AE-ID-STEM <b>and</b>          Content <b>containing</b>          AE resource representation</p> <p><b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>does not create</b> the AE resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>          Response Status Code <b>set to</b> 4105 (CONFLICT)</p> <p><b>}</b></p>	IUT → AE

## TP/oneM2M/CSE/REG/CRE/024

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/024	
<b>Test objective</b>	Check that IUT sends a CSE registration request with attributes multiplicity equals to 1	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.1, ETSI TS 118 104 [2], clause 7.4.5.2.2	
<b>Config Id</b>	CF04	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_MN_CSE or PICS ASN_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state" <b>and</b></p> <p>the IUT <b>having</b> privileges to perform CREATE operation on the resource CSEBASE_RESOURCE_ADDRESS</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b></p> <p>To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b></p> <p>Resource Type <b>set to</b> 16 (remoteCSE) <b>and</b></p> <p>Content <b>containing</b></p> <p>remoteCSE resource representation</p> <p><b>}</b></p>	NA
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid CREATE Request <b>containing</b></p> <p>To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> CSE_ID <b>and</b></p> <p>Resource Type <b>set to</b> 16 (remoteCSE) <b>and</b></p> <p>Content <b>containing</b></p> <p>remoteCSE resource representation</p> <p><b>}</b></p>	IUT → CSE

## TP/oneM2M/CSE/REG/CRE/025

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/025	
<b>Test objective</b>	Check that IUT accepts a CSE registration request with attributes multiplicity equals to 1	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.1, ETSI TS 118 104 [2], clause 7.4.5.2.2	
<b>Config Id</b>	CF04	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state" <b>and</b></p> <p>the IUT <b>having</b> privileges to perform CREATE operation on the resource CSEBASE_RESOURCE_ADDRESS</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>containing</b></p> <p>To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> CSE_ID <b>and</b></p> <p>Resource Type <b>set to</b> 16 (remoteCSE) <b>and</b></p> <p>Content <b>containing</b></p> <p>remoteCSE resource representation</p> <p><b>}</b></p>	IUT ← CSE
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b></p> <p>Content <b>containing</b></p> <p>remoteCSE resource representation</p> <p><b>and the IUT creates</b> the &lt;remoteCSE&gt; resource</p> <p><b>}</b></p>	IUT → CSE

## TP/oneM2M/CSE/REG/CRE/026

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/026	
<b>Test objective</b>	Check that IUT sends a CSE registration request with <i>OPTIONAL_ATTRIBUTE</i> attribute	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.1, ETSI TS 118 104 [2], clause 7.4.5.2.2	
<b>Config Id</b>	CF04	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_MN_CSE or PICS ASN_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having</b> privileges to perform CREATE operation on the resource CSEBASE_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>is triggered to send</b> a valid CREATE Request <b>containing</b> To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b> Content <b>containing</b> remoteCSE resource <b>containing</b> cseType attribute <b>set to</b> 2 (MN_CSE) <b>and</b> valid attribute <i>OPTIONAL_ATTRIBUTE</i> <b>}</b>	NA
	<b>then {</b> the IUT <b>sends</b> a valid CREATE Request <b>containing</b> To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> CSE_ID <b>and</b> Resource Type <b>set to</b> 16 (remoteCSE) <b>and</b> Content <b>containing</b> remoteCSE resource <b>containing</b> cseType attribute <b>set to</b> 2 (MN_CSE) <b>and</b> valid attribute <i>OPTIONAL_ATTRIBUTE</i> <b>}</b>	IUT → CSE

<b>TP Id</b>	<b>PICS Selection</b>	<b>Reference</b>	<b>OPTIONAL_ATTRIBUTE</b>
TP/oneM2M/CSE/REG/CRE/026_RN	PICS_CSR_RN	ETSI TS 118 101 [1], table 9.6.4-2	resourceName
TP/oneM2M/CSE/REG/CRE/026_ET	PICS_CSR_ET	ETSI TS 118 101 [1], table 9.6.4-2	expirationTime
TP/oneM2M/CSE/REG/CRE/026_LBL	PICS_CSR_LBL	ETSI TS 118 101 [1], table 9.6.4-2	labels
TP/oneM2M/CSE/REG/CRE/026_POA	PICS_CSR_POA	ETSI TS 118 101 [1], table 9.6.4-2	pointOfAccess
TP/oneM2M/CSE/REG/CRE/026_NL	PICS_CSR_NL	ETSI TS 118 101 [1], table 9.6.4-2	nodeLink
TP/oneM2M/CSE/REG/CRE/026_CST	PICS_CSR_CST	ETSI TS 118 101 [1], table 9.6.4-2	cseType

## TP/oneM2M/CSE/REG/CRE/027

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/027	
<b>Test objective</b>	Check that IUT accepts a CSE registration request with <code>cseType</code> attribute set to 'MN_CSE'	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.1, ETSI TS 118 104 [2], clause 7.4.5.2.2	
<b>Config Id</b>	CF04	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having</b> privileges to perform CREATE operation on the resource CSEBASE_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>containing</b> To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> CSE_ID <b>and</b> Resource Type <b>set to</b> 16 (remoteCSE) <b>and</b> Content <b>containing</b> remoteCSE resource <b>containing</b> cseType attribute <b>set to</b> 2 (MN_CSE) <b>}</b>	IUT ← CSE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> remoteCSE resource <b>containing</b> cseType attribute <b>set to</b> 2 (MN_CSE) <b>and the IUT creates</b> a <remoteCSE> resource <b>}</b>	IUT → CSE

## TP/oneM2M/CSE/REG/CRE/028

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/028	
<b>Test objective</b>	Check that IUT accepts a CSE registration request with <i>OPTIONAL_ATTRIBUTE</i> attribute	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.1, ETSI TS 118 104 [2], clause 7.4.5.2.2	
<b>Config Id</b>	CF04	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the CSE <b>having</b> privileges to perform CREATE operation on the resource CSEBASE_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>containing</b> To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> CSE_ID <b>and</b> Resource Type <b>set to</b> 16 (remoteCSE) <b>and</b> Content <b>containing</b> remoteCSE resource <b>containing</b> cseType attribute <b>set to</b> 2 (MN_CSE) <b>and</b> valid attribute <i>OPTIONAL_ATTRIBUTE</i> <b>}</b>	IUT ← CSE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> remoteCSE resource <b>containing</b> cseType attribute <b>set to</b> 2 (MN_CSE) <b>and</b> valid attribute <i>OPTIONAL_ATTRIBUTE</i> <b>and the IUT creates a &lt;remoteCSE&gt; resource</b> <b>}</b>	IUT → CSE

<b>TP Id</b>	<b>PICS Selection</b>	<b>Reference</b>	<b>OPTIONAL_ATTRIBUTE</b>
TP/oneM2M/CSE/REG/CRE/028_LBL	PICS_CSR_LBL	ETSI TS 118 101 [1], table 9.6.4-2	labels
TP/oneM2M/CSE/REG/CRE/028_POA	PICS_CSR_POA	ETSI TS 118 101 [1], table 9.6.4-2	pointOfAccess
TP/oneM2M/CSE/REG/CRE/028_NL	PICS_CSR_NL	ETSI TS 118 101 [1], table 9.6.4-2	nodeLink

## TP/oneM2M/CSE/REG/CRE/029

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/029							
<b>Test objective</b>	Check that the IUT accepts an AE registration (preprovisioned S-AE-ID-STEM provided by AE), communication between MN-CSE and IN-CSE							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case a, step 5-8							
<b>Config Id</b>	CF04							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_IN_CSE							
<b>Initial conditions</b>	<p>with {     the IUT <b>being</b> in the "initial state" }</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid CREATE Request from the CSE <b>containing</b>            Resource Type <b>set to</b> 10002 (AEAnn) <b>and</b>            From <b>set to</b> SP-RELATIVE-AE-ID <b>and</b>            Content <b>containing</b>            AEAnn resource <b>containing</b>            link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b>            labels <b>indicating</b> 'Credential-ID:None'  <b>}</b> </td><td>IUT← MN-CSE</td></tr> <tr> <td> <b>then {</b>            the IUT <b>creates</b> the AEANN_RESOURCE_ADDRESS resource  <b>and</b> the IUT <b>sends</b> a valid Response to CSE <b>containing</b>            Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>            Content <b>containing</b>            AEAnn resource <b>containing</b>            link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b>            labels <b>indicating</b> 'Credential-ID:None'  <b>}</b> </td><td>IUT → MN-CSE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request from the CSE <b>containing</b> Resource Type <b>set to</b> 10002 (AEAnn) <b>and</b> From <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> Content <b>containing</b> AEAnn resource <b>containing</b> link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> labels <b>indicating</b> 'Credential-ID:None' <b>}</b>	IUT← MN-CSE	<b>then {</b> the IUT <b>creates</b> the AEANN_RESOURCE_ADDRESS resource <b>and</b> the IUT <b>sends</b> a valid Response to CSE <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> AEAnn resource <b>containing</b> link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> labels <b>indicating</b> 'Credential-ID:None' <b>}</b>	IUT → MN-CSE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid CREATE Request from the CSE <b>containing</b> Resource Type <b>set to</b> 10002 (AEAnn) <b>and</b> From <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> Content <b>containing</b> AEAnn resource <b>containing</b> link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> labels <b>indicating</b> 'Credential-ID:None' <b>}</b>	IUT← MN-CSE							
<b>then {</b> the IUT <b>creates</b> the AEANN_RESOURCE_ADDRESS resource <b>and</b> the IUT <b>sends</b> a valid Response to CSE <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> AEAnn resource <b>containing</b> link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> labels <b>indicating</b> 'Credential-ID:None' <b>}</b>	IUT → MN-CSE							
NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM} S-AE-ID-STEM = Valid AE-ID-STEM starting with "S".								

## TP/oneM2M/CSE/REG/CRE/030

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/030							
<b>Test objective</b>	Check that the IUT accepts an AE re-registration (allowed M2M-SP-assigned AE-ID, S-AE-ID-STEM provided by AE), transfer response to the AE							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case b, step 8							
<b>Config Id</b>	CF02							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_MN_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state" <b>and</b>            the IUT <b>having registered</b> the MN-CSE <b>and</b>            the AE <b>having sent</b> a registration <b>containing</b>                From <b>set to</b> S-AE-ID-STEM <b>and</b>            the IUT <b>having sent</b> a valid AEAnn CREATE Request to IN-CSE          }</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid Response from IN-CSE <b>containing</b>                Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>                Content <b>containing</b>                    AEAnn resource <b>containing</b>                        link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b>                        labels attribute <b>indicating</b> 'Credential-ID:None'  <b>}</b> </td><td>IUT ← IN-CSE</td></tr> <tr> <td> <b>then {</b>            the IUT <b>sends</b> a valid Response <b>to</b> the AE <b>containing</b>                Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>                Content <b>containing</b>                    AE resource <b>containing</b>                        AE-ID attribute <b>set to</b> S-AE-ID-STEM  <b>}</b> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid Response from IN-CSE <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> AEAnn resource <b>containing</b> link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> labels attribute <b>indicating</b> 'Credential-ID:None' <b>}</b>	IUT ← IN-CSE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>to</b> the AE <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> AE resource <b>containing</b> AE-ID attribute <b>set to</b> S-AE-ID-STEM <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid Response from IN-CSE <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> AEAnn resource <b>containing</b> link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> labels attribute <b>indicating</b> 'Credential-ID:None' <b>}</b>	IUT ← IN-CSE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>to</b> the AE <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> AE resource <b>containing</b> AE-ID attribute <b>set to</b> S-AE-ID-STEM <b>}</b>	IUT → AE							
NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM} . S-AE-ID-STEM = Value starting with "S" assigned by IN-CSE.								

## TP/oneM2M/CSE/REG/CRE/031

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/031	
<b>Test objective</b>	Check that the IUT accepts an AE registration (S-AE-ID-STEM not provided by AE), communication between MN-CSE and IN-CSE	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2 case a, ETSI TS 118 104 [2], clause 7.4.5.2.1	
<b>Config Id</b>	CF04	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_IN_CSE	
<b>Initial conditions</b>	with { the IUT <b>being</b> in the "initial state" }	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid CREATE Request from MN-CSE <b>containing</b> Resource Type <b>set to</b> 10002 (AEAnn) <b>and</b> From <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> Content <b>containing</b> AEAnn resource <b>containing</b> link attribute <b>set to</b> SP-RELATIVE-AE-ID <b>and</b> labels <b>indicating</b> 'Credential-ID:None' <b>}</b> <b>then {</b> the IUT <b>creates</b> the AEANN_RESOURCE_ADDRESS resource <b>and</b> the IUT <b>sends</b> a valid Response to CSE <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> AEAnn resource <b>containing</b> link attribute <b>set to</b> SP-RELATIVE-AE-ID* <b>and</b> labels <b>indicating</b> 'Credential-ID:None' <b>}</b>	<b>Direction</b> IUT ← MN-CSE IUT → MN-CSE
NOTE: SP-RELATIVE-AE-ID = {SP-RELATIVE-CSE-ID}/{AE-ID-STEM} SP-RELATIVE-AE-ID* = {SP-RELATIVE-CSE-ID}/{S-AE-ID-STEM} AE-ID-STEM = "S" S-AE-ID-STEM = Valid AE-ID-STEM starting with "S".		

## TP/oneM2M/CSE/REG/CRE/032

<b>TP Id</b>	TP/oneM2M/CSE/REG/CRE/032	
<b>Test objective</b>	Check that the IUT accepts a create request of <AE> resource with attributes multiplicity equals to 1 with AE-ID-Stem being empty	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2, ETSI TS 118 104 [2], clause 7.4.5.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>		
<b>Initial conditions</b>	with { the IUT <b>being</b> in the "initial state" }	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid CREATE Request from AE <b>containing</b> From <b>set to</b> empty <b>and</b> Resource Type <b>set to</b> 2(AE) <b>and</b> Content <b>containing</b> AE resource representation <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> AE resource representation <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

### 7.2.2.2.3 DELETE Operation

TP/oneM2M/CSE/REG/DEL/001

<b>TP Id</b>	TP/oneM2M/CSE/REG/DEL/001	
<b>Test objective</b>	Check that the IUT rejects the delete request of <CSEBase> resource.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.3.4 and clause 9.6.3, ETSI TS 118 104 [2], clause 7.4.3.2.4	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid DELETE Request <b>from AE containing</b> <b>To set to CSEBASE_RESOURCE_ADDRESS and</b> <b>From set to AE_ID and</b> <b>no Content</b> <b>}</b>	IUT $\leftarrow$ AE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> <b>Response Status Code set to 4005 (OPERATION_NOT_ALLOWED)</b> <b>}</b>	IUT $\rightarrow$ AE

TP/oneM2M/CSE/REG/DEL/002

<b>TP Id</b>	TP/oneM2M/CSE/REG/DEL/002	
<b>Test objective</b>	Check that IUT accepts a <remoteCSE> delete request on TARGET_REMOTE_CSE_ADDRESS, and deletes the <remoteCSE> resource	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.2.4 and clause 9.6.4, ETSI TS 118 104 [2], clause 7.4.4.2.1	
<b>Config Id</b>	CF04	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the CSE <b>and the CSE originator having</b> privileges to perform DELETE operation on the remoteCSE resource <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid DELETE Request <b>from CSE containing</b> <b>To set to REMOTECSE_RESOURCE_ADDRESS and</b> <b>From set to CSE_ID and</b> <b>no Content</b> <b>}</b>	IUT $\leftarrow$ CSE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> <b>Response Status Code set to 2002 (DELETED)</b> <b>and the IUT deletes</b> the remoteCSE resource <b>}</b>	IUT $\rightarrow$ CSE

## TP/oneM2M/CSE/REG/DEL/003

<b>TP Id</b>	TP/oneM2M/CSE/REG/DEL/003	
<b>Test objective</b>	Check that the IUT accepts an AE de-registration.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.4.2.2	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>and the AE having</b> privileges to perform DELETE operation on the resource AE <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid DELETE Request from AE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b>	IUT $\leftarrow$ AE
	<b>then {</b> the IUT <b>deletes</b> the AE_RESOURCE_ADDRESS resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>}</b>	IUT $\rightarrow$ AE

## TP/oneM2M/CSE/REG/DEL/004

<b>TP Id</b>	TP/oneM2M/CSE/REG/DEL/004	
<b>Test objective</b>	Check that IUT sends a <remoteCSE> delete request on TARGET_REMOTE_CSE_ADDRESS	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.2.4, ETSI TS 118 104 [2], clause 7.4.5.2.5	
<b>Config Id</b>	CF04	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_MN_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having created</b> a resource TARGET_REMOTE_CSE_ADDRESS <b>and</b> the IUT <b>having</b> privileges to perform DELETE operation on the resource TARGET_REMOTE_CSE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>is triggered to send</b> a valid DELETE Request <b>containing</b> To <b>set to</b> TARGET_REMOTE_CSE_ADDRESSSS <b>}</b>	NA
	<b>then {</b> the IUT <b>sends</b> a valid DELETE Request <b>containing</b> To <b>set to</b> TARGET_REMOTE_CSE_ADDRESS <b>and</b> From <b>set to</b> CSE_ID <b>and</b> <b>no Content</b> <b>}</b>	IUT $\rightarrow$ CSE

## TP/oneM2M/CSE/REG/DEL/005

<b>TP Id</b>	TP/oneM2M/CSE/REG/DEL/005	
<b>Test objective</b>	Check that the IUT accepts an AE de-registration when AE-ID is starting with "S"	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.4.2.2	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_IN_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>containing</b> From <b>set to</b> "S" <b>and the AE having</b> privileges to perform DELETE operation on the resource AE <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b>	IUT $\leftarrow$ AE
	<b>then {</b> the IUT <b>deletes</b> the AE_RESOURCE_ADDRESS resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>}</b>	IUT $\rightarrow$ AE

## TP/oneM2M/CSE/REG/DEL/006

<b>TP Id</b>	TP/oneM2M/CSE/REG/DEL/006	
<b>Test objective</b>	Check that the IUT accepts an AE de-registration when AE-ID is starting with "S"	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2	
<b>Config Id</b>	CF02	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_MN_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>containing</b> From <b>set to</b> "S" <b>and the AE having</b> privileges to perform DELETE operation on the resource AE <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b>	IUT $\leftarrow$ AE
	<b>then {</b> the IUT <b>sends</b> a valid UPDATE Request <b>containing</b> Content <b>containing</b> AEANNCE_RESOURCE_ADDRESS resource <b>containing</b> link attribute <b>set to</b> "INACTIVE" <b>}</b>	IUT $\rightarrow$ IN-CSE

## TP/oneM2M/CSE/REG/DEL/007

<b>TP Id</b>	TP/oneM2M/CSE/REG/DEL/007							
<b>Test objective</b>	Check that the IUT accepts the response from IN-CSE for the AE de-registration when AE-ID is starting with "S"							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.2.2							
<b>Config Id</b>	CF02							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_MN_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the AE <b>containing</b>  From <b>set to</b> "S"  <b>and the AE having</b> privileges to perform DELETE operation on the resource AE  <b>and the AE having sent</b> a valid DELETE Request at AE_RESOURCE_ADDRESS resource  <b>and the IUT having sent</b> a valid UPDATE Request to IN-CSE <b>containing</b>  Content <b>containing</b>  AEANNCE_RESOURCE_ADDRESS resource <b>containing</b>  link attribute <b>set to</b> empty</p> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td><b>when {</b> the IUT <b>receives</b> a valid Response <b>from</b> IN-CSE <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>}</b></td><td>IUT ← IN-CSE</td></tr> <tr> <td><b>then {</b> the IUT <b>deletes</b> the AE_RESOURCE_ADDRESS resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>}</b></td><td>IUT → AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid Response <b>from</b> IN-CSE <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>}</b>	IUT ← IN-CSE	<b>then {</b> the IUT <b>deletes</b> the AE_RESOURCE_ADDRESS resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>}</b>	IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid Response <b>from</b> IN-CSE <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>}</b>	IUT ← IN-CSE							
<b>then {</b> the IUT <b>deletes</b> the AE_RESOURCE_ADDRESS resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>}</b>	IUT → AE							

## 7.2.2.2.4 UPDATE Operation

## TP/oneM2M/CSE/REG/UPD/001

<b>TP Id</b>	TP/oneM2M/CSE/REG/UPD/001							
<b>Test objective</b>	Check that the IUT rejects the update request of <CSEBase> resource.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.3.3 and clause 9.6.3, ETSI TS 118 104 [2], clause 7.4.3.2.3							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the AE</p> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td><b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> CSEBase resource representation <b>}</b></td><td>IUT ← AE</td></tr> <tr> <td><b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4005 (OPERATION_NOT_ALLOWED) <b>}</b></td><td>IUT → AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> CSEBase resource representation <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4005 (OPERATION_NOT_ALLOWED) <b>}</b>	IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> CSEBASE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> CSEBase resource representation <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4005 (OPERATION_NOT_ALLOWED) <b>}</b>	IUT → AE							

## TP/oneM2M/CSE/REG/UPD/002

<b>TP Id</b>	TP/oneM2M/CSE/REG/UPD/002	
<b>Test objective</b>	Check that IUT accepts a <remoteCSE> update request with <i>OPTIONAL_ATTRIBUTE</i> attribute	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.2.3, ETSI TS 118 104 [2], clause 7.4.5.2.4	
<b>Config Id</b>	CF04	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_MN_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having created</b> a resource TARGET_REMOTE_CSE_ADDRESS <b>containing</b> a RW <i>OPTIONAL_ATTRIBUTE</i> attribute <b>set to</b> VALUE_1 <b>and</b> the CSE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_REMOTE_CSE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>containing</b> To <b>set to</b> TARGET_REMOTE_CSE_ADDRESS <b>and</b> From <b>set to</b> CSE_ID <b>and</b> Content <b>containing</b> remoteCSE resource <b>containing</b> <i>OPTIONAL_ATTRIBUTE</i> attribute <b>set to</b> VALUE_2 <b>}</b>	IUT ← CSE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b> Content <b>containing</b> remoteCSE resource <b>containing</b> <i>OPTIONAL_ATTRIBUTE</i> attribute <b>set to</b> VALUE_2 <b>}</b>	IUT → CSE

TP Id	Reference	OPTIONAL_ATTRIBUTE
TP/oneM2M/CSE/REG/UPD/002_LBL	ETSI TS 118 101 [1], table 9.6.4-2	labels
TP/oneM2M/CSE/REG/UPD/002_POA	ETSI TS 118 101 [1], table 9.6.4-2	pointOfAccess
TP/oneM2M/CSE/REG/UPD/002_NL	ETSI TS 118 101 [1], table 9.6.4-2	nodeLink

## TP/oneM2M/CSE/REG/UPD/003

<b>TP Id</b>	TP/oneM2M/CSE/REG/UPD/003		
<b>Test objective</b>	Check that IUT sends a <remoteCSE> update request with <i>OPTIONAL_ATTRIBUTE</i> attribute		
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.2.3, ETSI TS 118 104 [2], clause 7.4.5.2.4		
<b>Config Id</b>	CF04		
<b>Parent Release</b>	Release 1		
<b>PICS Selection</b>	PICS_MN_CSE		
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having created</b> a resource TARGET_REMOTE_CSE_ADDRESS <b>containing</b> a RW <i>OPTIONAL_ATTRIBUTE</i> attribute <b>set to</b> VALUE_1 <b>and</b> the IUT <b>having</b> privileges to perform UPDATE operation on the resource TARGET_REMOTE_CSE_ADDRESS <b>}</b>		
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>is triggered to send</b> a valid UPDATE Request <b>containing</b> To <b>set to</b> TARGET_REMOTE_CSE_ADDRESS <b>and</b> Content <b>containing</b> remoteCSE resource <b>containing</b> attribute <i>OPTIONAL_ATTRIBUTE</i> <b>set to</b> VALUE_2 <b>}</b>		NA
	<b>then {</b> the IUT <b>sends</b> a valid UPDATE Request <b>containing</b> To <b>set to</b> TARGET_REMOTE_CSE_ADDRESS <b>and</b> From <b>set to</b> CSE_ID <b>and</b> Content <b>containing</b> remoteCSE resource <b>containing</b> attribute <i>OPTIONAL_ATTRIBUTE</i> <b>set to</b> VALUE_2 <b>}</b>		IUT → CSE

<b>TP Id</b>	<b>PICS Selection</b>	<b>Reference</b>	<b>OPTIONAL_ATTRIBUTE</b>
TP/oneM2M/CSE/REG/UPD/003_ET	PICS_CSR_ET	ETSI TS 118 101 [1], table 9.6.4-2	expirationTime
TP/oneM2M/CSE/REG/UPD/003_LBL	PICS_CSR_LBL	ETSI TS 118 101 [1], table 9.6.4-2	labels
TP/oneM2M/CSE/REG/UPD/003_POA	PICS_CSR_POA	ETSI TS 118 101 [1], table 9.6.4-2	pointOfAccess
TP/oneM2M/CSE/REG/UPD/003_NL	PICS_CSR_NL	ETSI TS 118 101 [1], table 9.6.4-2	nodeLink
TP/oneM2M/CSE/REG/UPD/003_RR	PICS_CSR_RR	ETSI TS 118 101 [1], table 9.6.4-2	requestReachability

## 7.2.2.3 Data Management and Repository Function (DMR)

### 7.2.2.3.1 RETRIEVE Operation

TP/oneM2M/CSE/DMR/RET/001

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/001	
<b>Test objective</b>	Check that the IUT returns successfully the TARGET_RESOURCE_ADDRESS resource	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the AE resource <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> <b>From set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> <b>Content containing</b> RESOURCE_TYPE resource representation <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/RET/001_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)
TP/oneM2M/CSE/DMR/RET/001_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/RET/001_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)
TP/oneM2M/CSE/DMR/RET/001_CIN	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	4 (contentInstance)
TP/oneM2M/CSE/DMR/RET/001_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)
TP/oneM2M/CSE/DMR/RET/001_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/RET/001_PCH	Release 2	ETSI TS 118 101 [1], clause 10.2.13.3	15 (pollingChannel)
TP/oneM2M/CSE/DMR/RET/001_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)

## TP/oneM2M/CSE/DMR/RET/002

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/002	
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to retrieve the resource TARGET_RESOURCE_ADDRESS which does not exist	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2 item 1)	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having not yet created</b> a resource TARGET_RESOURCE_ADDRESS</p> }	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>no Content</b></p> <p><b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4004 (NOT_FOUND)</p> <p><b>}</b></p>	IUT → AE

## TP/oneM2M/CSE/DMR/RET/003

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/003	
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to retrieve a resource TARGET_RESOURCE_ADDRESS under AE without having privileges for the RETRIEVE operation	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2 item 2)	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	PARENT_RELEASE	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the AE resource  <b>and</b> the AE <b>having no</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> }	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>no Content</b></p> <p><b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a Response <b>containing</b>  Response Status Code <b>set to</b> 4103 (ACCESS_DENIED)</p> <p><b>}</b></p>	IUT → AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/RET/003_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)
TP/oneM2M/CSE/DMR/RET/003_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/RET/003_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)
TP/oneM2M/CSE/DMR/RET/003_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)
TP/oneM2M/CSE/DMR/RET/003_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/RET/003_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)

## TP/oneM2M/CSE/DMR/RET/004

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/004								
<b>Test objective</b>	Check that the IUT returns successfully the ATTRIBUTE of TARGET_RESOURCE_ADDRESS resource ("To" option)								
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2								
<b>Config Id</b>	CF01								
<b>Parent Release</b>	<i>PARENT_RELEASE</i>								
<b>PICS Selection</b>	PICS_CSE								
<b>Initial conditions</b>	<pre>with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type     RESOURCE_TYPE under the AE resource     <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource     TARGET_RESOURCE_ADDRESS }</pre>								
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>           the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>           To <b>set to</b> TARGET_ATTRIBUTE_ADDRESS <b>and</b>           From <b>set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b> </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then {</b>           the IUT <b>sends</b> a valid Response <b>containing</b>           Response Status Code <b>set to</b> 2000 (OK) <b>and</b>           Content <b>containing</b>           RESOURCE_TYPE resource <b>containing</b>           valid ATTRIBUTE attribute <b>and</b> <b>no other</b> attribute <b>}</b> </td> <td>IUT → AE</td> </tr> </tbody> </table>			Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_ATTRIBUTE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> valid ATTRIBUTE attribute <b>and</b> <b>no other</b> attribute <b>}</b>	IUT → AE
Test events	Direction								
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_ATTRIBUTE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b>	IUT ← AE								
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> valid ATTRIBUTE attribute <b>and</b> <b>no other</b> attribute <b>}</b>	IUT → AE								
NOTE:	TARGET_ATTRIBUTE_ADDRESS is represented as TARGET_RESOURCE_ADDRESS#ATTRIBUTE where '#' is present between TARGET_RESOURCE_ADDRESS and ATTRIBUTE. ATTRIBUTE indicates common attribute for all RESOURCE_TYPE resources listed in the table below.								

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/RET/004_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)
TP/oneM2M/CSE/DMR/RET/004_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/RET/004_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)
TP/oneM2M/CSE/DMR/RET/004_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)
TP/oneM2M/CSE/DMR/RET/004_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/RET/004_PCH	Release 2	ETSI TS 118 101 [1], clause 10.2.13.3	15 (pollingChannel)
TP/oneM2M/CSE/DMR/RET/004_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)

## TP/oneM2M/CSE/DMR/RET/005

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/005	
<b>Test objective</b>	Check that the IUT returns successfully the ATTRIBUTE of TARGET_RESOURCE_ADDRESS resource ("Content" option)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the AE resource  <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p>when {</p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>Content containing</b>  <b>attributeList element containing</b>  <b>ATTRIBUTE name</b></p> <p>}</p> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  <b>Response Status Code set to</b> 2000 (OK) <b>and</b>  <b>Content containing</b>  <b>RESOURCE_TYPE resource containing</b>  <b>valid ATTRIBUTE attribute and</b>  <b>no other attribute</b></p> <p>}</p>	IUT $\leftarrow$ AE  IUT $\rightarrow$ AE
NOTE: ATTRIBUTE indicates common attribute for all RESOURCE_TYPE resources listed in the table below.		

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/RET/005_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)
TP/oneM2M/CSE/DMR/RET/005_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/RET/005_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)
TP/oneM2M/CSE/DMR/RET/005_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)
TP/oneM2M/CSE/DMR/RET/005_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/RET/005_PCH	Release 2	ETSI TS 118 101 [1], clause 10.2.13.3	15 (pollingChannel)
TP/oneM2M/CSE/DMR/RET/005_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)

## TP/oneM2M/CSE/DMR/RET/006

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/006	
<b>Test objective</b>	Check that the IUT returns successfully multiple attributes of TARGET_RESOURCE_ADDRESS resource	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the AE resource  <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>Content containing</b>  <b>attributeList element containin</b>  <b>ATTRIBUTE_1 name and</b>  <b>ATTRIBUTE_2 name</b></p> <p><b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  <b>Response Status Code set to</b> 2000 (OK) <b>and</b>  <b>Content containing</b>  <b>RESOURCE_TYPE resource containing</b>  <b>valid ATTRIBUTE_1 attribute and</b>  <b>valid ATTRIBUTE_2 attribute and</b>  <b>no other attribute</b></p> <p><b>}</b></p>	IUT ← AE  IUT → AE
<p>NOTE: ATTRIBUTE_1 indicates common attribute for all RESOURCE_TYPE resources listed in the table below.</p> <p>ATTRIBUTE_2 indicates common attribute for all RESOURCE_TYPE resources listed in the table below.</p>		

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/RET/006_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)
TP/oneM2M/CSE/DMR/RET/006_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/RET/006_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)
TP/oneM2M/CSE/DMR/RET/006_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)
TP/oneM2M/CSE/DMR/RET/006_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/RET/006_PCH	Release 2	ETSI TS 118 101 [1], clause 10.2.13.3	15 (pollingChannel)
TP/oneM2M/CSE/DMR/RET/006_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)

## TP/oneM2M/CSE/DMR/RET/007

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/007		
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to retrieve a non-existing attribute of the TARGET_RESOURCE_ADDRESS resource ("single" attribute case)		
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2		
<b>Config Id</b>	CF01		
<b>Parent Release</b>	<i>PARENT_RELEASE</i>		
<b>PICS Selection</b>	PICS_CSE		
<b>Initial conditions</b>	<p>with {</p> <p style="padding-left: 20px;">the IUT <b>being</b> in the "initial state"</p> <p style="padding-left: 20px;"><b>and</b> the IUT <b>having registered</b> the AE</p> <p style="padding-left: 20px;"><b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the AE resource <b>containing</b></p> <p style="padding-left: 20px;"><b>no</b> attribute ATTRIBUTE</p> <p style="padding-left: 20px;"><b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>		
<b>Expected behaviour</b>	<b>Test events</b> <p>when {</p> <p style="padding-left: 20px;">the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b></p> <p style="padding-left: 20px;">To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b></p> <p style="padding-left: 20px;">From <b>set to</b> AE_ID <b>and</b></p> <p style="padding-left: 20px;">Content <b>containing</b></p> <p style="padding-left: 20px;">attributeList element <b>containing</b></p> <p style="padding-left: 20px;">ATTRIBUTE name</p> <p>}</p> <p>then {</p> <p style="padding-left: 20px;">the IUT <b>sends</b> a valid Response <b>containing</b></p> <p style="padding-left: 20px;">Response Status Code <b>set to</b> 4004 (NOT_FOUND)</p> <p>}</p>		<b>Direction</b>
			IUT ← AE
			IUT → AE
NOTE: <i>labels</i> attribute was chosen, since it is a common attribute for all types of resource. It can be replaced by any common attribute.			

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	ATTRIBUTE
TP/oneM2M/CSE/DMR/RET/007_CNT/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)	labels
TP/oneM2M/CSE/DMR/RET/007_ACP/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)	labels
TP/oneM2M/CSE/DMR/RET/007_SUB/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)	labels
TP/oneM2M/CSE/DMR/RET/007_GRP/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)	labels
TP/oneM2M/CSE/DMR/RET/007_SCH/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	labels
TP/oneM2M/CSE/DMR/RET/007_PCH/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.13.3	15 (pollingChallenge)	labels
TP/oneM2M/CSE/DMR/RET/007_TS/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)	labels

## TP/oneM2M/CSE/DMR/RET/008

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/008							
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to retrieve a non-existing attributes of the TARGET_RESOURCE_ADDRESS resource ("multiple" attributes case)							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the AE resource <b>containing</b>  <b>no ATTRIBUTE_1</b> attribute <b>and</b>  <b>no ATTRIBUTE_2</b> attribute  <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>Content containing</b>  <b>attributeList element containing</b>  <b>ATTRIBUTE_1 name and</b>  <b>ATTRIBUTE_2 name</b></p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  <b>Response Status Code set to</b> 4004 (NOT_FOUND)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>Content containing</b>  <b>attributeList element containing</b>  <b>ATTRIBUTE_1 name and</b>  <b>ATTRIBUTE_2 name</b></p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  <b>Response Status Code set to</b> 4004 (NOT_FOUND)</p> <p>}</p>	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>Content containing</b>  <b>attributeList element containing</b>  <b>ATTRIBUTE_1 name and</b>  <b>ATTRIBUTE_2 name</b></p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  <b>Response Status Code set to</b> 4004 (NOT_FOUND)</p> <p>}</p>	IUT → AE							

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	ATTRIBUTE_1	ATTRIBUTE_2
TP/oneM2M/CSE/DMR/RET/008_CNT/LBL/AT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)	labels	announce To
TP/oneM2M/CSE/DMR/RET/008_SUB/LBL/AT	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)	labels	announce To
TP/oneM2M/CSE/DMR/RET/008_ACP/LBL/AT	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)	labels	announce To
TP/oneM2M/CSE/DMR/RET/008_GRP/LBL/AT	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)	labels	announce To
TP/oneM2M/CSE/DMR/RET/008_SCH/LBL/AT	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	labels	announce To
TP/oneM2M/CSE/DMR/RET/008_PCH/LBL/PI	Release 2	ETSI TS 118 101 [1], clause 10.2.13.3	15 (pollingChannel)	labels	parentID
TP/oneM2M/CSE/DMR/RET/008_TS/LBL/AT	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)	labels	announce To

## TP/oneM2M/CSE/DMR/RET/009

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/009	
<b>Test objective</b>	Check that the IUT rejects the RETRIEVE Request of a latest resource target to a container resource that has no direct child contentInstance resources.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.22.1, ETSI TS 118 104 [2], clause 7.4.28.2.3	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>containing</b> a container resource <b>containing</b> <b>no</b> direct child contentInstance resources <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no</b> Content <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4004 (NOT_FOUND) <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

## TP/oneM2M/CSE/DMR/RET/010

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/010	
<b>Test objective</b>	Check that the IUT accepts the RETRIEVE Request of the oldest contentInstance target to a <container> resource	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.23.1, ETSI TS 118 104 [2], clause 7.4.29.2.3	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>and the IUT having created</b> a container resource <b>containing</b> CONTENT_INSTANCE_1 contentInstance resource <b>and</b> CONTENT_INSTANCE_2 contentInstance resource <b>and the AE having</b> privileges to perform RETRIEVE operation on the container resource <b>and</b> creationTime attribute of CONTENT_INSTANCE_1 < creationTime attribute of CONTENT_INSTANCE_2 <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/01 <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no</b> Content <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> contentInstance resource <b>containing</b> resourceName attribute <b>set to</b> CONTENT_INSTANCE_1 <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

## TP/oneM2M/CSE/DMR/RET/011

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/011	
<b>Test objective</b>	Check that the IUT rejects the RETRIEVE Request of an oldest resource target to a container resource that has no direct child contentInstance resources.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.23.1, ETSI TS 118 104 [2], clause 7.4.29.2.3	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<pre> with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b>         a container resource <b>containing</b>             <b>no</b> direct child contentInstance resources } </pre>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<pre> when {     the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/ol <b>and</b>         From <b>set to</b> AE_ID <b>and</b>             <b>no</b> Content } </pre>	IUT ← AE
	<pre> then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 4004 (NOT_FOUND) } </pre>	IUT → AE

## TP/oneM2M/CSE/DMR/RET/012

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/012	
<b>Test objective</b>	Check that the IUT accepts the RETRIEVE Request of the latest contentInstance target to a <container> resource	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.22.1, ETSI TS 118 104 [2], clause 7.4.28.2.3	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<pre> with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b>         <b>and</b> the IUT <b>having created</b> a container resource <b>containing</b>             CONTENT_INSTANCE_1 contentInstance resource <b>and</b>             CONTENT_INSTANCE_2 contentInstance resource         <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the container resource         <b>and</b> creationTime attribute of CONTENT_INSTANCE_1 &lt; creationTime attribute of             CONTENT_INSTANCE_2 } </pre>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<pre> when {     the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/la <b>and</b>         From <b>set to</b> AE_ID <b>and</b>             <b>no</b> Content } </pre>	IUT ← AE
	<pre> then {     the IUT <b>sends</b> a Response <b>containing</b>         Response Status Code <b>set to</b> 2000 (OK) <b>and</b>         Content <b>containing</b>             contentInstance resource <b>containing</b>                 resourceName attribute <b>set to</b> CONTENT_INSTANCE_2 } </pre>	IUT → AE

## TP/oneM2M/CSE/DMR/RET/013

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/013	
<b>Test objective</b>	Check that the IUT returns successfully the TARGET_RESOURCE_ADDRESS resource under CSEBase	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the CSEBase resource  <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS  <b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID  <b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  <b>Response Status Code set to</b> 2000 (OK) <b>and</b>  <b>Content containing</b>  <b>RESOURCE_TYPE</b> resource representation  <b>}</b></p>	IUT $\leftarrow$ AE  IUT $\rightarrow$ AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/RET/013_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/RET/013_AE	Release 1	ETSI TS 118 101 [1], clause 10.2.1.2	2 (AE)
TP/oneM2M/CSE/DMR/RET/013_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)
TP/oneM2M/CSE/DMR/RET/013_CSR	Release 1	ETSI TS 118 101 [1], clause 10.2.2.2	16 (remoteCSE)
TP/oneM2M/CSE/DMR/RET/013_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)
TP/oneM2M/CSE/DMR/RET/013_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)
TP/oneM2M/CSE/DMR/RET/013_DLV	Release 2	ETSI TS 118 101 [1], clause 10.2.5.3	6 (delivery)
TP/oneM2M/CSE/DMR/RET/013_LCP	Release 2	ETSI TS 118 101 [1], clause 10.2.10.1.2	10 (locationPolicy)
TP/oneM2M/CSE/DMR/RET/013_MGC	Release 2	ETSI TS 118 101 [1], clause 10.2.8.3	12 (mgmtCmd)
TP/oneM2M/CSE/DMR/RET/013_NOD	Release 2	ETSI TS 118 101 [1], clause 10.2.14.2	14 (node)
TP/oneM2M/CSE/DMR/RET/013_REQ	Release 2	ETSI TS 118 101 [1], clause 10.2.20.2	17 (request)
TP/oneM2M/CSE/DMR/RET/013_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/RET/013_STCL	Release 2	ETSI TS 118 101 [1], clause 10.2.15.11	21 (statsCollect)
TP/oneM2M/CSE/DMR/RET/013_STCG	Release 2	ETSI TS 118 101 [1], clause 10.2.15.3	22 (statsConfig)
TP/oneM2M/CSE/DMR/RET/013_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)

## TP/oneM2M/CSE/DMR/RET/014

TP Id	TP/oneM2M/CSE/DMR/RET/014						
Test objective	Check that the IUT responds with an error when the AE tries to retrieve a resource TARGET_RESOURCE_ADDRESS under CSEBase without having privileges for the RETRIEVE operation						
Reference	ETSI TS 118 101 [1], clause 10.1.2 item 2)						
Config Id	CF01						
Parent Release	PARENT_RELEASE						
PICS Selection	PICS_CSE						
Initial conditions	<pre> with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type     RESOURCE_TYPE under the CSEBase resource     <b>and</b> the AE <b>having no</b> privileges to perform RETRIEVE operation on the resource     TARGET_RESOURCE_ADDRESS } </pre>						
Expected behaviour	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when {     the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID <b>and</b>         <b>no</b> Content } </pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre> then {     the IUT <b>sends</b> a Response <b>containing</b>         Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) } </pre> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<pre> when {     the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID <b>and</b>         <b>no</b> Content } </pre>	IUT ← AE	<pre> then {     the IUT <b>sends</b> a Response <b>containing</b>         Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) } </pre>	IUT → AE
Test events	Direction						
<pre> when {     the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID <b>and</b>         <b>no</b> Content } </pre>	IUT ← AE						
<pre> then {     the IUT <b>sends</b> a Response <b>containing</b>         Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) } </pre>	IUT → AE						

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/RET/014_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/RET/014_AE	Release 1	ETSI TS 118 101 [1], clause 10.2.1.2	2 (AE)
TP/oneM2M/CSE/DMR/RET/014_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)
TP/oneM2M/CSE/DMR/RET/014_CSR	Release 1	ETSI TS 118 101 [1], clause 10.2.2.2	16 (remoteCSE)
TP/oneM2M/CSE/DMR/RET/014_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)
TP/oneM2M/CSE/DMR/RET/014_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)
TP/oneM2M/CSE/DMR/RET/014_DLV	Release 2	ETSI TS 118 101 [1], clause 10.2.5.3	6 (delivery)
TP/oneM2M/CSE/DMR/RET/014_LCP	Release 2	ETSI TS 118 101 [1], clause 10.2.10.1.2	10 (locationPolicy)
TP/oneM2M/CSE/DMR/RET/014_MGC	Release 2	ETSI TS 118 101 [1], clause 10.2.8.3	12 (mgmtCmd)
TP/oneM2M/CSE/DMR/RET/014_NOD	Release 2	ETSI TS 118 101 [1], clause 10.2.14.2	14 (node)
TP/oneM2M/CSE/DMR/RET/014_REQ	Release 2	ETSI TS 118 101 [1], clause 10.2.20.2	17 (request)
TP/oneM2M/CSE/DMR/RET/014_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/RET/014_STCL	Release 2	ETSI TS 118 101 [1], clause 10.2.15.11	21 (statsCollect)
TP/oneM2M/CSE/DMR/RET/014_STCG	Release 2	ETSI TS 118 101 [1], clause 10.2.15.3	22 (statsConfig)
TP/oneM2M/CSE/DMR/RET/014_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)

## TP/oneM2M/CSE/DMR/RET/015

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/015		
<b>Test objective</b>	Check that the IUT returns successfully the ATTRIBUTE of TARGET_RESOURCE_ADDRESS resource ("To" option) under CSEBase		
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2		
<b>Config Id</b>	CF01		
<b>Parent Release</b>	<i>PARENT_RELEASE</i>		
<b>PICS Selection</b>	PICS_CSE		
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the CSEBase resource  <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS  <b>}</b></p>		
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_ATTRIBUTE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b>		<b>Direction</b>
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> valid ATTRIBUTE attribute <b>and</b> <b>no other</b> attribute <b>}</b>		IUT → AE
NOTE: TARGET_ATTRIBUTE_ADDRESS is represented as TARGET_RESOURCE_ADDRESS # ATTRIBUTE. ATTRIBUTE indicates common attribute for all RESOURCE_TYPE resources listed in the table below.			

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/RET/015_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/RET/015_AE	Release 1	ETSI TS 118 101 [1], clause 10.2.1.2	2 (AE)
TP/oneM2M/CSE/DMR/RET/015_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)
TP/oneM2M/CSE/DMR/RET/015_CSR	Release 1	ETSI TS 118 101 [1], clause 10.2.2.2	16 (remoteCSE)
TP/oneM2M/CSE/DMR/RET/015_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)
TP/oneM2M/CSE/DMR/RET/015_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)
TP/oneM2M/CSE/DMR/RET/015_DLV	Release 2	ETSI TS 118 101 [1], clause 10.2.5.3	6 (delivery)
TP/oneM2M/CSE/DMR/RET/015_LCP	Release 2	ETSI TS 118 101 [1], clause 10.2.10.1.2	10 (locationPolicy)
TP/oneM2M/CSE/DMR/RET/015_MGC	Release 2	ETSI TS 118 101 [1], clause 10.2.8.3	12 (mgmtCmd)
TP/oneM2M/CSE/DMR/RET/015_NOD	Release 2	ETSI TS 118 101 [1], clause 10.2.14.2	14 (node)
TP/oneM2M/CSE/DMR/RET/015_REQ	Release 2	ETSI TS 118 101 [1], clause 10.2.20.2	17 (request)
TP/oneM2M/CSE/DMR/RET/015_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/RET/015_STCL	Release 2	ETSI TS 118 101 [1], clause 10.2.15.11	21 (statsCollect)
TP/oneM2M/CSE/DMR/RET/015_STCG	Release 2	ETSI TS 118 101 [1], clause 10.2.15.3	22 (statsConfig)

TP/oneM2M/CSE/DMR/RET/015_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)
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TP/oneM2M/CSE/DMR/RET/016

TP Id	TP/oneM2M/CSE/DMR/RET/016							
<b>Test objective</b>	Check that the IUT returns successfully the ATTRIBUTE of TARGET_RESOURCE_ADDRESS resource ("Content" option) under CSEBase							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<pre>with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type     RESOURCE_TYPE under the CSEBase resource     <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource     TARGET_RESOURCE_ADDRESS }</pre>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>           the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>           To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>           From <b>set to</b> AE_ID <b>and</b>           Content <b>containing</b>           attributeList element <b>containing</b>           ATTRIBUTE name <b>}</b> </td><td>IUT ← AE</td></tr> <tr> <td> <b>then {</b>           the IUT <b>sends</b> a valid Response <b>containing</b>           Response Status Code <b>set to</b> 2000 (OK) <b>and</b>           Content <b>containing</b>           RESOURCE_TYPE resource <b>containing</b>           valid ATTRIBUTE attribute <b>and</b>           no other attribute <b>}</b> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> attributeList element <b>containing</b> ATTRIBUTE name <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> valid ATTRIBUTE attribute <b>and</b> no other attribute <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> attributeList element <b>containing</b> ATTRIBUTE name <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> valid ATTRIBUTE attribute <b>and</b> no other attribute <b>}</b>	IUT → AE							

NOTE: ATTRIBUTE indicates common attribute for all RESOURCE\_TYPE resources listed in the table below.

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/RET/016_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/RET/016_AE	Release 1	ETSI TS 118 101 [1], clause 10.2.1.2	2 (AE)
TP/oneM2M/CSE/DMR/RET/016_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)
TP/oneM2M/CSE/DMR/RET/016_CSR	Release 1	ETSI TS 118 101 [1], clause 10.2.2.2	16 (remoteCSE)
TP/oneM2M/CSE/DMR/RET/016_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)
TP/oneM2M/CSE/DMR/RET/016_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)
TP/oneM2M/CSE/DMR/RET/016_DLV	Release 2	ETSI TS 118 101 [1], clause 10.2.5.3	6 (delivery)
TP/oneM2M/CSE/DMR/RET/016_LCP	Release 2	ETSI TS 118 101 [1], clause 10.2.10.1.2	10 (locationPolicy)
TP/oneM2M/CSE/DMR/RET/016_MGC	Release 2	ETSI TS 118 101 [1], clause 10.2.8.3	12 (mgmtCmd)
TP/oneM2M/CSE/DMR/RET/016_NOD	Release 2	ETSI TS 118 101 [1], clause 10.2.14.2	14 (node)
TP/oneM2M/CSE/DMR/RET/016_REQ	Release 2	ETSI TS 118 101 [1], clause 10.2.20.2	17 (request)
TP/oneM2M/CSE/DMR/RET/016_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)

TP/oneM2M/CSE/DMR/RET/016_STCL	Release 2	ETSI TS 118 101 [1], clause 10.2.15.11	21 (statsCollect)
TP/oneM2M/CSE/DMR/RET/016_STCG	Release 2	ETSI TS 118 101 [1], clause 10.2.15.3	22 (statsConfig)
TP/oneM2M/CSE/DMR/RET/016_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)

TP/oneM2M/CSE/DMR/RET/017

TP Id	TP/oneM2M/CSE/DMR/RET/017							
<b>Test objective</b>	Check that the IUT returns successfully multiple attributes of TARGET_RESOURCE_ADDRESS resource under CSEBase							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<pre>with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type     RESOURCE_TYPE under the CSEBase resource     <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource     TARGET_RESOURCE_ADDRESS }</pre>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>           the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>           To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>           From <b>set to</b> AE_ID <b>and</b>           Content <b>containing</b>           attributeList element <b>containing</b>           ATTRIBUTE_1 name           <b>and</b> ATTRIBUTE_2 name <b>}</b> </td><td>IUT ← AE</td></tr> <tr> <td> <b>then {</b>           the IUT <b>sends</b> a valid Response <b>containing</b>           Response Status Code <b>set to</b> 2000 (OK) <b>and</b>           Content <b>containing</b>           RESOURCE_TYPE resource <b>containing</b>           valid ATTRIBUTE_1 attribute <b>and</b>           valid ATTRIBUTE_2 attribute <b>and</b> <b>no other</b> attribute <b>}</b> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> attributeList element <b>containing</b> ATTRIBUTE_1 name <b>and</b> ATTRIBUTE_2 name <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> valid ATTRIBUTE_1 attribute <b>and</b> valid ATTRIBUTE_2 attribute <b>and</b> <b>no other</b> attribute <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> attributeList element <b>containing</b> ATTRIBUTE_1 name <b>and</b> ATTRIBUTE_2 name <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> valid ATTRIBUTE_1 attribute <b>and</b> valid ATTRIBUTE_2 attribute <b>and</b> <b>no other</b> attribute <b>}</b>	IUT → AE							
NOTE: ATTRIBUTE_1 indicates common attribute for all RESOURCE_TYPE resources listed in the table below. ATTRIBUTE_2 indicates common attribute for all RESOURCE_TYPE resources listed in the table below.								

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/RET/017_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/RET/017_AE	Release 1	ETSI TS 118 101 [1], clause 10.2.1.2	2 (AE)
TP/oneM2M/CSE/DMR/RET/017_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)
TP/oneM2M/CSE/DMR/RET/017_CSR	Release 1	ETSI TS 118 101 [1], clause 10.2.2.2	16 (remoteCSE)
TP/oneM2M/CSE/DMR/RET/017_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)
TP/oneM2M/CSE/DMR/RET/017_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)
TP/oneM2M/CSE/DMR/RET/017_DLV	Release 2	ETSI TS 118 101 [1], clause 10.2.5.3	6 (delivery)
TP/oneM2M/CSE/DMR/RET/017_LCP	Release 2	ETSI TS 118 101 [1], clause 10.2.10.1.2	10 (locationPolicy)

TP/oneM2M/CSE/DMR/RET/017_MGC	Release 2	ETSI TS 118 101 [1], clause 10.2.8.3	12 (mgmtCmd)
TP/oneM2M/CSE/DMR/RET/017_NOD	Release 2	ETSI TS 118 101 [1], clause 10.2.14.2	14 (node)
TP/oneM2M/CSE/DMR/RET/017_REQ	Release 2	ETSI TS 118 101 [1], clause 10.2.20.2	17 (request)
TP/oneM2M/CSE/DMR/RET/017_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/RET/017_STCL	Release 2	ETSI TS 118 101 [1], clause 10.2.15.11	21 (statsCollect)
TP/oneM2M/CSE/DMR/RET/017_STCG	Release 2	ETSI TS 118 101 [1], clause 10.2.15.3	22 (statsConfig)
TP/oneM2M/CSE/DMR/RET/017_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)

TP/oneM2M/CSE/DMR/RET/018

TP Id	TP/oneM2M/CSE/DMR/RET/018							
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to retrieve a non-existing attribute of the TARGET_RESOURCE_ADDRESS resource ("single" attribute case) under CSEBase							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	PARENT_RELEASE							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and</b> the IUT <b>having registered</b> the AE</p> <p><b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the CSEBase resource <b>containing</b></p> <p><b>no</b> attribute ATTRIBUTE</p> <p><b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {           the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>           To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>           From <b>set to</b> AE_ID <b>and</b>           Content <b>containing</b>           attributeList element <b>containing</b>           ATTRIBUTE name         }       </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then</b> {           the IUT <b>sends</b> a valid Response <b>containing</b>           Response Status Code <b>set to</b> 4004 (NOT_FOUND)         }       </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when</b> {           the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> attributeList element <b>containing</b> ATTRIBUTE name         }	IUT ← AE	<b>then</b> {           the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4004 (NOT_FOUND)         }	IUT → AE	
Test events	Direction							
<b>when</b> {           the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> attributeList element <b>containing</b> ATTRIBUTE name         }	IUT ← AE							
<b>then</b> {           the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4004 (NOT_FOUND)         }	IUT → AE							

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	ATTRIBUTE
TP/oneM2M/CSE/DMR/RET/018_ACP/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)	labels
TP/oneM2M/CSE/DMR/RET/018_AE/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.1.2	2 (AE)	labels
TP/oneM2M/CSE/DMR/RET/018_CNT/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)	labels
TP/oneM2M/CSE/DMR/RET/018_CSR/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.2.2	16 (remoteCSE)	labels
TP/oneM2M/CSE/DMR/RET/018_SUB/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)	labels
TP/oneM2M/CSE/DMR/RET/018_GRP/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)	labels
TP/oneM2M/CSE/DMR/RET/018_DLV/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.5.3	6 (delivery)	labels
TP/oneM2M/CSE/DMR/RET/018_LCP/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.10.1.2	10 (locationPolicy)	labels

TP/oneM2M/CSE/DMR/RET/018_MGC/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.8.3	12 (mgmtCmd)	labels
TP/oneM2M/CSE/DMR/RET/018_NOD/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.14.2	14 (node)	labels
TP/oneM2M/CSE/DMR/RET/018_REQ/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.20.2	17 (request)	labels
TP/oneM2M/CSE/DMR/RET/018_SCH/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	labels
TP/oneM2M/CSE/DMR/RET/018_STCL/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.15.11	21 (statsCollect)	labels
TP/oneM2M/CSE/DMR/RET/018_STCG/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.15.3	22 (statsConfig)	labels
TP/oneM2M/CSE/DMR/RET/018_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)	labels

TP/oneM2M/CSE/DMR/RET/019

TP Id	TP/oneM2M/CSE/DMR/RET/019						
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to retrieve a non-existing attribute of the TARGET_RESOURCE_ADDRESS resource ("multiple" attributes case) under CSEBase						
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.2						
<b>Config Id</b>	CF01						
<b>Parent Release</b>	PARENT_RELEASE						
<b>PICS Selection</b>	PICS_CSE						
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and</b> the IUT <b>having registered</b> the AE</p> <p><b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the &lt;CSEBase&gt; resource <b>containing</b></p> <p><b>no ATTRIBUTE_1 attribute and</b></p> <p><b>no ATTRIBUTE_2 attribute</b></p> <p><b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>						
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE_ID <b>and</b>            Content <b>containing</b>            attributeList element <b>containing</b>            ATTRIBUTE_1 name  <b>and</b> ATTRIBUTE_2 name  <b>}</b> </td><td>IUT ← AE</td></tr> <tr> <td> <b>then {</b>            the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> 4004 (NOT_FOUND)  <b>}</b> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> attributeList element <b>containing</b> ATTRIBUTE_1 name <b>and</b> ATTRIBUTE_2 name <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4004 (NOT_FOUND) <b>}</b>	IUT → AE
Test events	Direction						
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> attributeList element <b>containing</b> ATTRIBUTE_1 name <b>and</b> ATTRIBUTE_2 name <b>}</b>	IUT ← AE						
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4004 (NOT_FOUND) <b>}</b>	IUT → AE						

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	ATTRIBUTE_1	ATTRIBUTE_2
TP/oneM2M/CSE/DMR/RET/019_ACP/LBL/AT	Release 1	ETSI TS 118 101 [1], clause 10.2.21.2	1 (accessControlPolicy)	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_AE/LBL/AT	Release 1	ETSI TS 118 101 [1], clause 10.2.1.2	2 (AE)	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_CNT/LBL/AT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.2	3 (container)	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_CSR/LBL/AT	Release 1	ETSI TS 118 101 [1], clause 10.2.2.2	16 (remoteCSE)	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_SUB/LBL/AT	Release 1	ETSI TS 118 101 [1], clause 10.2.11.3	23 (subscription)	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_GRP/LBL/AT	Release 1	ETSI TS 118 101 [1], clause 10.2.7.3	9 (group)	labels	announceTo

TP/oneM2M/CSE/DMR/RET/019_DLV/LBL/AT	Release 2	ETSI TS 118 101 [1], clause 10.2.5.3	6 (delivery)	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_LCP/LBL/AT	Release 2	ETSI TS 118 101 [1], clause 10.2.10.1.2	10 (locationPolicy )	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_MGC/LBL/AT	Release 2	ETSI TS 118 101 [1], clause 10.2.8.3	12 (mgmtCmd)	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_NOD/LBL/AT	Release 2	ETSI TS 118 101 [1], clause 10.2.14.2	14 (node)	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_REQ/LBL/AT	Release 2	ETSI TS 118 101 [1], clause 10.2.20.2	17 (request)	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_SCH/LBL/AT	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_STCL/LBL/AT	Release 2	ETSI TS 118 101 [1], clause 10.2.15.11	21 (statsCollect)	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_STCG/LBL/AT	Release 2	ETSI TS 118 101 [1], clause 10.2.15.3	22 (statsConfig)	labels	announceTo
TP/oneM2M/CSE/DMR/RET/019_TS/LBL/AT	Release 2	ETSI TS 118 101 [1], clause 10.2.30.2	29 (timeSeries)	labels	announceTo

TP/oneM2M/CSE/DMR/RET/020

TP Id	TP/oneM2M/CSE/DMR/RET/020	
<b>Test objective</b>	Check that the IUT rejects a RETRIEVE Request target to TARGET_RESOURCE_ADDRESS resource when the Result Content set to RESULT_CONTENT	
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 7.3.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and</b> the IUT <b>having registered</b> the AE</p> <p><b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE</p> <p><b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>	
<b>Expected behaviour</b>	<p><b>Test events</b></p> <p>when {</p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE_ID <b>and</b></p> <p><b>no</b> Content <b>and</b></p> <p>Result Content <b>set to</b> RESULT_CONTENT</p> <p>}</p>	<b>Direction</b>
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4000 (BAD_REQUEST) <b>and</b></p> <p><b>no</b> Content</p> <p>}</p>	

TP Id	Reference	RESULT_CONTENT
TP/oneM2M/CSE/DMR/RET/020_RCN/0		0 (Nothing)
TP/oneM2M/CSE/DMR/RET/020_RCN/2		2 (hierarchical address)
TP/oneM2M/CSE/DMR/RET/020_RCN/3	ETSI TS 118 104 [2], clause 6.3.4.2.7	3 (attributes and hierarchical address)
TP/oneM2M/CSE/DMR/RET/020_RCN/9		9 (modified attributes)

## TP/oneM2M/CSE/DMR/RET/021

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/021	
<b>Test objective</b>	Check that the IUT returns successfully only attributes of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 1 (attributes)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 6.3.3.2.7	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type  <b>RESOURCE_TYPE containing</b>  a child resource  <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource  TARGET_RESOURCE_ADDRESS</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  <b>no</b> Content <b>and</b>  Result Content <b>set to</b> 1 (attributes)</p> <p><b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2000 (OK) <b>and</b>  Content <b>containing</b>  <b>RESOURCE_TYPE</b> resource <b>containing</b>  attributes <b>and</b>  <b>no</b> hierachical address <b>and</b>  <b>no</b> child resources <b>and</b>  <b>no</b> child resource references</p> <p><b>}</b></p>	IUT → AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/RET/021_CNT	Release 2	3 (container)
TP/oneM2M/CSE/DMR/RET/021_GRP	Release 2	9 (group)
TP/oneM2M/CSE/DMR/RET/021_ACP	Release 2	1 (accessControlPolicy)

## TP/oneM2M/CSE/DMR/RET/022

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/022	
<b>Test objective</b>	Check that the IUT returns successfully only attributes and child resources of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 4 (attributes and child resources)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 6.3.3.2.7	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE <b>containing</b> a child resource <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no</b> Content <b>and</b> Result Content <b>set to</b> 4 (attributes and child resources) <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> attributes <b>and</b> <b>no</b> hierachical address <b>and</b> child resources <b>and</b> <b>no</b> child resource references <b>}</b>	IUT → AE

TP Id	PARENT_RELEASE	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/RET/022_CNT	Release 2	3 (container)
TP/oneM2M/CSE/DMR/RET/022_GRP	Release 2	9 (group)
TP/oneM2M/CSE/DMR/RET/022_ACP	Release 2	1 (accessControlPolicy)

## TP/oneM2M/CSE/DMR/RET/023

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/023							
<b>Test objective</b>	Check that the IUT returns successfully only attributes and child resource references of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 5 (attributes and child resource references)							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 6.3.3.2.7							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<pre> with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type     RESOURCE_TYPE <b>containing</b>         a child resource     <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource     TARGET_RESOURCE_ADDRESS } </pre>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when {     the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID <b>and</b>         <b>no</b> Content <b>and</b>         Result Content <b>set to</b> 5 (attributes and child resource references) } </pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre> then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2000 (OK) <b>and</b>         Content <b>containing</b>             RESOURCE_TYPE resource <b>containing</b>                 attributes <b>and</b>                 <b>no</b> hierachichal address <b>and</b>                 <b>no</b> child resources <b>and</b>                 child resource references } </pre> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<pre> when {     the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID <b>and</b>         <b>no</b> Content <b>and</b>         Result Content <b>set to</b> 5 (attributes and child resource references) } </pre>	IUT ← AE	<pre> then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2000 (OK) <b>and</b>         Content <b>containing</b>             RESOURCE_TYPE resource <b>containing</b>                 attributes <b>and</b>                 <b>no</b> hierachichal address <b>and</b>                 <b>no</b> child resources <b>and</b>                 child resource references } </pre>	IUT → AE	
Test events	Direction							
<pre> when {     the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID <b>and</b>         <b>no</b> Content <b>and</b>         Result Content <b>set to</b> 5 (attributes and child resource references) } </pre>	IUT ← AE							
<pre> then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2000 (OK) <b>and</b>         Content <b>containing</b>             RESOURCE_TYPE resource <b>containing</b>                 attributes <b>and</b>                 <b>no</b> hierachichal address <b>and</b>                 <b>no</b> child resources <b>and</b>                 child resource references } </pre>	IUT → AE							

TP Id	PARENT_RELEASE	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/RET/023_CNT	Release 2	3 (container)
TP/oneM2M/CSE/DMR/RET/023_GRP	Release 2	9 (group)
TP/oneM2M/CSE/DMR/RET/023_ACP	Release 2	1 (accessControlPolicy)

## TP/oneM2M/CSE/DMR/RET/024

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/024	
<b>Test objective</b>	Check that the IUT returns successfully only child resource references of TARGET_RESOURCE_ADDRESS resource when Result Content is set to 6 (child resource references)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 6.3.3.2.7	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>and the IUT having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE <b>containing</b> a child resource <b>and the AE having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content and</b> Result Content <b>set to</b> 6 (child resource references) <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> resourceRefList element <b>containing</b> child resource reference <b>}</b>	IUT → AE

TP Id	PARENT_RELEASE	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/RET/024_CNT	Release 2	3 (container)
TP/oneM2M/CSE/DMR/RET/024_GRP	Release 2	9 (group)
TP/oneM2M/CSE/DMR/RET/024_ACP	Release 2	1 (accessControlPolicy)

## TP/oneM2M/CSE/DMR/RET/025

<b>TP Id</b>	TP/oneM2M/CSE/DMR/RET/025							
<b>Test objective</b>	Check that the IUT returns successfully only child resources of TARGET_RESOURCE_ADDRESS resource when Result Content is set to 8 (child resources)							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 6.3.3.2.7							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the AE  <b>and the IUT having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE <b>containing</b>  a child resource  <b>and the AE having</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS  <b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  <b>no Content and</b>  Result Content <b>set to</b> 8 (child resources)  <b>}</b> </td><td>IUT ← AE</td></tr> <tr> <td> <b>then {</b>  the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2000 (OK) <b>and</b>  Content <b>containing</b>  CHILD_RESOURCE_TYPE resource representation  <b>}</b> </td><td>IUT → AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content and</b> Result Content <b>set to</b> 8 (child resources) <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> CHILD_RESOURCE_TYPE resource representation <b>}</b>	IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content and</b> Result Content <b>set to</b> 8 (child resources) <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> CHILD_RESOURCE_TYPE resource representation <b>}</b>	IUT → AE							

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/RET/025_CNT	Release 2	3 (container)
TP/oneM2M/CSE/DMR/RET/025_GRP	Release 2	9 (group)
TP/oneM2M/CSE/DMR/RET/025_ACP	Release 2	1 (accessControlPolicy)

### 7.2.2.3.2 UPDATE Operation

TP/oneM2M/CSE/DMR/UPD/001

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/001		
<b>Test objective</b>	Check that the IUT updates successfully the value of the attribute <i>ATTRIBUTE_NAME</i> of the <i>TARGET_RESOURCE_ADDRESS</i> resource		
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3		
<b>Config Id</b>	CF01		
<b>Parent Release</b>	<i>PARENT_RELEASE</i>		
<b>PICS Selection</b>	PICS_CSE		
<b>Initial conditions</b>	<pre>with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type     RESOURCE_TYPE <b>containing</b>         a RW ATTRIBUTE_NAME attribute <b>set to</b> VALUE_1     <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource     TARGET_RESOURCE_ADDRESS }</pre>		
<b>Expected behaviour</b>	<b>Test events</b> <pre>when {     the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID <b>and</b>         Content <b>containing</b>             RESOURCE_TYPE resource <b>containing</b>                 ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2 }</pre>		<b>Direction</b>
			IUT ← AE
	<pre>then {     the IUT <b>updates</b> the TARGET_RESOURCE_ADDRESS resource     <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>         Content <b>containing</b>             RESOURCE_TYPE resource <b>containing</b>                 ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2 }</pre>	<b>IUT → AE</b>	

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	ATTRIBUTE_NAME
TP/oneM2M/CSE/DMR/UPD/001_CNT/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.4.3	3 (container)	labels
TP/oneM2M/CSE/DMR/UPD/001_ACP/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.21.3	1 (accessControlPolicy)	labels
TP/oneM2M/CSE/DMR/UPD/001_SUB/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.11.4	23 (subscription)	labels
TP/oneM2M/CSE/DMR/UPD/001_GRP/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.7.4	9 (group)	labels
TP/oneM2M/CSE/DMR/UPD/001_SCH/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	labels
TP/oneM2M/CSE/DMR/UPD/001_PCH/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.13.4	15 (pollingChannel)	labels
TP/oneM2M/CSE/DMR/UPD/001_TS/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.13.4	29 (timeSeries)	labels

## TP/oneM2M/CSE/DMR/UPD/002

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/002			
<b>Test objective</b>	Check that the IUT adds successfully the attribute <i>ATTRIBUTE_NAME</i> to the TARGET_RESOURCE_ADDRESS resource			
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3			
<b>Config Id</b>	CF01			
<b>Parent Release</b>	<i>PARENT_RELEASE</i>			
<b>PICS Selection</b>	PICS_CSE			
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing  <b>no</b> optional RW <i>ATTRIBUTE_NAME</i> attribute  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>			
<b>Expected behaviour</b>	<p><b>Test events</b></p> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request from AE containing  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>Content containing</b>      RESOURCE_TYPE resource <b>containing</b>  <i>ATTRIBUTE_NAME</i> attribute <b>set to</b> VALUE_1</p> <p>}</p> <p>then {</p> <p>the IUT <b>updates</b> the TARGET_RESOURCE_ADDRESS resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>  <b>Content containing</b>      RESOURCE_TYPE resource <b>containing</b>  <i>ATTRIBUTE_NAME</i> attribute <b>set to</b> VALUE_1</p> <p>}</p>	<b>Direction</b>		
			IUT ← AE	
			IUT → AE	

TP Id	PARENT_RELEASE	PICS Selection	Reference	RESOURCE_TYPE	ATTRIBUTE_NAME
TP/oneM2M/CSE/DMR/UPD/002_CNT/LBL	Release 1	PICS_CNT_LBL	ETSI TS 118 101 [1], clause 10.2.4.3	3 (container)	labels
TP/oneM2M/CSE/DMR/UPD/002_ACP/LBL	Release 1	PICS_ACP_LBL	ETSI TS 118 101 [1], clause 10.2.21.3	1 (accessControl Policy)	labels
TP/oneM2M/CSE/DMR/UPD/002_SUB/LBL	Release 1	PICS_SUB_LBL	ETSI TS 118 101 [1], clause 10.2.11.4	23 (subscription)	labels
TP/oneM2M/CSE/DMR/UPD/002_GRP/LBL	Release 1	PICS_GRP_LBL	ETSI TS 118 101 [1], clause 10.2.7.4	9 (group)	labels
TP/oneM2M/CSE/DMR/UPD/002_SCH/LBL	Release 2		ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	labels
TP/oneM2M/CSE/DMR/UPD/002_PCH/LBL	Release 2		ETSI TS 118 101 [1], clause 10.2.13.4	15 (pollingChannel )	labels
TP/oneM2M/CSE/DMR/UPD/002_TS/LBL	Release 2		ETSI TS 118 101 [1], clause 10.2.30.3	29 (timeSeries)	labels

## TP/oneM2M/CSE/DMR/UPD/003

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/003							
<b>Test objective</b>	Check that the IUT deletes successfully the attribute <i>ATTRIBUTE_NAME</i> from the TARGET_RESOURCE_ADDRESS resource							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing  an optional RW ATTRIBUTE_NAME attribute  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  ATTRIBUTE_NAME attribute <b>set to</b> NULL</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>updates</b> the TARGET_RESOURCE_ADDRESS resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  ATTRIBUTE_NAME attribute <b>set to</b> NULL</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  ATTRIBUTE_NAME attribute <b>set to</b> NULL</p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>updates</b> the TARGET_RESOURCE_ADDRESS resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  ATTRIBUTE_NAME attribute <b>set to</b> NULL</p> <p>}</p>	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  ATTRIBUTE_NAME attribute <b>set to</b> NULL</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>updates</b> the TARGET_RESOURCE_ADDRESS resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  ATTRIBUTE_NAME attribute <b>set to</b> NULL</p> <p>}</p>	IUT → AE							

TP Id	PARENT_RELEASE	PICS Selection	Reference	RESOURCE_TYPE	ATTRIBUTE_NAME
TP/oneM2M/CSE/DMR/UPD/003_CNT/LBL	Release 1	PICS_CNT_LBL	ETSI TS 118 101 [1], clause 10.2.4.3	3 (container)	labels
TP/oneM2M/CSE/DMR/UPD/003_ACP/LBL	Release 1	PICS_ACP_LBL	ETSI TS 118 101 [1], clause 10.2.21.3	1 (accessControlPolicy)	labels
TP/oneM2M/CSE/DMR/UPD/003_SUB/LBL	Release 1	PICS_SUB_LBL	ETSI TS 118 101 [1], clause 10.2.11.4	23 (subscription)	labels
TP/oneM2M/CSE/DMR/UPD/003_GRP/LBL	Release 1	PICS_GRP_LBL	ETSI TS 118 101 [1], clause 10.2.7.4	9 (group)	labels
TP/oneM2M/CSE/DMR/UPD/003_SCH/LBL	Release 2		ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	labels
TP/oneM2M/CSE/DMR/UPD/003_PCH/LBL	Release 2		ETSI TS 118 101 [1], clause 10.2.13.4	15 (pollingChannel)	labels
TP/oneM2M/CSE/DMR/UPD/003_TS/LBL	Release 2		ETSI TS 118 101 [1], clause 10.2.30.3	29 (timeSeries)	labels

## TP/oneM2M/CSE/DMR/UPD/004

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/004							
<b>Test objective</b>	Check that the IUT updates the value of the attribute <b>ATTRIBUTE_NAME_1</b> , and creates the <b>ATTRIBUTE_NAME_2</b> and deletes the <b>ATTRIBUTE_NAME_3</b> of the <b>TARGET_RESOURCE_ADDRESS</b> resource							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<b>PARENT_RELEASE</b>							
<b>PICS Selection</b>	<b>PICS_CSE</b>							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the AE  <b>and the IUT having created</b> a resource <b>TARGET_RESOURCE_ADDRESS</b> of type <b>RESOURCE_TYPE</b> <b>containing</b></p> <p>a RW <b>ATTRIBUTE_NAME_1</b> attribute <b>set to</b> <b>VALUE_1</b> <b>and</b>  <b>no</b> optional RW <b>ATTRIBUTE_NAME_2</b> attribute <b>and</b>  an optional RW <b>ATTRIBUTE_NAME_3</b> attribute  <b>and the AE having</b> privileges to perform UPDATE operation on the resource <b>TARGET_RESOURCE_ADDRESS</b></p> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th style="text-align: center;"><b>Test events</b></th> <th style="text-align: center;"><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> <b>TARGET_RESOURCE_ADDRESS</b> <b>and</b>  From <b>set to</b> <b>AE_ID</b> <b>and</b>  Content <b>containing</b>  <b>RESOURCE_TYPE</b> resource <b>containing</b>  <b>ATTRIBUTE_NAME_1</b> attribute <b>set to</b> <b>VALUE_2</b> <b>and</b>  <b>ATTRIBUTE_NAME_2</b> attribute <b>set to</b> <b>VALUE_3</b> <b>and</b>  <b>ATTRIBUTE_NAME_3</b> attribute <b>set to</b> <b>NULL</b>  <b>}</b> </td> <td style="text-align: center;">IUT ← AE</td> </tr> <tr> <td> <b>then {</b>  the IUT <b>updates</b> the <b>TARGET_RESOURCE_ADDRESS</b> resource  <b>and the IUT sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>  Content <b>containing</b>  <b>RESOURCE_TYPE</b> resource <b>containing</b>  <b>ATTRIBUTE_NAME_1</b> attribute <b>set to</b> <b>VALUE_2</b> <b>and</b>  <b>ATTRIBUTE_NAME_2</b> attribute <b>set to</b> <b>VALUE_3</b> <b>and</b>  <b>ATTRIBUTE_NAME_3</b> attribute <b>set to</b> <b>NULL</b>  <b>}</b> </td> <td style="text-align: center;">IUT → AE</td> </tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> <b>TARGET_RESOURCE_ADDRESS</b> <b>and</b> From <b>set to</b> <b>AE_ID</b> <b>and</b> Content <b>containing</b> <b>RESOURCE_TYPE</b> resource <b>containing</b> <b>ATTRIBUTE_NAME_1</b> attribute <b>set to</b> <b>VALUE_2</b> <b>and</b> <b>ATTRIBUTE_NAME_2</b> attribute <b>set to</b> <b>VALUE_3</b> <b>and</b> <b>ATTRIBUTE_NAME_3</b> attribute <b>set to</b> <b>NULL</b> <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>updates</b> the <b>TARGET_RESOURCE_ADDRESS</b> resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b> Content <b>containing</b> <b>RESOURCE_TYPE</b> resource <b>containing</b> <b>ATTRIBUTE_NAME_1</b> attribute <b>set to</b> <b>VALUE_2</b> <b>and</b> <b>ATTRIBUTE_NAME_2</b> attribute <b>set to</b> <b>VALUE_3</b> <b>and</b> <b>ATTRIBUTE_NAME_3</b> attribute <b>set to</b> <b>NULL</b> <b>}</b>	IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> <b>TARGET_RESOURCE_ADDRESS</b> <b>and</b> From <b>set to</b> <b>AE_ID</b> <b>and</b> Content <b>containing</b> <b>RESOURCE_TYPE</b> resource <b>containing</b> <b>ATTRIBUTE_NAME_1</b> attribute <b>set to</b> <b>VALUE_2</b> <b>and</b> <b>ATTRIBUTE_NAME_2</b> attribute <b>set to</b> <b>VALUE_3</b> <b>and</b> <b>ATTRIBUTE_NAME_3</b> attribute <b>set to</b> <b>NULL</b> <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>updates</b> the <b>TARGET_RESOURCE_ADDRESS</b> resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b> Content <b>containing</b> <b>RESOURCE_TYPE</b> resource <b>containing</b> <b>ATTRIBUTE_NAME_1</b> attribute <b>set to</b> <b>VALUE_2</b> <b>and</b> <b>ATTRIBUTE_NAME_2</b> attribute <b>set to</b> <b>VALUE_3</b> <b>and</b> <b>ATTRIBUTE_NAME_3</b> attribute <b>set to</b> <b>NULL</b> <b>}</b>	IUT → AE							

TP Id	PARENT_RELEASE	PICS Selection	Reference	RESOURCE_TYPE	ATTRIBUTE_NAME_1	ATTRIBUTE_NAME_2	ATTRIBUTE_NAME_3
TP/oneM2M/CSE/DMR/UPD/004_CNT/ET/MNI/LBL	Release 1	PICS_CNT_MNI and PICS_CNT_LBL	ETSI TS 118 101 [1], clause 10.2.4.3	3 (container)	expirationTime	maxNrOfInstances	labels
TP/oneM2M/CSE/DMR/UPD/004_ACP/PVS/PV/LBL	Release 1	PICS_AC_P_LBL	ETSI TS 118 101 [1], clause 10.2.21.3	1 (accessControlPolicy)	selfPrivileges	privileges	labels
TP/oneM2M/CSE/DMR/UPD/004_ACP/PV/AT/LBL	Release 1	PICS_AC_P_AT and PICS_AC_P_LBL	ETSI TS 118 101 [1], clause 10.2.21.3	1 (accessControlPolicy)	privileges	announceTo	labels
TP/oneM2M/CSE/DMR/UPD/004_SUB/ET/LBL/EXC	Release 1	PICS_SUB_LBL and PICS_SUB_EXC	ETSI TS 118 101 [1], clause 10.2.11.4	23 (subscription)	expirationTime	labels	expirationCounter
TP/oneM2M/CSE/DMR/UPD/004_GRP/ET/GN/LBL	Release 1	PICS_GRP_GN and PICS_GRP_LBL	ETSI TS 118 101 [1], clause 10.2.7.4	9 (group)	expirationTime	groupName	labels
TP/oneM2M/CSE/DMR/UPD/004_SCH/SE/AT/LBL	Release 2		ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	scheduleElement	announceTo	labels
TP/oneM2M/CSE/DMR/UPD/004_TS/ET/MNI/LBL	Release 2		ETSI TS 118 101 [1], clause 10.2.13.4	15 (pollingChannel)	expirationTime	maxNrOfInstances	labels

## TP/oneM2M/CSE/DMR/UPD/005

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/005	
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to update an attribute of a TARGET_RESOURCE_ADDRESS resource when the resource does not exist	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p style="padding-left: 20px;">the IUT <b>being</b> in the "initial state"</p> <p style="padding-left: 20px;"><b>and</b> the IUT <b>having registered</b> the AE</p> <p style="padding-left: 20px;"><b>and</b> the IUT <b>not having created</b> a resource TARGET_RESOURCE_ADDRESS</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> valid representation resource <b>containing</b> valid attribute <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4004 (NOT_FOUND) <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

## TP/oneM2M/CSE/DMR/UPD/006

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/006							
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to update the attribute <i>ATTRIBUTE_NAME</i> of a TARGET_RESOURCE_ADDRESS resource without having privileges for the UPDATE operation							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing  a RW ATTRIBUTE_NAME attribute <b>set to</b> VALUE_1  <b>and</b> the AE <b>having no</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE containing  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  ATTRIBUTE_NAME <b>set to</b> VALUE_2</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT <b>does not update</b> the TARGET_RESOURCE_ADDRESS resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4103 (ACCESS_DENIED)</p> <p>}</p> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE containing  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  ATTRIBUTE_NAME <b>set to</b> VALUE_2</p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>does not update</b> the TARGET_RESOURCE_ADDRESS resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4103 (ACCESS_DENIED)</p> <p>}</p>	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE containing  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  ATTRIBUTE_NAME <b>set to</b> VALUE_2</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>does not update</b> the TARGET_RESOURCE_ADDRESS resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4103 (ACCESS_DENIED)</p> <p>}</p>	IUT → AE							

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	ATTRIBUTE_NAME
TP/oneM2M/CSE/DMR/UPD/006_CNT/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.4.3	3 (container)	labels
TP/oneM2M/CSE/DMR/UPD/006_ACP/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.21.3	1 (accessControlPolicy)	labels
TP/oneM2M/CSE/DMR/UPD/006_SUB/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.11.4	23 (subscription)	labels
TP/oneM2M/CSE/DMR/UPD/006_GRP/LBL	Release 1	ETSI TS 118 101 [1], clause 10.2.7.4	9 (group)	labels
TP/oneM2M/CSE/DMR/UPD/006_SCH/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	labels
TP/oneM2M/CSE/DMR/UPD/005_TS/LBL	Release 2	ETSI TS 118 101 [1], clause 10.2.30.3	29 (timeSeries)	labels

## TP/oneM2M/CSE/DMR/UPD/007

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/007							
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to update a non-RW attribute <i>ATTRIBUTE_NAME</i> of a TARGET_RESOURCE_ADDRESS resource							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the AE  <b>and the IUT having created</b> a resource TARGET_RESOURCE_ADDRESS of type <i>RESOURCE_TYPE</i> containing  a non-RW <i>ATTRIBUTE_NAME</i> attribute  <b>and the AE having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p><b>when</b> {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Content <b>containing</b>  <i>RESOURCE_TYPE</i> resource <b>containing</b>  valid <i>ATTRIBUTE_NAME</i> attribute</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p><b>then</b> {</p> <p>the IUT <b>does not update</b> the TARGET_RESOURCE_ADDRESS resource  <b>and the IUT sends</b> a Response <b>containing</b>  Response Status Code <b>set to</b> 4000 (BAD_REQUEST)</p> } </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p><b>when</b> {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Content <b>containing</b>  <i>RESOURCE_TYPE</i> resource <b>containing</b>  valid <i>ATTRIBUTE_NAME</i> attribute</p> }	IUT ← AE	<p><b>then</b> {</p> <p>the IUT <b>does not update</b> the TARGET_RESOURCE_ADDRESS resource  <b>and the IUT sends</b> a Response <b>containing</b>  Response Status Code <b>set to</b> 4000 (BAD_REQUEST)</p> }	IUT → AE	
Test events	Direction							
<p><b>when</b> {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Content <b>containing</b>  <i>RESOURCE_TYPE</i> resource <b>containing</b>  valid <i>ATTRIBUTE_NAME</i> attribute</p> }	IUT ← AE							
<p><b>then</b> {</p> <p>the IUT <b>does not update</b> the TARGET_RESOURCE_ADDRESS resource  <b>and the IUT sends</b> a Response <b>containing</b>  Response Status Code <b>set to</b> 4000 (BAD_REQUEST)</p> }	IUT → AE							

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	ATTRIBUTE_NAME
TP/oneM2M/CSE/DMR/UPD/007_CNT/CT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.3	3 (container)	creationTime
TP/oneM2M/CSE/DMR/UPD/007_ACP/CT	Release 1	ETSI TS 118 101 [1], clause 10.2.21.3	1 (accessControlPolicy)	creationTime
TP/oneM2M/CSE/DMR/UPD/007_SUB/CT	Release 1	ETSI TS 118 101 [1], clause 10.2.11.4	23 (subscription)	creationTime
TP/oneM2M/CSE/DMR/UPD/007_GRP/CT	Release 1	ETSI TS 118 101 [1], clause 10.2.7.4	9 (group)	creationTime
TP/oneM2M/CSE/DMR/UPD/007_SCH/CT	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	creationTime
TP/oneM2M/CSE/DMR/UPD/007_PCH/CT	Release 2	ETSI TS 118 101 [1], clause 10.2.13.4	15 (pollingChannel)	creationTime
TP/oneM2M/CSE/DMR/UPD/007_TS/CT	Release 2	ETSI TS 118 101 [1], clause 10.2.30.3	29 (timeSeries)	creationTime

## TP/oneM2M/CSE/DMR/UPD/008

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/008								
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to delete a mandatory RW attribute <i>ATTRIBUTE_NAME</i> of a TARGET_RESOURCE_ADDRESS resource								
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3								
<b>Config Id</b>	CF01								
<b>Parent Release</b>	<i>PARENT_RELEASE</i>								
<b>PICS Selection</b>	PICS_CSE								
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing  a mandatory RW ATTRIBUTE_NAME attribute  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p><b>}</b></p>								
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>receives</b> a valid UPDATE Request from AE containing  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  ATTRIBUTE_NAME attribute <b>set to</b> NULL  <b>}</b> </td><td>IUT ← AE</td></tr> <tr> <td> <b>then {</b>  the IUT <b>does not update</b> the TARGET_RESOURCE_ADDRESS resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4000 (BAD_REQUEST)  <b>}</b> </td><td>IUT → AE</td></tr> </tbody> </table>			Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request from AE containing To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> ATTRIBUTE_NAME attribute <b>set to</b> NULL <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>does not update</b> the TARGET_RESOURCE_ADDRESS resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4000 (BAD_REQUEST) <b>}</b>	IUT → AE
Test events	Direction								
<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request from AE containing To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> ATTRIBUTE_NAME attribute <b>set to</b> NULL <b>}</b>	IUT ← AE								
<b>then {</b> the IUT <b>does not update</b> the TARGET_RESOURCE_ADDRESS resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4000 (BAD_REQUEST) <b>}</b>	IUT → AE								

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	ATTRIBUTE_NAME
TP/oneM2M/CSE/DMR/UPD/008_ACP/PVS	Release 1	ETSI TS 118 101 [1], clause 10.2.21.3	1 (accessControlPolicy)	selfPrivileges
TP/oneM2M/CSE/DMR/UPD/008_SUB/NU	Release 1	ETSI TS 118 101 [1], clause 10.2.11.4	23 (subscription)	notificationURI
TP/oneM2M/CSE/DMR/UPD/008_GRP/MNI	Release 1	ETSI TS 118 101 [1], clause 10.2.7.4	9 (group)	maxNrOfInstances

## TP/oneM2M/CSE/DMR/UPD/009

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/009							
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to update a RW attribute <i>ATTRIBUTE_NAME</i> of the TARGET_RESOURCE_ADDRESS resource with an <i>UNACCEPTABLE_VALUE</i>							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3 item 3)							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing  a valid RW ATTRIBUTE_NAME attribute  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS  }</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {  the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  <b>not supported</b> ATTRIBUTE_NAME attribute  } </td><td>IUT ← AE</td></tr> <tr> <td> <b>then</b> {  the IUT <b>does not update</b> the TARGET_RESOURCE_ADDRESS resource  <b>and</b> the IUT <b>sends</b> a Response <b>containing</b>  Response Status Code <b>set to</b> 4000 (BAD_REQUEST)  } </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<b>when</b> { the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> <b>not supported</b> ATTRIBUTE_NAME attribute }	IUT ← AE	<b>then</b> { the IUT <b>does not update</b> the TARGET_RESOURCE_ADDRESS resource <b>and</b> the IUT <b>sends</b> a Response <b>containing</b> Response Status Code <b>set to</b> 4000 (BAD_REQUEST) }	IUT → AE	
Test events	Direction							
<b>when</b> { the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> <b>not supported</b> ATTRIBUTE_NAME attribute }	IUT ← AE							
<b>then</b> { the IUT <b>does not update</b> the TARGET_RESOURCE_ADDRESS resource <b>and</b> the IUT <b>sends</b> a Response <b>containing</b> Response Status Code <b>set to</b> 4000 (BAD_REQUEST) }	IUT → AE							

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	ATTRIBUTE_NAME
TP/oneM2M/CSE/DMR/UPD/009_CNT/EXC	Release 1	ETSI TS 118 101 [1], clause 10.2.4.3	3 (container)	expirationCounter
TP/oneM2M/CSE/DMR/UPD/009_ACP/EXC	Release 1	ETSI TS 118 101 [1], clause 10.2.21.3	1 (accessControlPolicy)	expirationCounter
TP/oneM2M/CSE/DMR/UPD/009_SUB/MNI	Release 1	ETSI TS 118 101 [1], clause 10.2.11.4	23 (subscription)	maxNrOfInstances
TP/oneM2M/CSE/DMR/UPD/009_GRP/EXC	Release 1	ETSI TS 118 101 [1], clause 10.2.7.4	9 (group)	expirationCounter
TP/oneM2M/CSE/DMR/UPD/009_SCH/EXC	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	expirationCounter
TP/oneM2M/CSE/DMR/UPD/009_PCH/EXC	Release 2	ETSI TS 118 101 [1], clause 10.2.13.4	15 (pollingChannel)	expirationCounter
TP/oneM2M/CSE/DMR/UPD/009_TS/EXC	Release 2	ETSI TS 118 101 [1], clause 10.2.30.3	29 (timeSeries)	expirationCounter

## TP/oneM2M/CSE/DMR/UPD/010

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/010							
<b>Test objective</b>	Check that the stateTag attribute of a <i>RESOURCE_TYPE</i> resource is increased when an update operation has been performed on its child resource							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the AE  <b>and the IUT having created</b> a <i>RESOURCE_TYPE</i> resource <b>containing</b>  CHILD_RESOURCE_TYPE resource <b>containing</b>  ATTRIBUTE_NAME attribute <b>set to</b> VALUE_1  <b>and the AE having</b> privileges to perform UPDATE operation on the  TARGET_CHILD_RESOURCE_ADDRESS  <b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td><b>when {</b>  the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_CHILD_RESOURCE_ADDRESS and  From <b>set to</b> AE_ID  Content <b>containing</b>  CHILD_RESOURCE_TYPE resource <b>containing</b>  ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2  <b>}</b></td><td>IUT <math>\leftarrow</math> AE</td></tr> <tr> <td><b>then {</b>  the IUT <b>increments</b> the stateTag attribute of <i>RESOURCE_TYPE</i> resource  <b>and the IUT sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED)  <b>}</b></td><td>IUT <math>\rightarrow</math> AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_CHILD_RESOURCE_ADDRESS and From <b>set to</b> AE_ID Content <b>containing</b> CHILD_RESOURCE_TYPE resource <b>containing</b> ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2 <b>}</b>	IUT $\leftarrow$ AE	<b>then {</b> the IUT <b>increments</b> the stateTag attribute of <i>RESOURCE_TYPE</i> resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>}</b>	IUT $\rightarrow$ AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_CHILD_RESOURCE_ADDRESS and From <b>set to</b> AE_ID Content <b>containing</b> CHILD_RESOURCE_TYPE resource <b>containing</b> ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2 <b>}</b>	IUT $\leftarrow$ AE							
<b>then {</b> the IUT <b>increments</b> the stateTag attribute of <i>RESOURCE_TYPE</i> resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>}</b>	IUT $\rightarrow$ AE							

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/UPD/010_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.3	3 (container)

## TP/oneM2M/CSE/DMR/UPD/011

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/011	
<b>Test objective</b>	Check that the IUT rejects the UPDATE Request of an existing <i>RESOURCE_TYPE</i> resource with error "OPERATION_NOT_ALLOWED"	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.19.4, ETSI TS 118 104 [2], clause 7.3.2.1 and clause 7.4.8.2.3	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b> a <i>PARENT_RESOURCE_TYPE</i> resource <b>containing</b> a <i>RESOURCE_TYPE</i> resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> <i>RESOURCE_TYPE</i> representation <b>}</b> <b>then {</b> the IUT <b>does not update</b> the <i>RESOURCE_TYPE</i> resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4005 (OPERATION_NOT_ALLOWED) <b>}</b>	<b>Expected behaviour</b>

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	PARENT_RESOURCE_TYPE
TP/oneM2M/CSE/DMR/UPD/011_CNT/CIN	Release 1	ETSI TS 118 101 [1], clause 10.2.4.3	4 (contentInstance)	3 (container)
TP/oneM2M/CSE/DMR/UPD/011_TS/TSII	Release 2	ETSI TS 118 101 [1], clause 10.2.31.3	30 (timeSeriesInstance)	29 (timeSeries)

## TP/oneM2M/CSE/DMR/UPD/012

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/012	
<b>Test objective</b>	Check that the IUT rejects the UPDATE Request of a latest resource as a direct child of a <container> resource with error "OPERATION_NOT_ALLOWED"	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.22, ETSI TS 118 104 [2], clause 7.4.28.2.4 and clause 7.3.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b>            a container resource <b>containing</b>            a contentInstance resource <b>containing</b>            valid creationTime attribute <b>set to</b> the most recent resource creation time</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> an UPDATE Request <b>from</b> AE <b>containing</b>            To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/la <b>and</b>            From <b>set to</b> AE_ID <b>and</b>  <b>no Content</b></p> <p><b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>does not update</b> the CONTAINER_RESOURCE_ADDRESS/la            resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> 4005 (OPERATION_NOT_ALLOWED)</p> <p><b>}</b></p>	IUT ← AE  IUT → AE

## TP/oneM2M/CSE/DMR/UPD/013

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/013	
<b>Test objective</b>	Check that the IUT rejects the UPDATE Request of an oldest resource as a direct child of a <container> resource with error "OPERATION_NOT_ALLOWED"	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.23, ETSI TS 118 104 [2], clause 7.4.29.2.4 and clause 7.3.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p style="padding-left: 20px;">the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b>            a container resource <b>containing</b>            contentInstance resource(s)</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p style="padding-left: 20px;">the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>            To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/0l <b>and</b>            From <b>set to</b> AE_ID <b>and</b>  <b>no</b> Content</p> <p><b>}</b></p> <p><b>then {</b></p> <p style="padding-left: 20px;">the IUT <b>does not update</b> the CONTAINER_RESOURCE_ADDRESS/0l            resource  <b>and</b> the IUT <b>sends</b> a Response <b>containing</b>            Response Status Code <b>set to</b> 4005 (OPERATION_NOT_ALLOWED)</p> <p><b>}</b></p>	IUT ← AE  IUT → AE

## TP/oneM2M/CSE/DMR/UPD/014

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/014	
<b>Test objective</b>	Check that the IUT updates successfully the value of the optional attribute <i>OPTIONAL_ATTRIBUTE</i> of the <i>RESOURCE_TYPE</i> resource.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> the <i>RESOURCE_TYPE</i> resource  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource <i>TARGET_RESOURCE_ADDRESS</i></p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> <i>TARGET_RESOURCE_ADDRESS</i> <b>and</b>  <b>From set to</b> <i>AE-ID</i> <b>and</b>  <b>Content containing</b>  <i>RESOURCE_TYPE</i> resource <b>containing</b>  <i>OPTIONAL_ATTRIBUTE</i> attribute <b>set to</b> <i>VALUE</i></p> <p><b>}</b></p>	IUT $\leftarrow$ AE
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  <b>Response Status Code set to</b> 2004 (UPDATED) <b>and</b>  <b>Content containing</b>  <i>RESOURCE_TYPE</i> resource <b>containing</b>  <i>OPTIONAL_ATTRIBUTE</i> attribute <b>set to</b> <i>VALUE</i></p> <p><b>}</b></p>	IUT $\rightarrow$ AE

TP Id	PARENT_RELEASE	PICS Selection	Reference	RESOURCE_TYPE	OPTIONAL_ATTRIBUTE
TP/oneM2M/CSE/DMR/UPD/014_CNT/ACPI	Release 1	PICS_CNT_ACPI	ETSI TS 118 101 [1], table 9.6.1.3.2-1	container	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/UPD/014_CNT/ET	Release 1	PICS_CNT_ET	ETSI TS 118 101 [1], table 9.6.1.3.1-1	container	expirationTime
TP/oneM2M/CSE/DMR/UPD/014_CNT/LBL	Release 1	PICS_CNT_LBL	ETSI TS 118 101 [1], table 9.6.1.3.2-1	container	labels
TP/oneM2M/CSE/DMR/UPD/014_CNT/MNI	Release 1	PICS_CNT_MNI	ETSI TS 118 101 [1], table 9.6.6-2	container	maxNrOfInstances
TP/oneM2M/CSE/DMR/UPD/014_CNT/MBS	Release 1	PICS_CNT_MBS	ETSI TS 118 101 [1], table 9.6.6-2	container	maxByteSize
TP/oneM2M/CSE/DMR/UPD/014_CNT/MIA	Release 1	PICS_CNT_MIA	ETSI TS 118 101 [1], table 9.6.6-2	container	maxInstanceAge
TP/oneM2M/CSE/DMR/UPD/014_CNT/OR	Release 1	PICS_CNT_OR	ETSI TS 118 101 [1], table 9.6.6-2	container	ontologyRef
TP/oneM2M/CSE/DMR/UPD/014_ACP/ET	Release 1	N/A	ETSI TS 118 101 [1], table 9.6.1.3.1-1	accessControlPolicy	expirationTime
TP/oneM2M/CSE/DMR/UPD/014_ACP/LBL	Release 1	PICS_ACP_LBL	ETSI TS 118 101 [1], table 9.6.1.3.2-1	accessControlPolicy	labels
TP/oneM2M/CSE/DMR/UPD/014_SUB/ACPI	Release 1	PICS_SUB_ACPI	ETSI TS 118 101 [1], table 9.6.1.3.2-1	subscription	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/UPD/014_SUB/ET	Release 1	N/A	ETSI TS 118 101 [1], table 9.6.1.3.1-1	subscription	expirationTime
TP/oneM2M/CSE/DMR/UPD/014_SUB/LBL	Release 1	PICS_SUB_LBL	ETSI TS 118 101 [1], table 9.6.1.3.2-1	subscription	labels
TP/oneM2M/CSE/DMR/UPD/014_SUB/ENC	Release 1	PICS_SUB_ENC	ETSI TS 118 101 [1], table 9.6.8-2	subscription	eventNotificationCriteria
TP/oneM2M/CSE/DMR/UPD/014_SUB/EXC	Release 1	PICS_SUB_EXC	ETSI TS 118 101 [1], table 9.6.8-2	subscription	expirationCounter
TP/oneM2M/CSE/DMR/UPD/014_SUB/GPI	Release 1	PICS_SUB_GPI	ETSI TS 118 101 [1], table 9.6.8-2	subscription	groupID
TP/oneM2M/CSE/DMR/UPD/014_SUB/NFU	Release 1	PICS_SUB_NFU	ETSI TS 118 101 [1], table 9.6.8-2	subscription	notificationForwardingURI
TP/oneM2M/CSE/DMR/UPD/014_SUB/BN	Release 1	PICS_SUB_BN	ETSI TS 118 101 [1], table 9.6.8-2	subscription	batchNotify
TP/oneM2M/CSE/DMR/UPD/014_SUB/RL	Release 1	PICS_SUB_RL	ETSI TS 118 101 [1], table 9.6.8-2	subscription	rateLimit
TP/oneM2M/CSE/DMR/UPD/014_SUB/PN	Release 1	PICS_SUB_PN	ETSI TS 118 101 [1], table 9.6.8-2	subscription	pendingNotification
TP/oneM2M/CSE/DMR/UPD/014_SUB/NSP	Release 1	PICS_SUB_NSP	ETSI TS 118 101 [1], table 9.6.8-2	subscription	notificationStoragePriority
TP/oneM2M/CSE/DMR/UPD/014_SUB/LN	Release 1	PICS_SUB_LN	ETSI TS 118 101 [1], table 9.6.8-2	subscription	latestNotify
TP/oneM2M/CSE/DMR/UPD/014_SUB/NCT	Release 1	PICS_SUB_NCT	ETSI TS 118 101 [1], table 9.6.8-2	subscription	notificationContent-Type

TP/oneM2M/CSE/DMR/UPD/014_SUB/NEC	Release 1	PICS_SUB_NEC	ETSI TS 118 101 [1], table 9.6.8-2	subscription	notificationEventCat
TP/oneM2M/CSE/DMR/UPD/014_STCG/LBL	Release 2		ETSI TS 118 101 [1], table 9.6.23-2	statsConfig	labels
TP/oneM2M/CSE/DMR/UPD/014_STCG/ACPI	Release 2		ETSI TS 118 101 [1], table 9.6.23-2	statsConfig	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/UPD/014_TS/ACPI	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/UPD/014_TS/LBL	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	labels
TP/oneM2M/CSE/DMR/UPD/014_TS/MNI	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	maximumNrOfInstances
TP/oneM2M/CSE/DMR/UPD/014_TS/MBS	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	maxByteSize
TP/oneM2M/CSE/DMR/UPD/014_TS/MIA	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	maxInstanceAge
TP/oneM2M/CSE/DMR/UPD/014_TS/PEI	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	periodicInterval
TP/oneM2M/CSE/DMR/UPD/014_TS/MDD	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	missingDataDetect
TP/oneM2M/CSE/DMR/UPD/014_TS/MDN	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	missingDataMaxNr
TP/oneM2M/CSE/DMR/UPD/014_TS/MDT	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	missingDataDetectTimer
TP/oneM2M/CSE/DMR/UPD/014_TS/OR	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	ontologyRef

## TP/oneM2M/CSE/DMR/UPD/015

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/015		
<b>Test objective</b>	Check that the IUT updates successfully the value of the optional attribute <i>OPTIONAL_ATTRIBUTE</i> of the <i>RESOURCE_TYPE</i> resource under CSEBase		
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3		
<b>Config Id</b>	CF01		
<b>Parent Release</b>	<i>PARENT_RELEASE</i>		
<b>PICS Selection</b>	PICS_CSE		
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE under the CSEBase resource <b>containing</b>  <b>no</b> OPTIONAL_ATTRIBUTE attribute  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS  }</p>		
<b>Expected behaviour</b>	<b>Test events</b>		<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  OPTIONAL_ATTRIBUTE attribute <b>set to</b> VALUE  <b>}</b></p>		IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>updates</b> the RESOURCE_TYPE resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  OPTIONAL_ATTRIBUTE attribute <b>set to</b> VALUE  <b>}</b></p>		IUT → AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>PICS Selection</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>	<b>OPTIONAL_ATTRIBUTE</b>
TP/oneM2M/CSE/DMR/UPD/015_CSR/LBL	Release 1	PICS_CSR_LBL	ETSI TS 118 101 [1], table 9.6.4-2	remoteCSE	labels
TP/oneM2M/CSE/DMR/UPD/015_CSR/POA	Release 1	PICS_CSR_POA	ETSI TS 118 101 [1], table 9.6.4-2	remoteCSE	pointOfAccess
TP/oneM2M/CSE/DMR/UPD/015_CSR/NL	Release 1	PICS_CSR_NL	ETSI TS 118 101 [1], table 9.6.4-2	remoteCSE	nodeLink
TP/oneM2M/CSE/DMR/UPD/015_AE/LBL	Release 1	PICS_AE_LBL	ETSI TS 118 101 [1], table 9.6.5-2	AE	labels

TP Id	PARENT_RELEASE	PICS Selection	Reference	RESOURCE_TYPE	OPTIONAL_ATTRIBUTE
TP/oneM2M/CSE/DMR/UPD/015_AE/ACPI	Release 1	PICS_AE ACPI	ETSI TS 118 101 [1], table 9.6.5-2	AE	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/UPD/015_AE/APN	Release 1	PICS_AE APN	ETSI TS 118 101 [1], table 9.6.5-2	AE	AppName
TP/oneM2M/CSE/DMR/UPD/015_AE/POA	Release 1	PICS_AE POA	ETSI TS 118 101 [1], table 9.6.5-2	AE	pointOfAccess
TP/oneM2M/CSE/DMR/UPD/015_AE/OR	Release 1	PICS_AE OR	ETSI TS 118 101 [1], table 9.6.5-2	AE	ontologyRef
TP/oneM2M/CSE/DMR/UPD/015_CNT/LBL	Release 1	PICS_CNT LBL	ETSI TS 118 101 [1], table 9.6.6-2	container	labels
TP/oneM2M/CSE/DMR/UPD/015_CNT/ACPI	Release 1	PICS_CNT ACPI	ETSI TS 118 101 [1], table 9.6.6-2	container	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/UPD/015_CNT/MNI	Release 1	PICS_CNT MNI	ETSI TS 118 101 [1], table 9.6.6-2	container	maxNrOfInstances
TP/oneM2M/CSE/DMR/UPD/015_CNT/MBS	Release 1	PICS_CNT MBS	ETSI TS 118 101 [1], table 9.6.6-2	container	maxByteSize
TP/oneM2M/CSE/DMR/UPD/015_CNT/MIA	Release 1	PICS_CNT MIA	ETSI TS 118 101 [1], table 9.6.6-2	container	maxInstanceAge
TP/oneM2M/CSE/DMR/UPD/015_CNT/OR	Release 1	PICS_CNT OR	ETSI TS 118 101 [1], table 9.6.6-2	container	ontologyRef
TP/oneM2M/CSE/DMR/UPD/015_CNT/LI	Release 1	PICS_CNT LI	ETSI TS 118 101 [1], table 9.6.6-2	container	locationID
TP/oneM2M/CSE/DMR/UPD/015_ACP/LBL	Release 1	PICS_ACP LBL	ETSI TS 118 101 [1], table 9.6.2-2	accessControlPolicy	labels
TP/oneM2M/CSE/DMR/UPD/015_SUB/ACPI	Release 1	PICS_SUB ACPI	ETSI TS 118 101 [1], table 9.6.8-2	subscription	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/UPD/015_SUB/LBL	Release 1	PICS_SUB LBL	ETSI TS 118 101 [1], table 9.6.8-2	subscription	labels
TP/oneM2M/CSE/DMR/UPD/015_SUB/ENC	Release 1	PICS_SUB ENC	ETSI TS 118 101 [1], table 9.6.8-2	subscription	eventNotificationCriteria
TP/oneM2M/CSE/DMR/UPD/015_SUB/EXC	Release 1	PICS_SUB EXC	ETSI TS 118 101 [1], table 9.6.8-2	subscription	expirationCounter
TP/oneM2M/CSE/DMR/UPD/015_SUB/GPI	Release 1	PICS_SUB GPI	ETSI TS 118 101 [1], table 9.6.8-2	subscription	groupID
TP/oneM2M/CSE/DMR/UPD/015_SUB/NFU	Release 1	PICS_SUB NFU	ETSI TS 118 101 [1], table 9.6.8-2	subscription	notificationForwardingURI
TP/oneM2M/CSE/DMR/UPD/015_SUB/BN	Release 1	PICS_SUB BN	ETSI TS 118 101 [1], table 9.6.8-2	subscription	batchNotify
TP/oneM2M/CSE/DMR/UPD/015_SUB/RL	Release 1	PICS_SUB RL	ETSI TS 118 101 [1], table 9.6.8-2	subscription	rateLimit

TP Id	PARENT_RELEASE	PICS Selection	Reference	RESOURCE_TYPE	OPTIONAL_ATTRIBUTE
TP/oneM2M/CSE/DMR/UPD/015_SUB/PN	Release 1	PICS_SUB_PN	ETSI TS 118 101 [1], table 9.6.8-2	subscription	pendingNotification
TP/oneM2M/CSE/DMR/UPD/015_SUB/NSP	Release 1	PICS_SUB_NSP	ETSI TS 118 101 [1], table 9.6.8-2	subscription	notificationStoragePriority
TP/oneM2M/CSE/DMR/UPD/015_SUB/LN	Release 1	PICS_SUB_LN	ETSI TS 118 101 [1], table 9.6.8-2	subscription	latestNotify
TP/oneM2M/CSE/DMR/UPD/015_SUB/NEC	Release 1	PICS_SUB_NEC	ETSI TS 118 101 [1], table 9.6.8-2	subscription	notificationEventCat
TP/oneM2M/CSE/DMR/UPD/015_GRP/LBL	Release 1	PICS_GRP_LBL	ETSI TS 118 101 [1], table 9.6.13-2	group	labels
TP/oneM2M/CSE/DMR/UPD/015_GRP/ACPI	Release 1	PICS_GRP_ACPI	ETSI TS 118 101 [1], table 9.6.13-2	group	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/UPD/015_GRP/MACP	Release 1	PICS_GRP_MACP	ETSI TS 118 101 [1], table 9.6.13-2	group	membersAccessControlPolicyIDs
TP/oneM2M/CSE/DMR/UPD/015_GRP/GN	Release 1	PICS_GRP_GN	ETSI TS 118 101 [1], table 9.6.13-2	group	groupName
TP/oneM2M/CSE/DMR/UPD/015_NOD/LBL	Release 2		ETSI TS 118 101 [1], table 9.6.18-2	node	labels
TP/oneM2M/CSE/DMR/UPD/015_NOD/ACPI	Release 2		ETSI TS 118 101 [1], table 9.6.18-2	node	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/UPD/015_NOD/HCL	Release 2		ETSI TS 118 101 [1], table 9.6.18-2	node	hostedCSELink
TP/oneM2M/CSE/DMR/UPD/015_TS/ACPI	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/UPD/015_TS/LBL	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	labels
TP/oneM2M/CSE/DMR/UPD/015_TS/MNI	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	maximumNrOfInstances
TP/oneM2M/CSE/DMR/UPD/015_TS/MBS	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	maxByteSize
TP/oneM2M/CSE/DMR/UPD/015_TS/MIA	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	maxInstanceAge
TP/oneM2M/CSE/DMR/UPD/015_TS/PEI	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	periodicInterval
TP/oneM2M/CSE/DMR/UPD/015_TS/MDD	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	missingDataDetect
TP/oneM2M/CSE/DMR/UPD/015_TS/MDN	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	missingDataMaxNr
TP/oneM2M/CSE/DMR/UPD/015_TS/MDT	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	missingDataDetectTimer
TP/oneM2M/CSE/DMR/UPD/015_TS/OR	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	ontologyRef

## TP/oneM2M/CSE/DMR/UPD/016

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/016							
<b>Test objective</b>	Check that the IUT updates successfully the value of the attribute <i>MANDATORY_ATTRIBUTE</i> of the <i>RESOURCE_TYPE</i> resource under CSEBase							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.3							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<pre> with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type     RESOURCE_TYPE under the CSEBase resource     <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource     TARGET_RESOURCE_ADDRESS } </pre>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {                     the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>                     To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>                     From <b>set to</b> AE-ID <b>and</b>                     Content <b>containing</b>                     RESOURCE_TYPE resource <b>containing</b>                     MANDATORY_ATTRIBUTE attribute <b>set to</b> VALUE                 }             </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then</b> {                     the IUT <b>updates</b> the RESOURCE_TYPE resource                     <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>                     Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>                     Content <b>containing</b>                     RESOURCE_TYPE resource <b>containing</b>                     MANDATORY_ATTRIBUTE attribute <b>set to</b> VALUE                 }             </td> <td>IUT → AE</td> </tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when</b> {                     the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> MANDATORY_ATTRIBUTE attribute <b>set to</b> VALUE                 }	IUT ← AE	<b>then</b> {                     the IUT <b>updates</b> the RESOURCE_TYPE resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> MANDATORY_ATTRIBUTE attribute <b>set to</b> VALUE                 }	IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<b>when</b> {                     the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> MANDATORY_ATTRIBUTE attribute <b>set to</b> VALUE                 }	IUT ← AE							
<b>then</b> {                     the IUT <b>updates</b> the RESOURCE_TYPE resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> MANDATORY_ATTRIBUTE attribute <b>set to</b> VALUE                 }	IUT → AE							

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>	<b>MANDATORY_ATTRIBUTE</b>
TP/oneM2M/CSE/DMR/UPD/016_CSR/ET	Release 1	ETSI TS 118 101 [1], table 9.6.4-2	remoteCSE	expirationTime
TP/oneM2M/CSE/DMR/UPD/016_CSR/RR	Release 1	ETSI TS 118 101 [1], table 9.6.4-2	remoteCSE	requestReachability
TP/oneM2M/CSE/DMR/UPD/016_AE/ET	Release 1	ETSI TS 118 101 [1], table 9.6.5-2	AE	expirationTime
TP/oneM2M/CSE/DMR/UPD/016_AE/RR	Release 1	ETSI TS 118 101 [1], table 9.6.5-2	AE	requestReachability

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	MANDATORY_ATTRIBUTE
TP/oneM2M/CSE/DMR/UPD/016_CNT/ET	Release 1	ETSI TS 118 101 [1], table 9.6.6-2	container	expirationTime
TP/oneM2M/CSE/DMR/UPD/016_ACP/ET	Release 1	ETSI TS 118 101 [1], table 9.6.2-2	accessControlPolicy	expirationTime
TP/oneM2M/CSE/DMR/UPD/016_ACP/PV	Release 1	ETSI TS 118 101 [1], table 9.6.2-2	accessControlPolicy	privileges
TP/oneM2M/CSE/DMR/UPD/016_ACP/PVS	Release 1	ETSI TS 118 101 [1], table 9.6.2-2	accessControlPolicy	selfPrivileges
TP/oneM2M/CSE/DMR/UPD/016_SUB/ET	Release 1	ETSI TS 118 101 [1], table 9.6.8-2	subscription	expirationTime
TP/oneM2M/CSE/DMR/UPD/016_SUB/NU	Release 1	ETSI TS 118 101 [1], table 9.6.8-2	subscription	notificationURI
TP/oneM2M/CSE/DMR/UPD/016_SUB/NC	Release 1	ETSI TS 118 101 [1], table 9.6.8-2	subscription	notificationContent
TP/oneM2M/CSE/DMR/UPD/016_GRP/ET	Release 1	ETSI TS 118 101 [1], table 9.6.13-2	group	expirationTime
TP/oneM2M/CSE/DMR/UPD/016_GRP/MNM	Release 1	ETSI TS 118 101 [1], table 9.6.13-2	group	maxNrOfMembers
TP/oneM2M/CSE/DMR/UPD/016_GRP/MI	Release 1	ETSI TS 118 101 [1], table 9.6.13-2	group	memberIDs
TP/oneM2M/CSE/DMR/UPD/016_NOD/ET	Release 2	ETSI TS 118 101 [1], table 9.6.18-2	node	expirationTime
TP/oneM2M/CSE/DMR/UPD/016_NOD/NI	Release 2	ETSI TS 118 101 [1], table 9.6.18-2	node	nodeID
TP/oneM2M/CSE/DMR/UPD/016_TS/ET	Release 2	ETSI TS 118 101 [1], table 9.6.36-2	timeSeries	expirationTime

## TP/oneM2M/CSE/DMR/UPD/017

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/017							
<b>Test objective</b>	Check that the IUT updates successfully the value of the announceTo optional attribute of the RESOURCE_TYPE resource.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.18.4 and table 9.6.1.3.2-1, ETSI TS 118 104 [2], clause 7.3.3.10							
<b>Config Id</b>	CF02							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> the PARENT_RESOURCE resource <b>containing</b> RESOURCE_TYPE resource <b>containing</b> announceTo attribute <b>set to</b> NULL  <b>and</b> the IUT <b>having announced</b> the PARENT_RESOURCE resource  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE-ID <b>and</b>  <b>Content containing</b>  <b>RESOURCE_TYPE</b> resource <b>containing</b>  <b>announceTo</b> attribute <b>set to</b> ANNC_TARGET_CSE_ADDRESS</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid CREATE Request <b>containing</b>  <b>To set</b> ANNC_TARGET_CSE_ADDRESS <b>and</b>  <b>Content containing</b>  <b>RESOURCE_TYPE</b> announced variant resource <b>containing</b>  MA (mandatory) attributes</p> <p>}</p> </td><td>IUT → CSE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE-ID <b>and</b>  <b>Content containing</b>  <b>RESOURCE_TYPE</b> resource <b>containing</b>  <b>announceTo</b> attribute <b>set to</b> ANNC_TARGET_CSE_ADDRESS</p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>sends</b> a valid CREATE Request <b>containing</b>  <b>To set</b> ANNC_TARGET_CSE_ADDRESS <b>and</b>  <b>Content containing</b>  <b>RESOURCE_TYPE</b> announced variant resource <b>containing</b>  MA (mandatory) attributes</p> <p>}</p>	IUT → CSE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE-ID <b>and</b>  <b>Content containing</b>  <b>RESOURCE_TYPE</b> resource <b>containing</b>  <b>announceTo</b> attribute <b>set to</b> ANNC_TARGET_CSE_ADDRESS</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>sends</b> a valid CREATE Request <b>containing</b>  <b>To set</b> ANNC_TARGET_CSE_ADDRESS <b>and</b>  <b>Content containing</b>  <b>RESOURCE_TYPE</b> announced variant resource <b>containing</b>  MA (mandatory) attributes</p> <p>}</p>	IUT → CSE							

TP Id	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/UPD/017_ACP	accesControlPolicy
TP/oneM2M/CSE/DMR/UPD/017_CNT	container
TP/oneM2M/CSE/DMR/UPD/017_GRP	group
TP/oneM2M/CSE/DMR/UPD/017_LCP	locationPolicy
TP/oneM2M/CSE/DMR/UPD/017_MGO	mgmtObj
TP/oneM2M/CSE/DMR/UPD/017_NOD	node
TP/oneM2M/CSE/DMR/UPD/017_SCH	schedule
TP/oneM2M/CSE/DMR/UPD/017_TS	timeSeries
TP/oneM2M/CSE/DMR/UPD/017_TSI	timeSeriesInstance

## TP/oneM2M/CSE/DMR/UPD/018

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/018							
<b>Test objective</b>	Check that the IUT updates successfully the value of the announcedAttribute optional attribute of the <i>RESOURCE_TYPE</i> resource.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.18.8 and table 9.6.1.3.2-1, ETSI TS 118 104 [2], clause 7.3.3.10							
<b>Parent Release</b>	Release 2							
<b>Config Id</b>	CF02							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a <i>RESOURCE_TYPE</i> resource <b>containing</b>  <i>OA_ATTRIBUTE</i> attribute <b>set to</b> VALUE <b>and</b>  <i>announceTo</i> attribute <b>set to</b> ANNC_TARGET_CSE_ADDRESS <b>and</b>  <i>announcedAttribute</i> attribute <b>set to</b> NULL  <b>and</b> the IUT <b>having announced</b> the <i>RESOURCE_TYPE</i> resource to the announcement target CSE  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  <i>To</i> <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <i>From</i> <b>set to</b> AE-ID <b>and</b>  <i>Content</i> <b>containing</b>  <i>RESOURCE_TYPE</i> resource <b>containing</b>  <i>announcedAttribute</i> attribute <b>set to</b> <i>OA_ATTRIBUTE</i></p> } </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>The IUT <b>sends</b> a valid UPDATE Request <b>containing</b>  <i>To</i> <b>set to</b> ANNC_TARGET_CSE_ADDRESS <b>and</b>  <i>Content</i> <b>containing</b>  <i>RESOURCE_TYPE</i> announced variant resource <b>containing</b>  <i>OA_ATTRIBUTE</i> attribute <b>set to</b> VALUE</p> } </td> <td>IUT → CSE</td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  <i>To</i> <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <i>From</i> <b>set to</b> AE-ID <b>and</b>  <i>Content</i> <b>containing</b>  <i>RESOURCE_TYPE</i> resource <b>containing</b>  <i>announcedAttribute</i> attribute <b>set to</b> <i>OA_ATTRIBUTE</i></p> }	IUT ← AE	<p>then {</p> <p>The IUT <b>sends</b> a valid UPDATE Request <b>containing</b>  <i>To</i> <b>set to</b> ANNC_TARGET_CSE_ADDRESS <b>and</b>  <i>Content</i> <b>containing</b>  <i>RESOURCE_TYPE</i> announced variant resource <b>containing</b>  <i>OA_ATTRIBUTE</i> attribute <b>set to</b> VALUE</p> }	IUT → CSE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  <i>To</i> <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <i>From</i> <b>set to</b> AE-ID <b>and</b>  <i>Content</i> <b>containing</b>  <i>RESOURCE_TYPE</i> resource <b>containing</b>  <i>announcedAttribute</i> attribute <b>set to</b> <i>OA_ATTRIBUTE</i></p> }	IUT ← AE							
<p>then {</p> <p>The IUT <b>sends</b> a valid UPDATE Request <b>containing</b>  <i>To</i> <b>set to</b> ANNC_TARGET_CSE_ADDRESS <b>and</b>  <i>Content</i> <b>containing</b>  <i>RESOURCE_TYPE</i> announced variant resource <b>containing</b>  <i>OA_ATTRIBUTE</i> attribute <b>set to</b> VALUE</p> }	IUT → CSE							

TP Id	RESOURCE_TYPE	OA_ATTRIBUTE
TP/oneM2M/CSE/DMR/UPD/018_CNT/MBS	container	maxByteSize
TP/oneM2M/CSE/DMR/UPD/018_GRP/MT	Group	memberType
TP/oneM2M/CSE/DMR/UPD/018_LCP/LOI	locationPolicy	locationContainerID
TP/oneM2M/CSE/DMR/UPD/018_MGO/DC	mgmtObj	description
TP/oneM2M/CSE/DMR/UPD/018_NOD/HCL	Node	hostedCSELINK
TP/oneM2M/CSE/DMR/UPD/018_SCH/SE	schedule	scheduleElement

TP/oneM2M/CSE/DMR/UPD/018_TS/MBS	timeSeries	maxByteSize
----------------------------------	------------	-------------

TP/oneM2M/CSE/DMR/UPD/019

TP Id	TP/oneM2M/CSE/DMR/UPD/019	
Test objective	Check that the IUT rejects a UPDATE Request target to TARGET_RESOURCE_ADDRESS resource when the Result Content set to <i>RESULT_CONTENT</i>	
Reference	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 7.3.2.1	
Config Id	CF01	
Parent Release	Release 2	
PICS Selection	PICS_CSE	
Initial conditions	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
Expected behaviour	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Result Content <b>set to</b> RESULT_CONTENT Content <b>and</b> RESOURCE_TYPE resource <b>containing</b> valid attribute <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4000 (BAD_REQUEST) <b>and</b> <b>no</b> Content <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

TP Id	Reference	RESULT_CONTENT
TP/oneM2M/CSE/DMR/UPD/019_RCN/2		2 (hierarchical address)
TP/oneM2M/CSE/DMR/UPD/019_RCN/3		3 (attributes and hierarchical address)
TP/oneM2M/CSE/DMR/UPD/019_RCN/4		4 (attributes and child resources)
TP/oneM2M/CSE/DMR/UPD/019_RCN/5		5 (attributes and child resource references)
TP/oneM2M/CSE/DMR/UPD/019_RCN/6		6 (child resource references)
TP/oneM2M/CSE/DMR/UPD/019_RCN/7		7 (original resource)
TP/oneM2M/CSE/DMR/UPD/019_RCN/8		8 (child resources)

TP/oneM2M/CSE/DMR/UPD/020

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/020							
<b>Test objective</b>	Check that the IUT returns nothing of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 0 (nothing)							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 6.3.3.2.7							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing  a child resource  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Result Content <b>set to</b> 0 (nothing)  Content <b>and</b>  RESOURCE_TYPE resource <b>containing</b>  valid attribute  <b>}</b> </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then {</b>  the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>  <b>no</b> Content  <b>}</b> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Result Content <b>set to</b> 0 (nothing) Content <b>and</b> RESOURCE_TYPE resource <b>containing</b> valid attribute <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b> <b>no</b> Content <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Result Content <b>set to</b> 0 (nothing) Content <b>and</b> RESOURCE_TYPE resource <b>containing</b> valid attribute <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b> <b>no</b> Content <b>}</b>	IUT → AE							

TP Id	PARENT_RELEASE	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/UPD/020_CNT	Release 2	3 (container)
TP/oneM2M/CSE/DMR/UPD/020_GRP	Release 2	9 (group)
TP/oneM2M/CSE/DMR/UPD/020_ACP	Release 2	1 (accessControlPolicy)

## TP/oneM2M/CSE/DMR/UPD/021

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/021	
<b>Test objective</b>	Check that the IUT returns successfully only attributes of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 1 (attributes)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 6.3.3.2.7	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing  a child resource  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Result Content <b>set to</b> 1 (attributes)  Content <b>and</b>  RESOURCE_TYPE resource <b>containing</b>  valid attribute</p> <p><b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  attributes <b>and</b>  no hierachical address <b>and</b>  no child resources <b>and</b>  no child resource references</p> <p><b>}</b></p>	IUT → AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/UPD/021_CNT	Release 2	3 (container)
TP/oneM2M/CSE/DMR/UPD/021_GRP	Release 2	9 (group)
TP/oneM2M/CSE/DMR/UPD/021_ACP	Release 2	1 (accessControlPolicy)

## TP/oneM2M/CSE/DMR/UPD/022

<b>TP Id</b>	TP/oneM2M/CSE/DMR/UPD/022	
<b>Test objective</b>	Check that the IUT returns successfully only modified attributes of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 9 (modified attributes)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 6.3.3.2.7	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing  a child resource  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Result Content <b>set to</b> 9 (modified attributes)  Content <b>and</b>  RESOURCE_TYPE resource <b>containing</b>  valid ATTRIBUTE attribute <b>set to</b> VALUE</p> <p><b>}</b></p>	IUT $\leftarrow$ AE
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  modified attributes <b>and</b>  no ATTRIBUTE attribute <b>and</b>  no hierachical address <b>and</b>  no child resources <b>and</b>  no child resource references</p> <p><b>}</b></p>	IUT $\rightarrow$ AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/UPD/022_CNT	Release 2	3 (container)
TP/oneM2M/CSE/DMR/UPD/022_GRP	Release 2	9 (group)
TP/oneM2M/CSE/DMR/UPD/022_ACP	Release 2	1 (accessControlPolicy)

## 7.2.2.3.3 CREATE Operation

TP/oneM2M/CSE/DMR/CRE/001

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/001		
<b>Test objective</b>	Check that the IUT accepts the creation of a <i>RESOURCE_TYPE</i> resource on the TARGET_RESOURCE_ADDRESS of type <i>PARENT_RESOURCE_TYPE</i> with resource name not provided		
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.1		
<b>Config Id</b>	CF01		
<b>Parent Release</b>	<i>PARENT_RELEASE</i>		
<b>PICS Selection</b>	PICS_CSE		
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>and the Originator having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>		
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from AE containing</b> Resource Type <b>set to</b> <i>RESOURCE_TYPE</i> <b>and</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> Content <b>containing</b> <i>RESOURCE_TYPE</i> resource <b>containing</b> <b>no</b> resourceName attribute <b>}</b>		<b>Direction</b>
			IUT ← AE
	<b>then {</b> the IUT <b>creates</b> the <i>RESOURCE_TYPE</i> resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> <i>RESOURCE_TYPE</i> resource <b>containing</b> Valid resourceName attribute <b>}</b>	<b>Direction</b>	
			IUT → AE

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	PARENT_RESOURCE_TYPE
TP/oneM2M/CSE/DMR/CRE/001_CNT/CB	Release 1	ETSI TS 118 101 [1], clause 10.2.4.1	3 (container)	5 (CSEBase)
TP/oneM2M/CSE/DMR/CRE/001_CNT/AE	Release 1	ETSI TS 118 101 [1], clause 10.2.4.1	3 (container)	2 (AE)
TP/oneM2M/CSE/DMR/CRE/001_CNT/CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.1	3 (container)	3 (container)

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	PARENT_RESOURCE_TYPE
TP/oneM2M/CSE/DMR/CRE/001_ACP/CB	Release 1	ETSI TS 118 101 [1], clause 10.2.21.1	1 (accessControlPolicy)	5 (CSEBase)
TP/oneM2M/CSE/DMR/CRE/001_ACP/AE	Release 1	ETSI TS 118 101 [1], clause 10.2.21.1	1 (accessControlPolicy)	2 (AE)
TP/oneM2M/CSE/DMR/CRE/001_SUB/CB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.2	23 (subscription)	5 (CSEBase)
TP/oneM2M/CSE/DMR/CRE/001_SUB/AE	Release 1	ETSI TS 118 101 [1], clause 10.2.11.2	23 (subscription)	2 (AE)
TP/oneM2M/CSE/DMR/CRE/001_SUB/CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.11.2	23 (subscription)	3 (container)
TP/oneM2M/CSE/DMR/CRE/001_SUB/ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.11.2	23 (subscription)	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/CRE/001_SUB/CSR	Release 1	ETSI TS 118 101 [1], table 9.6.4-1	23 (subscription)	16 (remoteCSE)
TP/oneM2M/CSE/DMR/CRE/001_CIN/CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.1	4 (contentInstance)	3 (container)
TP/oneM2M/CSE/DMR/CRE/001_GRP/CB	Release 1	ETSI TS 118 101 [1], clause 10.2.7.2	9 (group)	5 (CSEBase)
TP/oneM2M/CSE/DMR/CRE/001_GRP/AE	Release 1	ETSI TS 118 101 [1], clause 10.2.7.2	9 (group)	2 (AE)
TP/oneM2M/CSE/DMR/CRE/001_SUB/GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.11.2	23 (subscription)	9 (group)
TP/oneM2M/CSE/DMR/CRE/001_SCH/CB	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	5 (CSEBase)
TP/oneM2M/CSE/DMR/CRE/001_SCH/AE	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	2 (AE)
TP/oneM2M/CSE/DMR/CRE/001_SCH/SUB	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)	23 (subscription)
TP/oneM2M/CSE/DMR/CRE/001_PCH/AE	Release 2	ETSI TS 118 101 [1], clause 10.2.13.2	15 (pollingChannel)	2 (AE)
TP/oneM2M/CSE/DMR/CRE/001_SUB/SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.11.2	23 (subscription)	18 (schedule)
TP/oneM2M/CSE/DMR/CRE/001_NOD/CB	Release 2	ETSI TS 118 101 [1], table 9.6.3-1	14 (node)	5 (CSEBase)
TP/oneM2M/CSE/DMR/CRE/001_MGC/CB	Release 2	ETSI TS 118 101 [1], table 9.6.3-1	12 (mgmtCmd)	5 (CSEBase)
TP/oneM2M/CSE/DMR/CRE/001_LCP/CB	Release 2	ETSI TS 118 101 [1], table 9.6.3-1	10 (locationPolicy)	5 (CSEBase)
TP/oneM2M/CSE/DMR/CRE/001_STCG/CB	Release 2	ETSI TS 118 101 [1], table 9.6.3-1	22 (statsConfig)	5 (CSEBase)
TP/oneM2M/CSE/DMR/CRE/001_STCL/CB	Release 2	ETSI TS 118 101 [1], table 9.6.3-1	21 (statsCollect)	5 (CSEBase)
TP/oneM2M/CSE/DMR/CRE/001_ASAR/CB	Release 2	ETSI TS 118 101 [1], table 9.6.3-1	19(serviceSubscribedAppRule)	5 (CSEBase)

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	PARENT_RESOURCE_TYPE
TP/oneM2M/CSE/DMR/CRE/001_SCH/CSR	Release 2	ETSI TS 118 101 [1], table 9.6.4-1	18 (schedule)	16 (remoteCSE)
TP/oneM2M/CSE/DMR/CRE/001_SUB/AEA	Release 2	ETSI TS 118 101 [1], table 9.6.5-1	23 (subscription)	10002 (AEannC)
TP/oneM2M/CSE/DMR/CRE/001_CNT/AEA	Release 2	ETSI TS 118 101 [1], table 9.6.5-1	3 (container)	10002 (AEannC)
TP/oneM2M/CSE/DMR/CRE/001_GRP/AEA	Release 2	ETSI TS 118 101 [1], table 9.6.5-1	9 (group)	10002 (AEannC)
TP/oneM2M/CSE/DMR/CRE/001_ACP/AEA	Release 2	ETSI TS 118 101 [1], table 9.6.5-1	1 (accessControlPolicy)	10002 (AEannC)
TP/oneM2M/CSE/DMR/CRE/001_EVCF/STCG	Release 2	ETSI TS 118 101 [1], table 9.6.23-1	7 (eventConfig)	22 (statsConfig)
TP/oneM2M/CSE/DMR/CRE/001_SUB/STCG	Release 2	ETSI TS 118 101 [1], table 9.6.23-1	23 (subscription)	22 (statsConfig)
TP/oneM2M/CSE/DMR/CRE/001_TS/CB	Release 2	ETSI TS 118 101 [1], table 9.6.36-1	29 (timeSeries)	5 (CSEBase)
TP/oneM2M/CSE/DMR/CRE/001_TS/AE	Release 2	ETSI TS 118 101 [1], table 9.6.36-1	29 (timeSeries)	2 (AE)
TP/oneM2M/CSE/DMR/CRE/001_TS/CSR	Release 2	ETSI TS 118 101 [1], table 9.6.36-1	29 (timeSeries)	16 (remoteCSE)
TP/oneM2M/CSE/DMR/CRE/001_TS/AEA	Release 2	ETSI TS 118 101 [1], table 9.6.36-1	29 (timeSeries)	10002 (AEAnnC)
TP/oneM2M/CSE/DMR/CRE/001_TSI/TS	Release 2	ETSI TS 118 101 [1], table 9.6.37-1	30 (timeSeriesInstance)	30 (timeSeries)

## TP/oneM2M/CSE/DMR/CRE/002

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/002		
<b>Test objective</b>	Check that the IUT accepts the creation of a <i>RESOURCE_TYPE</i> resource with a non-existing resource name provided by AE		
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.1		
<b>Config Id</b>	CF01		
<b>Parent Release</b>	<i>PARENT_RELEASE</i>		
<b>PICS Selection</b>	PICS_CSE		
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS  <b>and</b> the AE <b>containing</b>  <b>no</b> child resource <b>containing</b>  resourceName attribute <b>set to NAME</b></p> }		
<b>Expected behaviour</b>	<p><b>Test events</b></p> <p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request from AE <b>containing</b>  To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>  Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  resourceName attribute <b>set to NAME</b></p> }	<b>Direction</b>	
	<p>then {</p> <p>the IUT <b>creates</b> the RESOURCE_TYPE resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED)</p> }		IUT → AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/CRE/002_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.1	3 (container)
TP/oneM2M/CSE/DMR/CRE/002_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.1	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/CRE/002_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.2	23 (subscription)
TP/oneM2M/CSE/DMR/CRE/002_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.2	9 (group)
TP/oneM2M/CSE/DMR/CRE/002_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)

TP/oneM2M/CSE/DMR/CRE/002_PCH	Release 2	ETSI TS 118 101 [1], clause 10.2.13.2	15 (pollingChannel)
TP/oneM2M/CSE/DMR/CRE/002_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.1	29 (timeSeries)
TP/oneM2M/CSE/DMR/CRE/002_FLXC	Release 2	ETSI TS 118 101 [1], clause 10.2.29.1	28 (flexContainer)

TP/oneM2M/CSE/DMR/CRE/003

TP Id	TP/oneM2M/CSE/DMR/CRE/003	
Test objective	Check that the IUT rejects the creation of a <i>RESOURCE_TYPE</i> resource with an existing resource name provided by AE	
Reference	ETSI TS 118 101 [1], clause 10.1.1.1	
Config Id	CF01	
Parent Release	<i>PARENT_RELEASE</i>	
PICS Selection	PICS_CSE	
Initial conditions	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS  <b>and</b> the AE <b>containing</b>            a child resource <b>having</b>              resourceName attribute <b>set to</b> NAME  <b>}</b></p>	
Expected behaviour	<p><b>Test events</b></p> <p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>            To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>            Resource Type <b>set to</b> <i>RESOURCE_TYPE</i> <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            Content <b>containing</b>              <i>RESOURCE_TYPE</i> resource <b>containing</b>                resourceName attribute <b>set to</b> NAME  <b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> 4105 (CONFLICT)  <b>}</b></p>	<p><b>Direction</b></p> <p>IUT ← AE</p> <p>IUT → AE</p>

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/CRE/003_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.1	3 (container)
TP/oneM2M/CSE/DMR/CRE/003_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.1	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/CRE/003_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.2	23 (subscription)
TP/oneM2M/CSE/DMR/CRE/003_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.2	9 (group)
TP/oneM2M/CSE/DMR/CRE/003_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/CRE/003_PCH	Release 2	ETSI TS 118 101 [1], clause 10.2.13.2	15 (pollingChannel)
TP/oneM2M/CSE/DMR/CRE/003_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.1	29 (timeSeries)

## TP/oneM2M/CSE/DMR/CRE/004

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/004		
<b>Test objective</b>	Check that the IUT rejects the creation of a <i>RESOURCE_TYPE</i> resource when AE has no privileges		
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1.1		
<b>Config Id</b>	CF01		
<b>Parent Release</b>	<i>PARENT_RELEASE</i>		
<b>PICS Selection</b>	PICS_CSE		
<b>Initial conditions</b>	<p>with {            the IUT <b>being</b> in the "initial state"            and the IUT <b>having registered</b> the AE            and the AE <b>having no</b> privileges to perform CREATE operation on the resource            TARGET_RESOURCE_ADDRESS          }</p>		
<b>Expected behaviour</b>	<b>Test events</b>		<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b> From <b>set to</b> AE-ID <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>}</b>		IUT ← AE
	<b>then {</b> the IUT <b>does not create</b> the RESOURCE_TYPE resource and the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) <b>}</b>		IUT → AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/CRE/004_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.1	3 (container)
TP/oneM2M/CSE/DMR/CRE/004_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.1	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/CRE/004_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.2	23 (subscription)
TP/oneM2M/CSE/DMR/CRE/004_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.2	9 (group)
TP/oneM2M/CSE/DMR/CRE/004_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/CRE/004_PCH	Release 2	ETSI TS 118 101 [1], clause 10.2.13.2	15 (pollingChannel)
TP/oneM2M/CSE/DMR/CRE/004_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.1	29 (timeSeries)

## TP/oneM2M/CSE/DMR/CRE/005

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/005	
<b>Test objective</b>	Check that the IUT rejects the CREATE Request of container resource when the RW ATTRIBUTE is provided with an invalid value	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.4.1, ETSI TS 118 104 [2], clause 7.4.7.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>and the AE having</b> privileges to perform CREATE operation on the resource AE_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> 3 (container) <b>and</b> Content <b>containing</b> an invalid RW ATTRIBUTE attribute <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>does not create</b> the container resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4000 (BAD_REQUEST) <b>}</b>	IUT → AE

<b>TP Id</b>	<b>Reference</b>	<b>ATTRIBUTE</b>
TP/oneM2M/CSE/DMR/CRE/005_MNI	ETSI TS 118 101 [1], clause 9.6.6, ETSI TS 118 104 [2], clause 7.4.7.1	maxNrOfInstances
TP/oneM2M/CSE/DMR/CRE/005_MBS	ETSI TS 118 101 [1], clause 9.6.6, ETSI TS 118 104 [2], clause 7.4.7.1	maxByteSize
TP/oneM2M/CSE/DMR/CRE/005_MIA	ETSI TS 118 101 [1], clause 9.6.6, ETSI TS 118 104 [2], clause 7.4.7.1	maxInstanceAge

## TP/oneM2M/CSE/DMR/CRE/006

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/006							
<b>Test objective</b>	Check that the IUT returns a default value to RW ATTRIBUTE in the response of a RESOURCE_TYPE resource CREATE Request where no a RW ATTRIBUTE is provided by AE							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.4.1, ETSI TS 118 104 [2], clause 7.4.7.1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<pre> with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource     AE_RESOURCE_ADDRESS } </pre>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {                     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>                     To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>                     From <b>set to</b> AE_ID <b>and</b>                     Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b>                     Content <b>containing</b>                     RESOURCE_TYPE resource representation                 }             </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then</b> {                     the IUT <b>creates</b> the RESOURCE_TYPE resource                     <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>                     Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>                     Content <b>containing</b>                     RESOURCE_TYPE resource <b>containing</b>                     valid ATTRIBUTE attribute                 }             </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when</b> {                     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource representation                 }	IUT ← AE	<b>then</b> {                     the IUT <b>creates</b> the RESOURCE_TYPE resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> valid ATTRIBUTE attribute                 }	IUT → AE	
Test events	Direction							
<b>when</b> {                     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource representation                 }	IUT ← AE							
<b>then</b> {                     the IUT <b>creates</b> the RESOURCE_TYPE resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> valid ATTRIBUTE attribute                 }	IUT → AE							

TP Id	Reference	RESOURCE_TYPE	ATTRIBUTE
TP/oneM2M/CSE/DMR/CRE/006_CNT/MNI	ETSI TS 118 101 [1], clause 9.6.6, ETSI TS 118 104 [2], clause 7.4.7.1	container	maxNrOfInstances
TP/oneM2M/CSE/DMR/CRE/006_CNT/MBS	ETSI TS 118 101 [1], clause 9.6.6, ETSI TS 118 104 [2], clause 7.4.7.1	container	maxByteSize
TP/oneM2M/CSE/DMR/CRE/006_CNT/MIA	ETSI TS 118 101 [1], clause 9.6.6, ETSI TS 118 104 [2], clause 7.4.7.1	container	maxInstanceAge
TP/oneM2M/CSE/DMR/CRE/006_TS/MNI	ETSI TS 118 101 [1], clause 9.6.36, ETSI TS 118 104 [2], clause 7.4.38.1	timeSeries	maxNrOfInstances
TP/oneM2M/CSE/DMR/CRE/006_TS/MBS	ETSI TS 118 101 [1], clause 9.6.36, ETSI TS 118 104 [2], clause 7.4.38.1	timeSeries	maxByteSize

TP/oneM2M/CSE/DMR/CRE/006_TS/MIA	ETSI TS 118 101 [1], clause 9.6.36, ETSI TS 118 104 [2], clause 7.4.38.1	timeSeries	maxInstanceAge
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## TP/oneM2M/CSE/DMR/CRE/007

TP Id	TP/oneM2M/CSE/DMR/CRE/007							
Test objective	Checks that the IUT accepts a newly created <i>RESOURCE_TYPE</i> when the <i>currentNrOfInstances</i> exceeds the field value set in <i>maxNrOfInstances</i> in the <i>PARENT_RESOURCE_TYPE</i> resource by removing enough of the oldest <i>RESOURCE_TYPE</i> resources to allow the creation of the new <i>RESOURCE_TYPE</i> resource							
Reference	ETSI TS 118 101 [1], clause 10.2.19.2, ETSI TS 118 104 [2], clause 7.4.8.2							
Config Id	CF01							
Parent Release	Release 1							
PICS Selection	PICS_CSE							
Initial conditions	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b>  <b>a PARENT_RESOURCE_TYPE</b> resource <b>containing</b>  <b>currentNrOfInstances</b> attribute <b>set to MAX_NUMBER_OF_INSTANCES</b>  <b>and</b> <b>maxNrOfInstances</b> attribute <b>set to MAX_NUMBER_OF_INSTANCES</b>  <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource  <i>PARENT_RESOURCE_ADDRESS</i></p> <p><b>}</b></p>							
Expected behaviour	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>            To <b>set to PARENT_RESOURCE_ADDRESS</b> <b>and</b>            From <b>set to AE_ID</b> <b>and</b>            Resource Type <b>set to RESOURCE_TYPE</b> <b>and</b>            Content <b>containing</b>  <i>RESOURCE_TYPE</i> resource representation  <b>}</b> </td> <td>IUT <math>\leftarrow</math> AE</td> </tr> <tr> <td> <b>then {</b>            the IUT creates the <i>RESOURCE_TYPE</i> resource            and the IUT removes the oldest <i>RESOURCE_TYPE</i> resources  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code set to 2001 (CREATED)  <b>}</b> </td> <td>IUT <math>\rightarrow</math> AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to PARENT_RESOURCE_ADDRESS</b> <b>and</b> From <b>set to AE_ID</b> <b>and</b> Resource Type <b>set to RESOURCE_TYPE</b> <b>and</b> Content <b>containing</b> <i>RESOURCE_TYPE</i> resource representation <b>}</b>	IUT $\leftarrow$ AE	<b>then {</b> the IUT creates the <i>RESOURCE_TYPE</i> resource and the IUT removes the oldest <i>RESOURCE_TYPE</i> resources <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code set to 2001 (CREATED) <b>}</b>	IUT $\rightarrow$ AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to PARENT_RESOURCE_ADDRESS</b> <b>and</b> From <b>set to AE_ID</b> <b>and</b> Resource Type <b>set to RESOURCE_TYPE</b> <b>and</b> Content <b>containing</b> <i>RESOURCE_TYPE</i> resource representation <b>}</b>	IUT $\leftarrow$ AE							
<b>then {</b> the IUT creates the <i>RESOURCE_TYPE</i> resource and the IUT removes the oldest <i>RESOURCE_TYPE</i> resources <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code set to 2001 (CREATED) <b>}</b>	IUT $\rightarrow$ AE							

TP Id	PARENT_RESOURCE_TYPE	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/CRE/007_CNT/CIN	<i>container</i>	<i>contentInstance</i>
TP/oneM2M/CSE/DMR/CRE/007_TS/TSI	<i>timeSeries</i>	<i>timeSeriesInstance</i>

## TP/oneM2M/CSE/DMR/CRE/008

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/008							
<b>Test objective</b>	Checks that the IUT accepts a newly created <i>RESOURCE_TYPE</i> resource when the <i>currentByteSize</i> exceeds the field value set in <i>maxByteSize</i> in the <i>PARENT_RESOURCE_TYPE</i> resource by removing enough of the oldest <i>RESOURCE_TYPE</i> resources to allow the creation of the new <i>RESOURCE_TYPE</i> resource..							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.19.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b>  a <i>PARENT_RESOURCE_TYPE</i> resource <b>containing</b>  <i>maxByteSize</i> attribute <b>set to MAX_BYTE_SIZE_OF_DATA</b> <b>and</b>  <i>currentByteSize</i> attribute <b>set to MAX_BYTE_SIZE_OF_DATA</b>  <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource  <i>PARENT_RESOURCE_ADDRESS</i></p> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Expected behaviour</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> <i>PARENT_RESOURCE_ADDRESS</i> <b>and</b>  From <b>set to</b> <i>AE_ID</i> <b>and</b>  Resource Type <b>set to</b> <i>RESOURCE_TYPE</i> <b>and</b>  Content <b>containing</b>  <i>RESOURCE_TYPE</i> resource <b>with size less than</b>  <i>MAX_BYTE_SIZE_OF DATA</i>  <b>}</b> </td><td>IUT ← AE</td></tr> <tr> <td> <b>then {</b>  the IUT <b>creates</b> the <i>RESOURCE_TYPE</i> resource  <b>and</b> the IUT <b>removes</b> the oldest contentInstance resources  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED)  <b>}</b> </td><td>IUT → AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Expected behaviour</b>	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> <i>PARENT_RESOURCE_ADDRESS</i> <b>and</b> From <b>set to</b> <i>AE_ID</i> <b>and</b> Resource Type <b>set to</b> <i>RESOURCE_TYPE</i> <b>and</b> Content <b>containing</b> <i>RESOURCE_TYPE</i> resource <b>with size less than</b> <i>MAX_BYTE_SIZE_OF DATA</i> <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>creates</b> the <i>RESOURCE_TYPE</i> resource <b>and</b> the IUT <b>removes</b> the oldest contentInstance resources <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>}</b>	IUT → AE	
<b>Test events</b>	<b>Expected behaviour</b>							
<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> <i>PARENT_RESOURCE_ADDRESS</i> <b>and</b> From <b>set to</b> <i>AE_ID</i> <b>and</b> Resource Type <b>set to</b> <i>RESOURCE_TYPE</i> <b>and</b> Content <b>containing</b> <i>RESOURCE_TYPE</i> resource <b>with size less than</b> <i>MAX_BYTE_SIZE_OF DATA</i> <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>creates</b> the <i>RESOURCE_TYPE</i> resource <b>and</b> the IUT <b>removes</b> the oldest contentInstance resources <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>}</b>	IUT → AE							

TP Id	PARENT_RESOURCE_TYPE	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/CRE/008_CNT/CIN	<i>container</i>	<i>contentInstance</i>
TP/oneM2M/CSE/DMR/CRE/008_TS/TSI	<i>timeSeries</i>	<i>timeSeriesInstance</i>

## TP/oneM2M/CSE/DMR/CRE/009

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/009	
<b>Test objective</b>	Check that the IUT increments and then copies the field value of attribute <i>stateTag</i> in parent container resource when contentInstance resource is created as the direct child of the parent container	
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.1.3.2, ETSI TS 118 104 [2], clause 7.4.7.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<pre> with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b>         a container resource CONTAINER_RESOURCE_ADDRESS <b>containing</b>             stateTag attribute     <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource         CONTAINER_RESOURCE_ADDRESS } </pre>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<pre> when {     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID <b>and</b>         Resource Type <b>set to</b> 4 (contentInstance) <b>and</b>         Content <b>containing</b>             contentInstance resource representation } </pre>	IUT ← AE
	<pre> then {     the IUT <b>increments</b> stateTag attribute of         CONTAINER_RESOURCE_ADDRESS resource     <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2001 (CREATED) } </pre>	IUT → AE

## TP/oneM2M/CSE/DMR/CRE/010

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/010	
<b>Test objective</b>	Check that the IUT rejects the CREATE Request of a container resource named "la" as a direct child of a container resource	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.22, ETSI TS 118 104 [2], clause 7.4.28.2.2 and clause 7.3.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a container resource CONTAINER_RESOURCE_ADDRESS  <b>and</b> the IUT <b>having</b> privileges to perform CREATE operation on the resource  CONTAINER_RESOURCE_ADDRESS  <b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Content <b>containing</b>  Container resource <b>containing</b>  resourceName attribute <b>set to</b> "la"  <b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>does not create</b> the container resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4005 (OPERATION_NOT_ALLOWED)  <b>}</b></p>	IUT → AE

## TP/oneM2M/CSE/DMR/CRE/011

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/011	
<b>Test objective</b>	Check that the IUT rejects the CREATE Request of a container resource named "ol" as a direct child of a container resource	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.23, ETSI TS 118 104 [2], clause 7.4.29.2.2 and clause 7.3.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" and the IUT <b>having registered</b> the AE and the IUT <b>having created</b> a container resource CONTAINER_RESOURCE_ADDRESS and the IUT <b>having</b> privileges to perform CREATE operation on the resource CONTAINER_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> container resource <b>containing</b> resourceName attribute <b>set to</b> "ol" <b>}</b> <b>then {</b> the IUT <b>does not create</b> the container resource and the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4005 (OPERATION_NOT_ALLOWED) <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

## TP/oneM2M/CSE/DMR/CRE/012

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/012			
<b>Test objective</b>	Check that the IUT accepts the creation of a <i>RESOURCE_TYPE</i> resource with the optional attribute <i>OPTIONAL_ATTRIBUTE</i> provided			
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.1			
<b>Config Id</b>	CF01			
<b>Parent Release</b>	<i>PARENT_RELEASE</i>			
<b>PICS Selection</b>	PICS_CSE			
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource AE_RESOURCE_ADDRESS</p> <p><b>}</b></p>			
<b>Expected behaviour</b>	<p><b>Test events</b></p> <p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  <i>RESOURCE_TYPE</i> resource <b>containing</b>  valid <i>OPTIONAL_ATTRIBUTE</i> attribute</p> <p><b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>creates</b> the <i>RESOURCE_TYPE</i> resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED)</p> <p><b>}</b></p>	<b>Direction</b>		
			IUT ← AE	
			IUT → AE	

TP Id	PARENT_RELEASE	PICS Selection	Reference	RESOURCE_TYPE	OPTIONAL_ATTRIBUTE
TP/oneM2M/CSE/DMR/CRE/012_CNT/ACPI	Release 1	PICS_CNT ACPI	ETSI TS 118 101 [1], table 9.6.1.3.2-1	3 (container)	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/CRE/012_CNT/ET	Release 1	PICS_CNT ET	ETSI TS 118 101 [1], table 9.6.1.3.1-1	3 (container)	expirationTime
TP/oneM2M/CSE/DMR/CRE/012_CNT/LBL	Release 1	PICS_CNT_LBL	ETSI TS 118 101 [1], table 9.6.1.3.2-1	3 (container)	labels
TP/oneM2M/CSE/DMR/CRE/012_CNT/MNI	Release 1	PICS_CNT_MNI	ETSI TS 118 101 [1], table 9.6.6-2	3 (container)	maxNrOfInstances
TP/oneM2M/CSE/DMR/CRE/012_CNT/MBS	Release 1	PICS_CNT_MBS	ETSI TS 118 101 [1], table 9.6.6-2	3 (container)	maxByteSize

TP Id	PARENT_RELEASE	PICS Selection	Reference	RESOURCE_TYPE	OPTIONAL_ATTRIBUTE
TP/oneM2M/CSE/DMR/CRE/012_CNT/MIA	Release 1	PICS_CNT_MIA	ETSI TS 118 101 [1], table 9.6.6-2	3 (container)	maxInstanceAge
TP/oneM2M/CSE/DMR/CRE/012_CNT/OR	Release 1	PICS_CNT_OR	ETSI TS 118 101 [1], table 9.6.6-2	3 (container)	ontologyRef
TP/oneM2M/CSE/DMR/CRE/012_CNT/CR	Release 1	PICS_CNT_CR	ETSI TS 118 101 [1], table 9.6.6-2	3 (container)	creator
TP/oneM2M/CSE/DMR/CRE/012_CIN/ET	Release 1	PICS_CIN_ET	ETSI TS 118 101 [1], table 9.6.1.3.1-1	4 (contentInstance)	expirationTime
TP/oneM2M/CSE/DMR/CRE/012_CIN/LBL	Release 1	PICS_CIN_LBL	ETSI TS 118 101 [1], table 9.6.1.3.2-1	4 (contentInstance)	labels
TP/oneM2M/CSE/DMR/CRE/012_CIN/CR	Release 1	PICS_CIN_CR	ETSI TS 118 101 [1], table 9.6.7-2	4 (contentInstance)	creator
TP/oneM2M/CSE/DMR/CRE/012_CIN/CNF	Release 1	PICS_CIN_CNF	ETSI TS 118 101 [1], table 9.6.7-2	4 (contentInstance)	contentInfo
TP/oneM2M/CSE/DMR/CRE/012_CIN/OR	Release 1	PICS_CIN_OR	ETSI TS 118 101 [1], table 9.6.7-2	4 (contentInstance)	ontologyRef
TP/oneM2M/CSE/DMR/CRE/012_ACP/ET	Release 1	N/A	ETSI TS 118 101 [1], table 9.6.1.3.1-1	1 (accesControlPolicy)	expirationTime
TP/oneM2M/CSE/DMR/CRE/012_ACP/LBL	Release 1	PICS_ACP_LBL	ETSI TS 118 101 [1], table 9.6.1.3.2-1	1 (accesControlPolicy)	labels
TP/oneM2M/CSE/DMR/CRE/012_SUB/ACPI	Release 1	PICS_SUB_ACPI	ETSI TS 118 101 [1], table 9.6.1.3.2-1	23 (subscription)	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/CRE/012_SUB/ET	Release 1	N/A	ETSI TS 118 101 [1], table 9.6.1.3.1-1	23 (subscription)	expirationTime
TP/oneM2M/CSE/DMR/CRE/012_SUB/LBL	Release 1	PICS_SUB_LBL	ETSI TS 118 101 [1], table 9.6.1.3.2-1	23 (subscription)	labels
TP/oneM2M/CSE/DMR/CRE/012_SUB/ENC	Release 1	PICS_SUB_ENC	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	eventNotificationCriteria
TP/oneM2M/CSE/DMR/CRE/012_SUB/EXC	Release 1	PICS_SUB_EXC	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	expirationCounter
TP/oneM2M/CSE/DMR/CRE/012_SUB/GPI	Release 1	PICS_SUB_GPI	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	groupID
TP/oneM2M/CSE/DMR/CRE/012_SUB/NFU	Release 1	PICS_SUB_NFU	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	notificationForwardingURI
TP/oneM2M/CSE/DMR/CRE/012_SUB/BN	Release 1	PICS_SUB_BN	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	batchNotify
TP/oneM2M/CSE/DMR/CRE/012_SUB/RL	Release 1	PICS_SUB_RL	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	rateLimit
TP/oneM2M/CSE/DMR/CRE/012_SUB/PSN	Release 1	PICS_SUB_PSN	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	preSubscriptionNotify
TP/oneM2M/CSE/DMR/CRE/012_SUB/PN	Release 1	PICS_SUB_PN	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	pendingNotification
TP/oneM2M/CSE/DMR/CRE/012_SUB/NSP	Release 1	PICS_SUB_NSP	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	notificationStoragePriority

TP Id	PARENT_RELEASE	PICS Selection	Reference	RESOURCE_TYPE	OPTIONAL_ATTRIBUTE
TP/oneM2M/CSE/DMR/CRE/012_SUB/LN	Release 1	PICS_SUB_LN	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	latestNotify
TP/oneM2M/CSE/DMR/CRE/012_SUB/NCT	Release 1	PICS_SUB_NCT	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	notificationContentType
TP/oneM2M/CSE/DMR/CRE/012_SUB/NEC	Release 1	PICS_SUB_NEC	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	notificationEventCat
TP/oneM2M/CSE/DMR/CRE/012_SUB/CR	Release 1	PICS_SUB_CR	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	creator
TP/oneM2M/CSE/DMR/CRE/012_SUB/SU	Release 1	PICS_SUB_SU	ETSI TS 118 101 [1], table 9.6.8-2	23 (subscription)	subscriberURI
TP/oneM2M/CSE/DMR/CRE/012_STCG/CR	Release 2		ETSI TS 118 101 [1], table 9.6.23-2	22 (statsConfig)	creator
TP/oneM2M/CSE/DMR/CRE/012_TS/ACPI	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	29 (timeSeries)	accessControlPolicyIDs
TP/oneM2M/CSE/DMR/CRE/012_TS/ET	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	29 (timeSeries)	expirationTime
TP/oneM2M/CSE/DMR/CRE/012_TS/LBL	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	29 (timeSeries)	labels
TP/oneM2M/CSE/DMR/CRE/012_TS/CR	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	29 (timeSeries)	creator
TP/oneM2M/CSE/DMR/CRE/012_TS/MNI	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	29 (timeSeries)	maxNrOfInstances
TP/oneM2M/CSE/DMR/CRE/012_TS/MBS	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	29 (timeSeries)	maxByteSize
TP/oneM2M/CSE/DMR/CRE/012_TS/MIA	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	29 (timeSeries)	maxInstanceAge
TP/oneM2M/CSE/DMR/CRE/012_TS/PEI	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	29 (timeSeries)	periodicInterval
TP/oneM2M/CSE/DMR/CRE/012_TS/MDD	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	29 (timeSeries)	missingDataDetect
TP/oneM2M/CSE/DMR/CRE/012_TS/MDN	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	29 (timeSeries)	missingDataMaxNr
TP/oneM2M/CSE/DMR/CRE/012_TS/MDT	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	29 (timeSeries)	missingDataDetectTimer
TP/oneM2M/CSE/DMR/CRE/012_TS/OR	Release 2		ETSI TS 118 101 [1], table 9.6.36-2	29 (timeSeries)	ontologyRef
TP/oneM2M/CSE/DMR/CRE/012_TSI/ET	Release 2		ETSI TS 118 101 [1], table 9.6.37-1	30 (timeSeriesInstance)	expirationTime
TP/oneM2M/CSE/DMR/CRE/012_TSI/LBL	Release 2		ETSI TS 118 101 [1], table 9.6.37-1	30 (timeSeriesInstance)	labels
TP/oneM2M/CSE/DMR/CRE/012_TSI/SNR	Release 2		ETSI TS 118 101 [1], table 9.6.37-1	30 (timeSeriesInstance)	sequenceNr

## TP/oneM2M/CSE/DMR/CRE/013

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/013							
<b>Test objective</b>	Check that the IUT rejects the CREATE Request of a <i>RESOURCE_TYPE</i> resource with error "NOT_ACCEPTABLE" when <i>contentSize</i> exceeds <i>maxByteSize</i> of the <i>PARENT_RESOURCE_TYPE</i>							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.19, ETSI TS 118 104 [2], clause 7.4.7.2.1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<pre>with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b>         a <i>PARENT_RESOURCE_TYPE</i> resource <b>having</b>             <i>maxByteSize</i> attribute <b>set to MAX_BYTE_SIZE</b> }</pre>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when {     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> <i>PARENT_RESOURCE_ADDRESS</i> <b>and</b>         From <b>set to</b> <i>AE_ID</i> <b>and</b>         Content <b>containing</b>             <i>RESOURCE_TYPE</i> resource <b>containing</b>                 valid content <b>with size larger than</b> <i>MAX_BYTE_SIZE</i> }</pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 5207 (NOT_ACCEPTABLE) }</pre> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<pre>when {     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> <i>PARENT_RESOURCE_ADDRESS</i> <b>and</b>         From <b>set to</b> <i>AE_ID</i> <b>and</b>         Content <b>containing</b>             <i>RESOURCE_TYPE</i> resource <b>containing</b>                 valid content <b>with size larger than</b> <i>MAX_BYTE_SIZE</i> }</pre>	IUT ← AE	<pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 5207 (NOT_ACCEPTABLE) }</pre>	IUT → AE	
Test events	Direction							
<pre>when {     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> <i>PARENT_RESOURCE_ADDRESS</i> <b>and</b>         From <b>set to</b> <i>AE_ID</i> <b>and</b>         Content <b>containing</b>             <i>RESOURCE_TYPE</i> resource <b>containing</b>                 valid content <b>with size larger than</b> <i>MAX_BYTE_SIZE</i> }</pre>	IUT ← AE							
<pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 5207 (NOT_ACCEPTABLE) }</pre>	IUT → AE							

TP Id	PARENT_RESOURCE_TYPE	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/CRE/013_CNT/CIN	<i>container</i>	<i>contentInstance</i>
TP/oneM2M/CSE/DMR/CRE/013_TS/TSI	<i>timeSeries</i>	<i>timeSeriesInstance</i>

## TP/oneM2M/CSE/DMR/CRE/014

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/014							
<b>Test objective</b>	Check that the IUT updates the currentByteSize attribute in a <i>PARENT_RESOURCE_TYPE</i> when a new <i>RESOURCE_TYPE</i> is created.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.19.2, ETSI TS 118 104 [2], clause 7.4.8.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> the AE <b>containing</b></p> <p>a PARENT_RESOURCE_TYPE resource at PARENT_RESOURCE_ADDRESS</p> <p><b>containing</b></p> <p>maxByteSize attribute <b>set to MAX_BYTE_SIZE_OF_DATA</b> and</p> <p>currentByteSize attribute <b>set to 0</b></p> <p>and the AE <b>having</b> privileges to perform CREATE operation on the resource</p> <p>PARENT_RESOURCE_ADDRESS</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {           the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>           To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b>           From <b>set to</b> AE_ID <b>and</b>           Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b>           Content <b>containing</b>           RESOURCE_TYPE resource <b>containing</b>           valid content attribute <b>with size equal to</b> DATA_SIZE         }       </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then</b> {           the IUT <b>increments</b> currentByteSize attribute of           PARENT_RESOURCE_ADDRESS resource by DATA_SIZE           <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>           Response Status Code <b>set to</b> 2001 (CREATED)         }       </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when</b> {           the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> valid content attribute <b>with size equal to</b> DATA_SIZE         }	IUT ← AE	<b>then</b> {           the IUT <b>increments</b> currentByteSize attribute of           PARENT_RESOURCE_ADDRESS resource by DATA_SIZE <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED)         }	IUT → AE	
Test events	Direction							
<b>when</b> {           the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> valid content attribute <b>with size equal to</b> DATA_SIZE         }	IUT ← AE							
<b>then</b> {           the IUT <b>increments</b> currentByteSize attribute of           PARENT_RESOURCE_ADDRESS resource by DATA_SIZE <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED)         }	IUT → AE							

TP Id	PARENT_RESOURCE_TYPE	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/CRE/014_CNT/CIN	<i>container</i>	<i>contentInstance</i>
TP/oneM2M/CSE/DMR/CRE/014_TS/TSI	<i>timeSeries</i>	<i>timeSeriesInstance</i>

## TP/oneM2M/CSE/DMR/CRE/015

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/015	
<b>Test objective</b>	Check that the IUT returns successfully after a CREATE request an empty content of created resource when the ResultContent set to 0 (Nothing)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, clause 8.1.3 and clause 10.1.1.1, ETSI TS 118 104 [2], clause 6.3.4.2.7	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>Config Id</b>	CF01	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" and the IUT <b>having registered</b> the AE and the AE <b>having</b> privileges to perform CREATE operation on the resource AE_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b> Result Content <b>set to</b> 0 (nothing) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource representation <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> no Content <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/CRE/015_CNT	Release 2	ETSI TS 118 101 [1], clause 10.2.4.1	3 (container)
TP/oneM2M/CSE/DMR/CRE/015_GRP	Release 2	ETSI TS 118 101 [1], clause 10.2.7.2	9 (group)
TP/oneM2M/CSE/DMR/CRE/015_ACP	Release 2	ETSI TS 118 101 [1], clause 10.2.21.1	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/CRE/015_SUB	Release 2	ETSI TS 118 101 [1], clause 10.2.11.2	23 (subscription)
TP/oneM2M/CSE/DMR/CRE/015_PCH	Release 2	ETSI TS 118 101 [1], clause 10.2.13.2	15 (pollingChannel)

## TP/oneM2M/CSE/DMR/CRE/016

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/016							
<b>Test objective</b>	Check that the IUT returns successfully after a CREATE request only hierarchical address of the created resource when the Result Content is set to 2 (hierarchical address)							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, clause 8.1.3 and clause 10.1.1.1, ETSI TS 118 104 [2], clause 6.3.4.2.7							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource AE_RESOURCE_ADDRESS  <b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>            To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE_ID <b>and</b>            Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b>            Result Content <b>set to</b> 2 (hierarchical address) <b>and</b>            Content <b>containing</b>            RESOURCE_TYPE resource representation  <b>}</b> </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then {</b>            the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>            Content <b>containing</b>            Hierarchical address of the RESOURCE_TYPE resource  <b>}</b> </td> <td>IUT → AE</td> </tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b> Result Content <b>set to</b> 2 (hierarchical address) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource representation <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> Hierarchical address of the RESOURCE_TYPE resource <b>}</b>	IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b> Result Content <b>set to</b> 2 (hierarchical address) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource representation <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> Hierarchical address of the RESOURCE_TYPE resource <b>}</b>	IUT → AE							

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/CRE/016_CNT	Release 2	ETSI TS 118 101 [1], clause 10.2.4.1	3 (container)
TP/oneM2M/CSE/DMR/CRE/016_GRP	Release 2	ETSI TS 118 101 [1], clause 10.2.7.2	9 (group)
TP/oneM2M/CSE/DMR/CRE/016_ACP	Release 2	ETSI TS 118 101 [1], clause 10.2.21.1	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/CRE/016_SUB	Release 2	ETSI TS 118 101 [1], clause 10.2.11.2	23 (subscription)
TP/oneM2M/CSE/DMR/CRE/016_PCH	Release 2	ETSI TS 118 101 [1], clause 10.2.13.2	15 (pollingChannel)

## TP/oneM2M/CSE/DMR/CRE/017

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/017							
<b>Test objective</b>	Check that the IUT returns successfully after a CREATE request only attributes and hierachichal address of the created resource when Result Content is set 3 (attributes and hierachichal address)							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, clause 8.1.3 and clause 10.1.1.1, ETSI TS 118 104 [2], clause 6.3.4.2.7							
<b>Parent Release</b>	<i>PARENT_RELEASE</i>							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the AE <b>having</b> privileges to perform RETRIEVE operation on the resource AE_RESOURCE_ADDRESS</p> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b>  Result Content <b>set to</b> 3 (attributes and hierachichal address) <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource representation</p> <p><b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>  Content <b>containing</b>  resource element <b>containing</b>  Hierarchical address of the RESOURCE_TYPE resource <b>and</b>  RESOURCE_TYPE resource representation</p> <p><b>}</b></p> </td><td>IUT ← AE</td></tr> <tr> <td></td><td>IUT → AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b>  Result Content <b>set to</b> 3 (attributes and hierachichal address) <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource representation</p> <p><b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>  Content <b>containing</b>  resource element <b>containing</b>  Hierarchical address of the RESOURCE_TYPE resource <b>and</b>  RESOURCE_TYPE resource representation</p> <p><b>}</b></p>	IUT ← AE		IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b>  Result Content <b>set to</b> 3 (attributes and hierachichal address) <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource representation</p> <p><b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>  Content <b>containing</b>  resource element <b>containing</b>  Hierarchical address of the RESOURCE_TYPE resource <b>and</b>  RESOURCE_TYPE resource representation</p> <p><b>}</b></p>	IUT ← AE							
	IUT → AE							

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/CRE/017_CNT	Release 2	ETSI TS 118 101 [1], clause 10.2.4.1	3 (container)
TP/oneM2M/CSE/DMR/CRE/017_GRP	Release 2	ETSI TS 118 101 [1], clause 10.2.7.2	9 (group)

TP/oneM2M/CSE/DMR/CRE/017_ACP	Release 2	ETSI TS 118 101 [1], clause 10.2.21.1	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/CRE/017_SUB	Release 2	ETSI TS 118 101 [1], clause 10.2.11.2	23 (subscription)
TP/oneM2M/CSE/DMR/CRE/017_PCH	Release 2	ETSI TS 118 101 [1], clause 10.2.13.2	15 (pollingChannel)

TP/oneM2M/CSE/DMR/CRE/018

TP Id	TP/oneM2M/CSE/DMR/CRE/018	
Test objective	Check that the IUT rejects a CREATE request when the ResultContent is set to <b>RESULT_CONTENT</b>	
Reference	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 7.3.2.1	
Parent Release	Release 2	
Config Id	CF01	
PICS Selection	PICS_CSE	
Initial conditions	<b>with {</b> the IUT <b>being</b> in the "initial state" and the IUT <b>having registered</b> the AE and the AE <b>having</b> privileges to perform CREATE operation on the resource AE_RESOURCE_ADDRESS <b>}</b>	
Expected behaviour	Test events	Direction
	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Result Content <b>set to</b> <b>RESULT_CONTENT</b> <b>}</b>	IUT $\leftarrow$ AE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4000 (BAD_REQUEST) <b>}</b>	IUT $\rightarrow$ AE

TP Id	Reference	RESULT_CONTENT
TP/oneM2M/CSE/DMR/CRE/018_RCN/4		4 (attributes and child resources)
TP/oneM2M/CSE/DMR/CRE/018_RCN/5		5 (attributes and child resources references)
TP/oneM2M/CSE/DMR/CRE/018_RCN/6	ETSI TS 118 104 [2], clause 6.3.4.2.7	6 (child resources references)
TP/oneM2M/CSE/DMR/CRE/018_RCN/8		8 (child resources)

## TP/oneM2M/CSE/DMR/CRE/019

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/019	
<b>Test objective</b>	Check that the IUT returns successfully only attributes of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 1 (attributes)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 6.3.3.2.7	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE  <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>Result Content set to</b> 1 (attributes)  <b>Content containing</b>  <b>RESOURCE_TYPE</b> resource representation</p> <p><b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  <b>Response Status Code set to</b> 2001 (CREATED) <b>and</b>  <b>Content containing</b>  <b>RESOURCE_TYPE</b> resource <b>containing</b>  <b>attributes and</b>  <b>no hierarchical address and</b>  <b>no child resources and</b>  <b>no child resource references</b></p> <p><b>}</b></p>	IUT → AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/CRE/019_CNT	Release 2	3 (container)
TP/oneM2M/CSE/DMR/CRE/019_GRP	Release 2	9 (group)
TP/oneM2M/CSE/DMR/CRE/019_ACP	Release 2	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/CRE/019_PCH	Release 2	15 (pollingChannel)
TP/oneM2M/CSE/DMR/CRE/019_SUB	Release 2	23 (subscription)

## TP/oneM2M/CSE/DMR/CRE/020

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/020	
<b>Test objective</b>	Check that the IUT returns successfully only modified attributes of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 9 (modified attributes)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 6.3.3.2.7	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" and the IUT <b>having registered</b> the AE and the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE and the AE <b>having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Result Content <b>set to</b> 1 (attributes) Content <b>containing</b> RESOURCE_TYPE resource representation <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> RESOURCE_TYPE resource <b>containing</b> modified attributes <b>}</b>	IUT → AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/CRE/020_CNT	Release 2	3 (container)
TP/oneM2M/CSE/DMR/CRE/020_GRP	Release 2	9 (group)
TP/oneM2M/CSE/DMR/CRE/020_ACP	Release 2	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/CRE/020_PCH	Release 2	15 (pollingChannel)
TP/oneM2M/CSE/DMR/CRE/020_SUB	Release 2	23 (subscription)

## TP/oneM2M/CSE/DMR/CRE/021

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/021							
<b>Test objective</b>	Check that the IUT accepts the creation of a <i>RESOURCE_TYPE</i> resource on the <i>TARGET_RESOURCE_ADDRESS</i> of type announced <i>PARENT_RESOURCE_TYPE</i>							
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.5							
<b>Parent Release</b>	Release 2							
<b>Config Id</b>	CF04							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the CSE  <b>and the IUT having created</b> the PARENT_RESOURCE_TYPE  <b>and the Originator having</b> privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid CREATE Request <b>from</b> CSE <b>containing</b>            Resource Type <b>set to</b> <i>RESOURCE_TYPE</i> <b>and</b>            To <b>set to</b> <i>PARENT_RESOURCE_ADDRESS</i> <b>and</b>            From <b>set to</b> CSE-ID <b>and</b>            Content <b>containing</b>  <i>RESOURCE_TYPE</i> resource <b>containing</b>  <b>no</b> resourceName attribute  <b>}</b> </td> <td>IUT ← CSE</td> </tr> <tr> <td> <b>then {</b>            the IUT <b>creates</b> the <i>RESOURCE_TYPE</i> resource  <b>and the IUT sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>            Content <b>containing</b>  <i>RESOURCE_TYPE</i> resource <b>containing</b>            Valid resourceName attribute  <b>}</b> </td> <td>IUT → CSE</td> </tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> CSE <b>containing</b> Resource Type <b>set to</b> <i>RESOURCE_TYPE</i> <b>and</b> To <b>set to</b> <i>PARENT_RESOURCE_ADDRESS</i> <b>and</b> From <b>set to</b> CSE-ID <b>and</b> Content <b>containing</b> <i>RESOURCE_TYPE</i> resource <b>containing</b> <b>no</b> resourceName attribute <b>}</b>	IUT ← CSE	<b>then {</b> the IUT <b>creates</b> the <i>RESOURCE_TYPE</i> resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> <i>RESOURCE_TYPE</i> resource <b>containing</b> Valid resourceName attribute <b>}</b>	IUT → CSE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> CSE <b>containing</b> Resource Type <b>set to</b> <i>RESOURCE_TYPE</i> <b>and</b> To <b>set to</b> <i>PARENT_RESOURCE_ADDRESS</i> <b>and</b> From <b>set to</b> CSE-ID <b>and</b> Content <b>containing</b> <i>RESOURCE_TYPE</i> resource <b>containing</b> <b>no</b> resourceName attribute <b>}</b>	IUT ← CSE							
<b>then {</b> the IUT <b>creates</b> the <i>RESOURCE_TYPE</i> resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b> Content <b>containing</b> <i>RESOURCE_TYPE</i> resource <b>containing</b> Valid resourceName attribute <b>}</b>	IUT → CSE							

TP Id	Reference	RESOURCE_TYPE	PARENT_RESOURCE_TYPE
TP/oneM2M/CSE/DMR/CRE/021_CNTA/AEA	ETSI TS 118 101 [1], table 9.6.5-1	(containerAnnC)	(AEannC)
TP/oneM2M/CSE/DMR/CRE/021_GRPA/AEA	ETSI TS 118 101 [1], table 9.6.5-1	(groupAnnC)	(AEannC)
TP/oneM2M/CSE/DMR/CRE/021_ACPA/AEA	ETSI TS 118 101 [1], table 9.6.5-1	(accessControlPolicyAnnC)	(AEannC)
TP/oneM2M/CSE/DMR/CRE/021_TSA/AEA	ETSI TS 118 101 [1], table 9.6.5-1	(timeSeriesAnnC)	(AEannC)

## TP/oneM2M/CSE/DMR/CRE/022

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/022							
<b>Test objective</b>	Check that the IUT accepts the creation of a <i>RESOURCE_TYPE</i> resource with the optional attribute announceTo provided							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.18.4 and table 9.6.1.3.2-1, ETSI TS 118 104 [2], clause 7.3.3.10							
<b>Parent Release</b>	Release 2							
<b>Config Id</b>	CF02							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <ul style="list-style-type: none"> <li>the IUT <b>being</b> in the "initial state"</li> <li><b>and</b> the IUT <b>having registered</b> the AE</li> <li><b>and</b> the IUT <b>having created and announced</b> the PARENT_RESOURCE to the announcement target CSE</li> <li><b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS</li> </ul> <b>}</b>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b> <ul style="list-style-type: none"> <li>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> <ul style="list-style-type: none"> <li>To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b></li> <li>From <b>set to</b> AE-ID <b>and</b></li> <li>Content <b>containing</b> <ul style="list-style-type: none"> <li><i>RESOURCE_TYPE</i> resource <b>containing</b> <ul style="list-style-type: none"> <li>announceTo attribute <b>set to</b> ANNC_TARGET_CSE_ADDRESS</li> </ul> </li> </ul> </li> </ul> <b>}</b> </li></ul></td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then {</b> <ul style="list-style-type: none"> <li>The IUT <b>sends</b> a valid CREATE Request <b>containing</b> <ul style="list-style-type: none"> <li>To <b>set to</b> ANNC_TARGET_CSE_ADDRESS <b>and</b></li> <li>Content <b>containing</b> <ul style="list-style-type: none"> <li><i>RESOURCE_TYPE</i> announced variant resource <b>containing</b> <ul style="list-style-type: none"> <li>MA (mandatory) attributes</li> </ul> </li> </ul> </li> </ul> <b>}</b> </li></ul></td> <td>IUT → CSE</td> </tr> </tbody> </table>	Test events	Direction	<b>when {</b> <ul style="list-style-type: none"> <li>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> <ul style="list-style-type: none"> <li>To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b></li> <li>From <b>set to</b> AE-ID <b>and</b></li> <li>Content <b>containing</b> <ul style="list-style-type: none"> <li><i>RESOURCE_TYPE</i> resource <b>containing</b> <ul style="list-style-type: none"> <li>announceTo attribute <b>set to</b> ANNC_TARGET_CSE_ADDRESS</li> </ul> </li> </ul> </li> </ul> <b>}</b> </li></ul>	IUT ← AE	<b>then {</b> <ul style="list-style-type: none"> <li>The IUT <b>sends</b> a valid CREATE Request <b>containing</b> <ul style="list-style-type: none"> <li>To <b>set to</b> ANNC_TARGET_CSE_ADDRESS <b>and</b></li> <li>Content <b>containing</b> <ul style="list-style-type: none"> <li><i>RESOURCE_TYPE</i> announced variant resource <b>containing</b> <ul style="list-style-type: none"> <li>MA (mandatory) attributes</li> </ul> </li> </ul> </li> </ul> <b>}</b> </li></ul>	IUT → CSE	
Test events	Direction							
<b>when {</b> <ul style="list-style-type: none"> <li>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> <ul style="list-style-type: none"> <li>To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b></li> <li>From <b>set to</b> AE-ID <b>and</b></li> <li>Content <b>containing</b> <ul style="list-style-type: none"> <li><i>RESOURCE_TYPE</i> resource <b>containing</b> <ul style="list-style-type: none"> <li>announceTo attribute <b>set to</b> ANNC_TARGET_CSE_ADDRESS</li> </ul> </li> </ul> </li> </ul> <b>}</b> </li></ul>	IUT ← AE							
<b>then {</b> <ul style="list-style-type: none"> <li>The IUT <b>sends</b> a valid CREATE Request <b>containing</b> <ul style="list-style-type: none"> <li>To <b>set to</b> ANNC_TARGET_CSE_ADDRESS <b>and</b></li> <li>Content <b>containing</b> <ul style="list-style-type: none"> <li><i>RESOURCE_TYPE</i> announced variant resource <b>containing</b> <ul style="list-style-type: none"> <li>MA (mandatory) attributes</li> </ul> </li> </ul> </li> </ul> <b>}</b> </li></ul>	IUT → CSE							
<b>TP Id</b>	<b>RESOURCE_TYPE</b>	<b>PICS</b>						
TP/oneM2M/CSE/DMR/CRE/022_ACP	1 (accesControlPolicy)	PICS_IN_PROFILE						
TP/oneM2M/CSE/DMR/CRE/022_CNT	3 (container)	PICS_IN_PROFILE						
TP/oneM2M/CSE/DMR/CRE/022_CIN	4 (contentInstance)	PICS_IN_PROFILE						
TP/oneM2M/CSE/DMR/CRE/022_GRP	9 (group)							
TP/oneM2M/CSE/DMR/CRE/022_LCP	10 (locationPolicy)							
TP/oneM2M/CSE/DMR/CRE/022_MGO	13 (mgmtObj)							
TP/oneM2M/CSE/DMR/CRE/022_NOD	14 (node)							
TP/oneM2M/CSE/DMR/CRE/022_SCH	18 (schedule)							
TP/oneM2M/CSE/DMR/CRE/022_TS	29 (timeSeries)							
TP/oneM2M/CSE/DMR/CRE/022_TSI	30 (timeSeriesInstance)							

## TP/oneM2M/CSE/DMR/CRE/023

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/023							
<b>Test objective</b>	Check that the IUT accepts the creation of a <i>RESOURCE_TYPE</i> resource with the optional attribute announcedAttribute provided							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.18.4 and table 9.6.1.3.2-1, ETSI TS 118 104 [2], clause 7.3.3.10							
<b>Parent Release</b>	Release 2							
<b>Config Id</b>	CF02							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <ul style="list-style-type: none"> <li>the IUT <b>being</b> in the "initial state"</li> <li><b>and the IUT having registered</b> the AE</li> <li><b>and the IUT having created and announced</b> the PARENT_RESOURCE to the announcement target CSE</li> <li><b>and the AE having</b> privileges to perform CREATE operation on the resource PARENT_RESOURCE_ADDRESS</li> </ul> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b> <ul style="list-style-type: none"> <li>the IUT receives a valid CREATE Request <b>from</b> AE <b>containing</b></li> <li>To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b></li> <li>From <b>set to</b> AE-ID <b>and</b></li> <li>Content <b>containing</b></li> <li><i>RESOURCE_TYPE</i> resource <b>containing</b></li> <li>OA_ATTRIBUTE attribute <b>set to</b> VALUE <b>and</b></li> <li>announcedAttribute attribute <b>set to</b> OA_ATTRIBUTE <b>and</b></li> <li>announceTo attribute <b>set to</b></li> <li>ANNC_TARGET_CSE_ADDRESS</li> </ul> <p><b>}</b></p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then {</b> <ul style="list-style-type: none"> <li>The IUT <b>sends</b> a valid CREATE Request <b>containing</b></li> <li>To <b>set to</b> ANNC_TARGET_CSE_ADDRESS <b>and</b></li> <li>Content <b>containing</b></li> <li><i>RESOURCE_TYPE</i> announced variant resource <b>containing</b></li> <li>MA (mandatory) attributes <b>and</b></li> <li>OA_ATTRIBUTE attribute <b>set to</b> VALUE</li> </ul> <p><b>}</b></p> </td> <td>IUT → CSE</td> </tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> <ul style="list-style-type: none"> <li>the IUT receives a valid CREATE Request <b>from</b> AE <b>containing</b></li> <li>To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b></li> <li>From <b>set to</b> AE-ID <b>and</b></li> <li>Content <b>containing</b></li> <li><i>RESOURCE_TYPE</i> resource <b>containing</b></li> <li>OA_ATTRIBUTE attribute <b>set to</b> VALUE <b>and</b></li> <li>announcedAttribute attribute <b>set to</b> OA_ATTRIBUTE <b>and</b></li> <li>announceTo attribute <b>set to</b></li> <li>ANNC_TARGET_CSE_ADDRESS</li> </ul> <p><b>}</b></p>	IUT ← AE	<b>then {</b> <ul style="list-style-type: none"> <li>The IUT <b>sends</b> a valid CREATE Request <b>containing</b></li> <li>To <b>set to</b> ANNC_TARGET_CSE_ADDRESS <b>and</b></li> <li>Content <b>containing</b></li> <li><i>RESOURCE_TYPE</i> announced variant resource <b>containing</b></li> <li>MA (mandatory) attributes <b>and</b></li> <li>OA_ATTRIBUTE attribute <b>set to</b> VALUE</li> </ul> <p><b>}</b></p>	IUT → CSE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> <ul style="list-style-type: none"> <li>the IUT receives a valid CREATE Request <b>from</b> AE <b>containing</b></li> <li>To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b></li> <li>From <b>set to</b> AE-ID <b>and</b></li> <li>Content <b>containing</b></li> <li><i>RESOURCE_TYPE</i> resource <b>containing</b></li> <li>OA_ATTRIBUTE attribute <b>set to</b> VALUE <b>and</b></li> <li>announcedAttribute attribute <b>set to</b> OA_ATTRIBUTE <b>and</b></li> <li>announceTo attribute <b>set to</b></li> <li>ANNC_TARGET_CSE_ADDRESS</li> </ul> <p><b>}</b></p>	IUT ← AE							
<b>then {</b> <ul style="list-style-type: none"> <li>The IUT <b>sends</b> a valid CREATE Request <b>containing</b></li> <li>To <b>set to</b> ANNC_TARGET_CSE_ADDRESS <b>and</b></li> <li>Content <b>containing</b></li> <li><i>RESOURCE_TYPE</i> announced variant resource <b>containing</b></li> <li>MA (mandatory) attributes <b>and</b></li> <li>OA_ATTRIBUTE attribute <b>set to</b> VALUE</li> </ul> <p><b>}</b></p>	IUT → CSE							

<b>TP Id</b>	<b>RESOURCE_TYPE</b>	<b>PICS</b>
TP/oneM2M/CSE/DMR/CRE/023_CNT	3 (container)	PICS_IN_PROFILE
TP/oneM2M/CSE/DMR/CRE/023_CIN	4 (contentInstance)	PICS_IN_PROFILE
TP/oneM2M/CSE/DMR/CRE/023_GRP	9 (group)	
TP/oneM2M/CSE/DMR/CRE/023_LCP	10 (locationPolicy)	
TP/oneM2M/CSE/DMR/CRE/023_MGO	13 (mgmtObj)	
TP/oneM2M/CSE/DMR/CRE/023_NOD	14 (node)	

TP/oneM2M/CSE/DMR/CRE/023_SCH	18 (schedule)	
TP/oneM2M/CSE/DMR/CRE/023_TS	29 (timeSeries)	
TP/oneM2M/CSE/DMR/CRE/023_TSI	30 (timeSeriesInstance)	

### 7.2.2.3.4 DELETE Operation

TP/oneM2M/CSE/DMR/DEL/001

TP Id	TP/oneM2M/CSE/DMR/DEL/001	
Test objective	Check that the IUT accepts the deletion of a <i>RESOURCE_TYPE</i> resource	
Reference	ETSI TS 118 101 [1], clause 10.1.4	
Config Id	CF01	
Parent Release	PARENT_RELEASE	
PICS Selection	PICS_CSE	
Initial conditions	<b>with {</b> the IUT <b>being</b> in the "initial state" and the IUT <b>having registered</b> the AE and the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type <i>RESOURCE_TYPE</i> and the AE <b>having</b> privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
Expected behaviour	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no</b> Content <b>}</b> <b>then {</b> the IUT <b>deletes</b> the TARGET_RESOURCE_ADDRESS resource and the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/DEL/001_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.4	3 (container)
TP/oneM2M/CSE/DMR/DEL/001_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.4	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/DEL/001_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.5	23 (subscription)

TP/oneM2M/CSE/DMR/DEL/001_CIN	Release 1	ETSI TS 118 101 [1], clause 10.2.4.1	4 (contentInstance)
TP/oneM2M/CSE/DMR/DEL/001_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.5	9 (group)
TP/oneM2M/CSE/DMR/DEL/001_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/DEL/001_PCH	Release 2	ETSI TS 118 101 [1], clause 10.2.13.5	15 (pollingChannel)
TP/oneM2M/CSE/DMR/DEL/001_STCG	Release 2	ETSI TS 118 101 [1], clause 10.2.15.5	22 (statsConfig)
TP/oneM2M/CSE/DMR/DEL/001_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.4	29 (timeSeries)
TP/oneM2M/CSE/DMR/DEL/001_TSI	Release 2	ETSI TS 118 101 [1], clause 10.2.31.4	30 (timeSeriesInstance)

## TP/oneM2M/CSE/DMR/DEL/002

<b>TP Id</b>	TP/oneM2M/CSE/DMR/DEL/002	
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to delete the resource TARGET_RESOURCE_ADDRESS without having privileges for the DELETE operation	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.4	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> the AE</p> <p>and the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE</p> <p>and the AE <b>having no</b> privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS</p> }	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no</b> Content <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>does not delete</b> the TARGET_RESOURCE_ADDRESS resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) <b>}</b>	IUT → AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/DEL/002_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.4	3 (container)
TP/oneM2M/CSE/DMR/DEL/002_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.4	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/DEL/002_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.5	23 (subscription)
TP/oneM2M/CSE/DMR/DEL/002_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.5	9 (group)
TP/oneM2M/CSE/DMR/DEL/002_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/DEL/002_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.4	29 (timeSeries)

## TP/oneM2M/CSE/DMR/DEL/003

<b>TP Id</b>	TP/oneM2M/CSE/DMR/DEL/003	
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries to delete the resource TARGET_RESOURCE_ADDRESS which does not exist	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.4	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> the AE</p> <p>and the IUT <b>having not yet created</b> a resource TARGET_RESOURCE_ADDRESS</p> }	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> <p>the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE_ID <b>and</b></p> <p><b>no Content</b></p> <b>}</b>	IUT ← AE
	<b>then {</b> <p>the IUT <b>does not delete</b> the TARGET_RESOURCE_ADDRESS resource</p> <p><b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4004 (NOT_FOUND)</p> <b>}</b>	IUT → AE

## TP/oneM2M/CSE/DMR/DEL/004

<b>TP Id</b>	TP/oneM2M/CSE/DMR/DEL/004						
<b>Test objective</b>	Check that the IUT responds with an error when AE tries to delete a child resource of a <b>RESOURCE_TYPE</b> resource when this resource has been already deleted						
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.1.4						
<b>Config Id</b>	CF01						
<b>Parent Release</b>	<b>PARENT_RELEASE</b>						
<b>PICS Selection</b>	PICS_CSE						
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the AE  <b>and the IUT having created</b> a resource TARGET_RESOURCE_ADDRESS of type <b>RESOURCE_TYPE</b> containing  a child resource  <b>and the AE having</b> privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS  <b>and the AE having deleted</b> the TARGET_RESOURCE_ADDRESS resource</p> <p><b>}</b></p>						
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>receives</b> a valid DELETE Request <b>from AE</b> containing  To <b>set to</b> TARGET_CHILD_RESOURCE_ADDRESS and  From <b>set to</b> AE_ID and  <b>no Content</b>  <b>}</b> </td> <td>IUT <math>\leftarrow</math> AE</td> </tr> <tr> <td> <b>then {</b>  the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4004 (NOT_FOUND)  <b>}</b> </td> <td>IUT <math>\rightarrow</math> AE</td> </tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid DELETE Request <b>from AE</b> containing To <b>set to</b> TARGET_CHILD_RESOURCE_ADDRESS and From <b>set to</b> AE_ID and <b>no Content</b> <b>}</b>	IUT $\leftarrow$ AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4004 (NOT_FOUND) <b>}</b>	IUT $\rightarrow$ AE
<b>Test events</b>	<b>Direction</b>						
<b>when {</b> the IUT <b>receives</b> a valid DELETE Request <b>from AE</b> containing To <b>set to</b> TARGET_CHILD_RESOURCE_ADDRESS and From <b>set to</b> AE_ID and <b>no Content</b> <b>}</b>	IUT $\leftarrow$ AE						
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4004 (NOT_FOUND) <b>}</b>	IUT $\rightarrow$ AE						

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/DEL/004_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.4	3 (container)
TP/oneM2M/CSE/DMR/DEL/004_ACP	Release 1	ETSI TS 118 101 [1], clause 10.2.21.4	1 (accessControlPolicy)
TP/oneM2M/CSE/DMR/DEL/004_SUB	Release 1	ETSI TS 118 101 [1], clause 10.2.11.5	23 (subscription)
TP/oneM2M/CSE/DMR/DEL/004_GRP	Release 1	ETSI TS 118 101 [1], clause 10.2.7.5	9 (group)
TP/oneM2M/CSE/DMR/DEL/004_SCH	Release 2	ETSI TS 118 101 [1], clause 10.2.40.2	18 (schedule)
TP/oneM2M/CSE/DMR/DEL/004_STCG	Release 2	ETSI TS 118 101 [1], clause 10.2.15.5	22 (statsConfig)

TP/oneM2M/CSE/DMR/DEL/004_TS	Release 2	ETSI TS 118 101 [1], clause 10.2.30.4	29 (timeSeries)
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## TP/oneM2M/CSE/DMR/DEL/005

TP Id	TP/oneM2M/CSE/DMR/DEL/005	
Test objective	Check that the stateTag attribute of a <i>RESOURCE_TYPE</i> resource is increased when a child resource is deleted	
Reference	ETSI TS 118 101 [1], clause 10.1.4	
Config Id	CF01	
Parent Release	Release 1	
PICS Selection	PICS_CSE	
Initial conditions	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having created</b> a <i>RESOURCE_TYPE</i> resource <b>containing</b> a child resource <b>and</b> the AE <b>having</b> privileges to perform DELETE operation on the TARGET_CHILD_RESOURCE_ADDRESS <b>}</b>	
Expected behaviour	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_CHILD_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b> <b>then {</b> the IUT <b>increments</b> the stateTag attribute of the <i>RESOURCE_TYPE</i> resource <b>and</b> the IUT sends a valid Response <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE
TP/oneM2M/CSE/DMR/DEL/005_CNT	Release 1	ETSI TS 118 101 [1], clause 10.2.4.4	3 (container)

## TP/oneM2M/CSE/DMR/DEL/006

<b>TP Id</b>	TP/oneM2M/CSE/DMR/DEL/006	
<b>Test objective</b>	Check that the IUT decreases the field value of attribute currentNrOfInstances and currentByteSize of parent <i>RESOURCE_TYPE</i> when a latest <i>RESOURCE_TYPE</i> resource is deleted successfully	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.19.5, ETSI TS 118 104 [2], clause 7.4.8.2.4	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a <i>PARENT_RESOURCE_TYPE</i> resource <b>containing</b>  currentNrOfInstances attribute <b>set to</b> NR_OF_INSTANCES <b>and</b>  currentByteSize attribute <b>set to</b> BYTE_SIZE_OF_DATA <b>and</b>  a <i>RESOURCE_TYPE</i> resource TARGET_RESOURCE_ADDRESS  <b>and</b> the AE <b>having</b> privileges to perform DELETE operation on the resource  TARGET_RESOURCE_ADDRESS</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  <b>no</b> Content</p> <p><b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>decreases</b> the currentNrOfInstances attribute of  <i>PARENT_RESOURCE_TYPE</i> resource  <b>and</b> the IUT <b>decreases</b> the currentByteSize attribute of  <i>PARENT_RESOURCE_TYPE</i> resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2002 (DELETED)</p> <p><b>}</b></p>	IUT → AE

TP Id	PARENT_RELEASE	Reference	RESOURCE_TYPE	PARENT_RESOURCE_TYPE
TP/oneM2M/CSE/DMR/DEL/006_CNT/CIN	Release 1	ETSI TS 118 101 [1], clause 10.2.4.4	4 (contentInstance)	3 (container)
TP/oneM2M/CSE/DMR/DEL/006_TS/TSI	Release 2	ETSI TS 118 101 [1], clause 10.2.30.4	30 (timeSeriesInstance)	29 (timeSeries)

## TP/oneM2M/CSE/DMR/DEL/007

TP Id	TP/oneM2M/CSE/DMR/DEL/007		
Test objective	Check that the IUT accepts the DELETE Request of the latest contentInstance resource target to a container resource		
Reference	ETSI TS 118 101 [1], clause 10.2.22.2, ETSI TS 118 104 [2], clause 7.4.28.2.5		
Config Id	CF01		
Parent Release	Release 1		
PICS Selection	PICS_CSE		
Initial conditions	<b>with {</b> the IUT <b>being</b> in the "initial state" and the IUT <b>having registered</b> the AE and the IUT <b>having created</b> a container resource <b>containing</b> CONTENT_INSTANCE_1 contentInstance resource <b>and</b> CONTENT_INSTANCE_2 contentInstance resource and the AE <b>having</b> privileges to perform DELETE operation on the container resource and creationTime attribute of CONTENT_INSTANCE_1 < creationTime attribute of CONTENT_INSTANCE_2 <b>}</b>		
Expected behaviour	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/la <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no Content</b> <b>}</b>		<b>Direction</b> IUT ← AE
	<b>then {</b> the IUT <b>deletes</b> the CONTENT_INSTANCE_2_RESOURCE_ADDRESS resource and the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>}</b>		IUT → AE

## TP/oneM2M/CSE/DMR/DEL/008

<b>TP Id</b>	TP/oneM2M/CSE/DMR/DEL/008											
<b>Test objective</b>	Check that the IUT rejects the DELETE request of a latest resource in a container resource that has no direct child contentInstance resources.											
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.22.2, ETSI TS 118 104 [2], clause 7.4.28.2.5											
<b>Config Id</b>	CF01											
<b>Parent Release</b>	Release 1											
<b>PICS Selection</b>	PICS_CSE											
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b>            a container resource <b>containing</b>  <b>no</b> contentInstance resources  <b>}</b></p>											
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td><b>when {</b></td><td></td></tr> <tr> <td>the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b>            To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/la <b>and</b>            From <b>set to</b> AE_ID <b>and</b>  <b>no</b> Content  <b>}</b></td><td>IUT ← AE</td></tr> <tr> <td><b>then {</b></td><td></td></tr> <tr> <td>the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> 4004 (NOT_FOUND)  <b>}</b></td><td>IUT → AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b>		the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/la <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no</b> Content <b>}</b>	IUT ← AE	<b>then {</b>		the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4004 (NOT_FOUND) <b>}</b>	IUT → AE	
<b>Test events</b>	<b>Direction</b>											
<b>when {</b>												
the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/la <b>and</b> From <b>set to</b> AE_ID <b>and</b> <b>no</b> Content <b>}</b>	IUT ← AE											
<b>then {</b>												
the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4004 (NOT_FOUND) <b>}</b>	IUT → AE											

## TP/oneM2M/CSE/DMR/DEL/009

<b>TP Id</b>	TP/oneM2M/CSE/DMR/DEL/009	
<b>Test objective</b>	Check that the IUT accepts the DELETE Request of the oldest contentInstance resource target to a container resource	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.23.2, ETSI TS 118 104 [2], clause 7.4.29.2.5	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a container resource <b>containing</b>  CONTENT_INSTANCE_1 contentInstance resource <b>and</b>  CONTENT_INSTANCE_2 contentInstance resource  <b>and</b> the AE <b>having</b> privileges to perform DELETE operation on the container resource  <b>and</b> creationTime attribute of CONTENT_INSTANCE_1 &lt; creationTime attribute of  CONTENT_INSTANCE_2</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  <b>no</b> Content</p> <p><b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>deletes</b> the CONTENT_INSTANCE_1_RESOURCE_ADDRESS  resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2002 (DELETED)</p> <p><b>}</b></p>	IUT → AE

## TP/oneM2M/CSE/DMR/DEL/010

<b>TP Id</b>	TP/oneM2M/CSE/DMR/DEL/010							
<b>Test objective</b>	Check that the IUT rejects the DELETE request of an oldest resource in a container resource that has no direct child contentInstance resources.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.23.2, ETSI TS 118 104 [2], clause 7.4.29.2.5							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b>  a container resource <b>containing</b>  <b>no</b> contentInstance resources  <b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/0/  From <b>set to</b> AE_ID <b>and</b>  <b>no</b> Content  <b>}</b> </td> <td>IUT <math>\leftarrow</math> AE</td> </tr> <tr> <td> <b>then {</b>  the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4004 (NOT_FOUND)  <b>}</b> </td> <td>IUT <math>\rightarrow</math> AE</td> </tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/0/ From <b>set to</b> AE_ID <b>and</b> <b>no</b> Content <b>}</b>	IUT $\leftarrow$ AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4004 (NOT_FOUND) <b>}</b>	IUT $\rightarrow$ AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS/0/ From <b>set to</b> AE_ID <b>and</b> <b>no</b> Content <b>}</b>	IUT $\leftarrow$ AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4004 (NOT_FOUND) <b>}</b>	IUT $\rightarrow$ AE							

## TP/oneM2M/CSE/DMR/DEL/011

<b>TP Id</b>	TP/oneM2M/CSE/DMR/DEL/011							
<b>Test objective</b>	Check that the IUT rejects a DELETE Request target to TARGET_RESOURCE_ADDRESS resource when the Result Content set to <i>RESULT_CONTENT</i>							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 7.3.2.1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE  <b>and</b> the AE <b>having</b> privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS  <b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>Result Content set to</b> RESULT_CONTENT  <b>no Content</b>  <b>}</b> </td><td>IUT ← AE</td></tr> <tr> <td> <b>then {</b>            the IUT <b>sends</b> a valid Response <b>containing</b>  <b>Response Status Code set to</b> 4000 (BAD_REQUEST) <b>and</b>  <b>no Content</b>  <b>}</b> </td><td>IUT → AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b> <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> <b>From set to</b> AE_ID <b>and</b> <b>Result Content set to</b> RESULT_CONTENT <b>no Content</b> <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> <b>Response Status Code set to</b> 4000 (BAD_REQUEST) <b>and</b> <b>no Content</b> <b>}</b>	IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b> <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> <b>From set to</b> AE_ID <b>and</b> <b>Result Content set to</b> RESULT_CONTENT <b>no Content</b> <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> <b>Response Status Code set to</b> 4000 (BAD_REQUEST) <b>and</b> <b>no Content</b> <b>}</b>	IUT → AE							

<b>TP Id</b>	<b>Reference</b>	<b>RESULT_CONTENT</b>
TP/oneM2M/CSE/DMR/DEL/011_RCN/2	ETSI TS 118 104 [2], clause 6.3.4.2.7	2 (hierarchical address)
TP/oneM2M/CSE/DMR/DEL/011_RCN/3		3 (attributes and hierarchical address)
TP/oneM2M/CSE/DMR/DEL/011_RCN/4		4 (attributes and child resources)
TP/oneM2M/CSE/DMR/DEL/011_RCN/5		5 (attributes and child resource references)
TP/oneM2M/CSE/DMR/DEL/011_RCN/6		6 (child resource references)
TP/oneM2M/CSE/DMR/DEL/011_RCN/7		7 (original resource)
TP/oneM2M/CSE/DMR/DEL/011_RCN/8		8 (child resources)
TP/oneM2M/CSE/DMR/DEL/011_RCN/9		9 (modified attributes)

## TP/oneM2M/CSE/DMR/DEL/012

<b>TP Id</b>	TP/oneM2M/CSE/DMR/DEL/012															
<b>Test objective</b>	Check that the IUT returns nothing of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 0 (nothing)															
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 6.3.3.2.7															
<b>Config Id</b>	CF01															
<b>Parent Release</b>	<i>PARENT_RELEASE</i>															
<b>PICS Selection</b>	PICS_CSE															
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing  a child resource  <b>and</b> the AE <b>having</b> privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p><b>}</b></p>															
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td><b>when {</b></td><td></td></tr> <tr> <td>the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Result Content <b>set to</b> 0 (nothing)  <b>no</b> Content</td><td>IUT <math>\leftarrow</math> AE</td></tr> <tr> <td><b>}</b></td><td></td></tr> <tr> <td><b>then {</b></td><td></td></tr> <tr> <td>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2002 (DELETED) <b>and</b>  <b>no</b> Content</td><td>IUT <math>\rightarrow</math> AE</td></tr> <tr> <td><b>}</b></td><td></td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b>		the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Result Content <b>set to</b> 0 (nothing) <b>no</b> Content	IUT $\leftarrow$ AE	<b>}</b>		<b>then {</b>		the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>and</b> <b>no</b> Content	IUT $\rightarrow$ AE	<b>}</b>		
<b>Test events</b>	<b>Direction</b>															
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the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Result Content <b>set to</b> 0 (nothing) <b>no</b> Content	IUT $\leftarrow$ AE															
<b>}</b>																
<b>then {</b>																
the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>and</b> <b>no</b> Content	IUT $\rightarrow$ AE															
<b>}</b>																

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/DEL/012_CNT	Release 2	3 (container)
TP/oneM2M/CSE/DMR/DEL/012_GRP	Release 2	9 (group)
TP/oneM2M/CSE/DMR/DEL/012_ACP	Release 2	1 (accessControlPolicy)

## TP/oneM2M/CSE/DMR/DEL/013

<b>TP Id</b>	TP/oneM2M/CSE/DMR/DEL/013	
<b>Test objective</b>	Check that the IUT returns successfully only attributes of TARGET_RESOURCE_ADDRESS resource when the Result Content is set to 1 (attributes)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, ETSI TS 118 104 [2], clause 6.3.3.2.7	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	<i>PARENT_RELEASE</i>	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type RESOURCE_TYPE containing  a child resource  <b>and</b> the AE <b>having</b> privileges to perform DELETE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid DELETE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID <b>and</b>  Result Content <b>set to</b> 1 (attributes)  <b>no</b> Content</p> <p><b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2002 (DELETED) <b>and</b>  Content <b>containing</b>  RESOURCE_TYPE resource <b>containing</b>  attributes <b>and</b>  <b>no</b> hierarchical address <b>and</b>  <b>no</b> child resources <b>and</b>  <b>no</b> child resource references</p> <p><b>}</b></p>	IUT → AE

<b>TP Id</b>	<b>PARENT_RELEASE</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/DMR/DEL/013_CNT	Release 2	3 (container)
TP/oneM2M/CSE/DMR/DEL/013_GRP	Release 2	9 (group)
TP/oneM2M/CSE/DMR/DEL/013_ACP	Release 2	1 (accessControlPolicy)

### 7.2.2.3.5 BASIC Operation

TP/oneM2M/CSE/DMR/001

<b>TP Id</b>	TP/oneM2M/CSE/DMR/001	
<b>Test objective</b>	Check that the IUT retargets the request to the hosting CSE when the To parameter contains the hosting CSE-ID which is known by the IUT (a descendant CSE or its Registrar CSE)	
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.2.1.1	
<b>Config Id</b>	CF02	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> to a Hosting CSE <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the Hosting CSE <b>containing</b> a resource representation on TARGET_RESOURCE_ADDRESS <b>and</b> the AE <b>having</b> privileges to perform OPERATION on the Hosting CSE <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid OPERATION Request <b>from</b> the AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>}</b> <b>then {</b> the IUT <b>sends</b> a OPERATION Request to the Hosting CSE <b>}</b>	<b>Direction</b> IUT ← AE IUT → CSE

<b>TP Id</b>	<b>OPERATION</b>
TP/oneM2M/CSE/DMR/001_CRE	CREATE
TP/oneM2M/CSE/DMR/001_RET	RETRIEVE
TP/oneM2M/CSE/DMR/001_UPD	UPDATE
TP/oneM2M/CSE/DMR/001_DEL	DELETE

## TP/oneM2M/CSE/DMR/002

<b>TP Id</b>	TP/oneM2M/CSE/DMR/002						
<b>Test objective</b>	Check that the IUT retargets the response from the hosting CSE after retargeting an OPERATION Request						
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.2.1.1						
<b>Config Id</b>	CF02						
<b>Parent Release</b>	Release 2						
<b>PICS Selection</b>	PICS_CSE						
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> to the Hosting CSE  <b>and the IUT having registered</b> the AE  <b>and the Hosting CSE containing</b>  a resource representation on TARGET_RESOURCE_ADDRESS  <b>and the AE having</b> privileges to perform OPERATION on the Hosting CSE  <b>and the IUT having received</b> a valid OPERATION Request <b>from</b> the AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID  <b>and the IUT sends</b> the OPERATION Request to the Hosting CSE</p> <p><b>}</b></p>						
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td><b>when {</b> the IUT <b>receives</b> a valid OPERATION Response <b>from</b> the Hosting CSE <b>}</b></td> <td>IUT ← CSE</td> </tr> <tr> <td><b>then {</b> the IUT <b>sends</b> a valid Response to the AE <b>}</b></td> <td>IUT → AE</td> </tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid OPERATION Response <b>from</b> the Hosting CSE <b>}</b>	IUT ← CSE	<b>then {</b> the IUT <b>sends</b> a valid Response to the AE <b>}</b>	IUT → AE
<b>Test events</b>	<b>Direction</b>						
<b>when {</b> the IUT <b>receives</b> a valid OPERATION Response <b>from</b> the Hosting CSE <b>}</b>	IUT ← CSE						
<b>then {</b> the IUT <b>sends</b> a valid Response to the AE <b>}</b>	IUT → AE						

<b>TP Id</b>	<b>OPERATION</b>
TP/oneM2M/CSE/DMR/002_CRE	CREATE
TP/oneM2M/CSE/DMR/002_RET	RETRIEVE
TP/oneM2M/CSE/DMR/002_UPD	UPDATE
TP/oneM2M/CSE/DMR/002_DEL	DELETE

## 7.2.2.4 Subscription and Notification (SUB)

### 7.2.2.4.1 CREATE Operation

TP/oneM2M/CSE/SUB/CRE/001

<b>TP Id</b>	TP/oneM2M/CSE/SUB/CRE/001							
<b>Test objective</b>	Check that the IUT rejects the creation of the <subscription> resource when the target subscribed-to <i>RESOURCE_TYPE</i> resource is not subscribable.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.11.2, ETSI TS 118 104 [2], clause 7.4.8.2.1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having</b> a resource PARENT_RESOURCE_ADDRESS <b>allowing</b>            the AE to perform CREATE operation  <b>and</b> the IUT <b>having</b> a resource PARENT_RESOURCE_ADDRESS <b>not being</b>            subscribable <i>RESOURCE_TYPE</i> resource</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>            To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b>            Resource Type <b>set to</b> 23 (subscription) <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            Content <b>containing</b>            subscription resource representation  <b>}</b> </td><td>IUT <math>\leftarrow</math> AE</td></tr> <tr> <td> <b>then {</b>            the IUT <b>does not create</b> the subscription resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> 5203            (TARGET_NOT_SUBSCRIBABLE) <b>and</b>  <b>no</b> Content  <b>}</b> </td><td>IUT <math>\rightarrow</math> AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 23 (subscription) <b>and</b> From <b>set to</b> AE-ID <b>and</b> Content <b>containing</b> subscription resource representation <b>}</b>	IUT $\leftarrow$ AE	<b>then {</b> the IUT <b>does not create</b> the subscription resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 5203 (TARGET_NOT_SUBSCRIBABLE) <b>and</b> <b>no</b> Content <b>}</b>	IUT $\rightarrow$ AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b> Resource Type <b>set to</b> 23 (subscription) <b>and</b> From <b>set to</b> AE-ID <b>and</b> Content <b>containing</b> subscription resource representation <b>}</b>	IUT $\leftarrow$ AE							
<b>then {</b> the IUT <b>does not create</b> the subscription resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 5203 (TARGET_NOT_SUBSCRIBABLE) <b>and</b> <b>no</b> Content <b>}</b>	IUT $\rightarrow$ AE							

<b>TP Id</b>	<b>Reference</b>	<b>RESOURCE_TYPE</b>
TP/oneM2M/CSE/SUB/CRE/001_CIN	ETSI TS 118 101 [1], clause 9.6.7	4 (contentInstance)
TP/oneM2M/CSE/SUB/CRE/001_SUB	ETSI TS 118 101 [1], clause 9.6.8	23 (subscription)
TP/oneM2M/CSE/SUB/CRE/001_TSI	ETSI TS 118 101 [1], clause 9.6.37	30 (timeSeriesInstance)

## TP/oneM2M/CSE/SUB/CRE/002

<b>TP Id</b>	TP/oneM2M/CSE/SUB/CRE/002							
<b>Test objective</b>	Check that the IUT rejects the creation of the <subscription> resource when the originator does not have privileges for retrieving the subscribed-to resource.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.11.2, ETSI TS 118 104 [2], clause 7.4.8.2.1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and</b> the IUT <b>having</b> a resource PARENT_RESOURCE_ADDRESS <b>containing</b></p> <p>accessControlPolicyIDs attribute <b>pointing to</b></p> <p>accessControlPolicy resource <b>containing</b></p> <p>privileges attribute <b>containing</b></p> <p>accessControlRule attribute <b>containing</b></p> <p>accessControlOriginators attribute <b>indicating</b> AE-ID <b>and</b></p> <p>accessControlOperations attribute <b>not indicating</b> RETRIEVE</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b></p> <p>Resource Type <b>set to</b> 23 (subscription) <b>and</b></p> <p>From <b>set to</b> AE-ID <b>and</b></p> <p>Content <b>containing</b></p> <p>subscription resource representation</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>does not create</b> the subscription resource</p> <p><b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4103</p> <p>(ORIGINATOR_HAS_NO_PRIVILEGE) <b>and</b></p> <p><b>no</b> Content</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b></p> <p>Resource Type <b>set to</b> 23 (subscription) <b>and</b></p> <p>From <b>set to</b> AE-ID <b>and</b></p> <p>Content <b>containing</b></p> <p>subscription resource representation</p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>does not create</b> the subscription resource</p> <p><b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4103</p> <p>(ORIGINATOR_HAS_NO_PRIVILEGE) <b>and</b></p> <p><b>no</b> Content</p> <p>}</p>	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b></p> <p>Resource Type <b>set to</b> 23 (subscription) <b>and</b></p> <p>From <b>set to</b> AE-ID <b>and</b></p> <p>Content <b>containing</b></p> <p>subscription resource representation</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>does not create</b> the subscription resource</p> <p><b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4103</p> <p>(ORIGINATOR_HAS_NO_PRIVILEGE) <b>and</b></p> <p><b>no</b> Content</p> <p>}</p>	IUT → AE							

## TP/oneM2M/CSE/SUB/CRE/003

<b>TP Id</b>	TP/oneM2M/CSE/SUB/CRE/003							
<b>Test objective</b>	Check that the IUT rejects the creation of the <subscription> resource when the notificationURI is not the originator and the IUT cannot send the Notify request to the notificationURI							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.11.2, ETSI TS 118 104 [2], clause 7.4.8.2.1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having</b> a resource PARENT_RESOURCE_ADDRESS <b>allowing</b></p> <p>the AE to perform CREATE operation</p> <p>and the IUT <b>not being</b> able to send the NOTIFY Request to the NOTI_URI_ADDRESS</p> <p><b>containing</b> verificationRequest <b>set to</b> TRUE</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b></p> <p>Resource Type <b>set to</b> 23 (subscription) <b>and</b></p> <p>From <b>set to</b> AE-ID <b>and</b></p> <p>Content <b>containing</b></p> <p>subscription resource <b>containing</b></p> <p>notificationURI attribute <b>set to</b> NOTI_URI_ADDRESS</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>does not create</b> the subscription resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 5204</p> <p>(SUBSCRIPTION_VERIFICATION_INITIATION_FAILED) <b>and</b></p> <p><b>no</b> Content</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b></p> <p>Resource Type <b>set to</b> 23 (subscription) <b>and</b></p> <p>From <b>set to</b> AE-ID <b>and</b></p> <p>Content <b>containing</b></p> <p>subscription resource <b>containing</b></p> <p>notificationURI attribute <b>set to</b> NOTI_URI_ADDRESS</p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>does not create</b> the subscription resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 5204</p> <p>(SUBSCRIPTION_VERIFICATION_INITIATION_FAILED) <b>and</b></p> <p><b>no</b> Content</p> <p>}</p>	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b></p> <p>Resource Type <b>set to</b> 23 (subscription) <b>and</b></p> <p>From <b>set to</b> AE-ID <b>and</b></p> <p>Content <b>containing</b></p> <p>subscription resource <b>containing</b></p> <p>notificationURI attribute <b>set to</b> NOTI_URI_ADDRESS</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>does not create</b> the subscription resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 5204</p> <p>(SUBSCRIPTION_VERIFICATION_INITIATION_FAILED) <b>and</b></p> <p><b>no</b> Content</p> <p>}</p>	IUT → AE							

## TP/oneM2M/CSE/SUB/CRE/004

<b>TP Id</b>	TP/oneM2M/CSE/SUB/CRE/004							
<b>Test objective</b>	Check that the IUT stores Originator ID in the notification creator attribute when a <SUBSCRIPTION> creation request which needs verification is received and the notificationURI is not the Originator.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.12.1, ETSI TS 118 104 [2], clause 7.4.9.2.1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt;  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid CREATE Request <b>from</b> AE1 <b>containing</b>            To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>            Resource Type <b>set to</b> 23 (subscription) <b>and</b>            Content <b>containing</b>            subscription resource <b>containing</b>            notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS</p> }       </td><td>IUT ← AE1</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid NOTIFY Request <b>containing</b>            Content <b>containing</b>            notification message <b>containing</b>            verificationRequest attribute <b>set to</b> TRUE <b>and</b>            creator attribute <b>set to</b> AE1_RESOURCE_ADDRESS</p> }       </td><td>IUT → AE2</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT receives a valid CREATE Request <b>from</b> AE1 <b>containing</b>            To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>            Resource Type <b>set to</b> 23 (subscription) <b>and</b>            Content <b>containing</b>            subscription resource <b>containing</b>            notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS</p> }	IUT ← AE1	<p>then {</p> <p>the IUT <b>sends</b> a valid NOTIFY Request <b>containing</b>            Content <b>containing</b>            notification message <b>containing</b>            verificationRequest attribute <b>set to</b> TRUE <b>and</b>            creator attribute <b>set to</b> AE1_RESOURCE_ADDRESS</p> }	IUT → AE2	
Test events	Direction							
<p>when {</p> <p>the IUT receives a valid CREATE Request <b>from</b> AE1 <b>containing</b>            To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>            Resource Type <b>set to</b> 23 (subscription) <b>and</b>            Content <b>containing</b>            subscription resource <b>containing</b>            notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS</p> }	IUT ← AE1							
<p>then {</p> <p>the IUT <b>sends</b> a valid NOTIFY Request <b>containing</b>            Content <b>containing</b>            notification message <b>containing</b>            verificationRequest attribute <b>set to</b> TRUE <b>and</b>            creator attribute <b>set to</b> AE1_RESOURCE_ADDRESS</p> }	IUT → AE2							

## TP/oneM2M/CSE/SUB/CRE/005

<b>TP Id</b>	TP/oneM2M/CSE/SUB/CRE/005							
<b>Test objective</b>	Check that the IUT sends a Notify request to the subscriber resource when notificationEventType attribute is set to "Create_of_Direct_Child_Resource" and a create operation has been performed on the subscribed-to resource							
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.8-3							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>  subscription child resource <b>containing</b>  notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>  eventNotificationCriteria attribute <b>containing</b>  notificationEventType <b>set to</b> 3 (Create_of_Direct_Child_Resource)  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to  resource  }</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE1 <b>containing</b>  To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>  Content <b>containing</b>  CHILD_RESOURCE_TYPE resource <b>containing</b>  resourceName attribute <b>set to</b> NAME  <b>}</b></p> </td><td>IUT ← AE1</td></tr> <tr> <td> <p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>  Content <b>containing</b>  Notification message <b>containing</b>  notificationEvent attribute <b>containing</b>  representation attribute <b>containing</b>  CHILD_RESOURCE_TYPE resource <b>containing</b>  All attributes  <b>}</b></p> </td><td> IUT → AE1  IUT → AE2 </td></tr> </tbody> </table>	Test events	Direction	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE1 <b>containing</b>  To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>  Content <b>containing</b>  CHILD_RESOURCE_TYPE resource <b>containing</b>  resourceName attribute <b>set to</b> NAME  <b>}</b></p>	IUT ← AE1	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>  Content <b>containing</b>  Notification message <b>containing</b>  notificationEvent attribute <b>containing</b>  representation attribute <b>containing</b>  CHILD_RESOURCE_TYPE resource <b>containing</b>  All attributes  <b>}</b></p>	IUT → AE1 IUT → AE2	
Test events	Direction							
<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE1 <b>containing</b>  To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>  Content <b>containing</b>  CHILD_RESOURCE_TYPE resource <b>containing</b>  resourceName attribute <b>set to</b> NAME  <b>}</b></p>	IUT ← AE1							
<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>  Content <b>containing</b>  Notification message <b>containing</b>  notificationEvent attribute <b>containing</b>  representation attribute <b>containing</b>  CHILD_RESOURCE_TYPE resource <b>containing</b>  All attributes  <b>}</b></p>	IUT → AE1 IUT → AE2							

## TP/oneM2M/CSE/SUB/CRE/006

<b>TP Id</b>	TP/oneM2M/CSE/DMR/CRE/006	
<b>Test objective</b>	Check that the IUT accepts the creation of a <i>subscription</i> resource with the <i>eventNotificationCriteria</i> attribute which includes a <i>CONDITION_TAG</i> condition provided	
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.8	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the AE  <b>and</b> the Originator <b>having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> }	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>  Resource Type <b>set to</b> <i>subscription</i> <b>and</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  <i>subscription</i> resource <b>containing</b>  <i>eventNotificationCriteria</i> attribute <b>containing</b>  valid <i>CONDITION_TAG</i> condition</p> }	IUT ← AE
	<p>then {</p> <p>the IUT <b>creates</b> the <i>subscription</i> resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED)</p> }	IUT → AE

<b>TP Id</b>	<b>Reference</b>	<b>CONDITION_TAG</b>
TP/oneM2M/CSE/SUB/CRE/006_CRB	ETSI TS 118 101 [1], clause 9.6.8	createdBefore
TP/oneM2M/CSE/SUB/CRE/006_CRA	ETSI TS 118 101 [1], clause 9.6.8	createdAfter
TP/oneM2M/CSE/SUB/CRE/006_MS	ETSI TS 118 101 [1], clause 9.6.8	modifiedSince
TP/oneM2M/CSE/SUB/CRE/006_US	ETSI TS 118 101 [1], clause 9.6.8	unmodifiedSince
TP/oneM2M/CSE/SUB/CRE/006_STS	ETSI TS 118 101 [1], clause 9.6.8	stateTagSmaller
TP/oneM2M/CSE/SUB/CRE/006_STB	ETSI TS 118 101 [1], clause 9.6.8	stateTagBigger

TP Id	Reference	CONDITION_TAG
TP/oneM2M/CSE/SUB/CRE/006_EXB	ETSI TS 118 101 [1], clause 9.6.8	expireBefore
TP/oneM2M/CSE/SUB/CRE/006_EXA	ETSI TS 118 101 [1], clause 9.6.8	expireAfter
TP/oneM2M/CSE/SUB/CRE/006_SZA	ETSI TS 118 101 [1], clause 9.6.8	sizeAbove
TP/oneM2M/CSE/SUB/CRE/006_SZB	ETSI TS 118 101 [1], clause 9.6.8	sizeBelow
TP/oneM2M/CSE/SUB/CRE/006_ET	ETSI TS 118 101 [1], clause 9.6.8	eventType
TP/oneM2M/CSE/SUB/CRE/006_OM	ETSI TS 118 101 [1], clause 9.6.8	operationMonitor
TP/oneM2M/CSE/SUB/CRE/006_ATR	ETSI TS 118 101 [1], clause 9.6.8	attribute

## 7.2.2.4.2 DELETE Operation

TP/oneM2M/CSE/SUB/DEL/001

<b>TP Id</b>	TP/oneM2M/CSE/SUB/DEL/001							
<b>Test objective</b>	Check that the IUT sends a Notify request to the AE2_RESOURCE_ADDRESS of the subscriberURI attribute when the SUBSCRIPTION_RESOURCE_ADDRESS <subscription> resource is deleted							
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.8, ETSI TS 118 104 [2], clause 7.5.1.2.4							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>  subscription resource <b>containing</b>  subscriberURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT receives a valid DELETE Request <b>from</b> AE1 <b>containing</b>  To <b>set to</b> SUBSCRIPTION_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE1_RESOURCE_ADDRESS  <b>}</b> </td><td>IUT ← AE1</td></tr> <tr> <td> <b>then {</b>  the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2002 (DELETED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>contaning</b>  Content <b>containing</b>  notification message <b>containing</b>  subscriptionDeletion attribute <b>set to</b> TRUE <b>and</b>  subscriptionReference attribute <b>set to</b>  AE2_RESOURCE_ADDRESS  <b>}</b> </td><td> IUT → AE1  IUT → AE2 </td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT receives a valid DELETE Request <b>from</b> AE1 <b>containing</b> To <b>set to</b> SUBSCRIPTION_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE1_RESOURCE_ADDRESS <b>}</b>	IUT ← AE1	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>contaning</b> Content <b>containing</b> notification message <b>containing</b> subscriptionDeletion attribute <b>set to</b> TRUE <b>and</b> subscriptionReference attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>}</b>	IUT → AE1 IUT → AE2	
Test events	Direction							
<b>when {</b> the IUT receives a valid DELETE Request <b>from</b> AE1 <b>containing</b> To <b>set to</b> SUBSCRIPTION_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE1_RESOURCE_ADDRESS <b>}</b>	IUT ← AE1							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2002 (DELETED) <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>contaning</b> Content <b>containing</b> notification message <b>containing</b> subscriptionDeletion attribute <b>set to</b> TRUE <b>and</b> subscriptionReference attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>}</b>	IUT → AE1 IUT → AE2							

## TP/oneM2M/CSE/SUB/DEL/002

<b>TP Id</b>	TP/oneM2M/CSE/SUB/DEL/002							
<b>Test objective</b>	Check that the IUT sends a Notify request to the subscriber resource when eventNotificationCriteria/notificationEventType attribute is set to "Delete_of_Resource" and an delete operation has been performed the subscribed-to resource							
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.8-3							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>  subscription child resource <b>containing</b>  notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>  eventNotificationCriteria attribute <b>containing</b>  notificationEventType <b>set to</b> 2 (Delete_of_Resource)  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid DELETE Request <b>from</b> AE1 <b>containing</b>  To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE1_RESOURCE_ADDRESS</p> </td><td>IUT ← AE1</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2002 (DELETED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>contaning</b>  Content <b>containing</b>  notification message <b>containing</b>  notificationEvent attribute <b>containing</b>  a valid representation attribute }</p> </td><td> IUT → AE1  IUT → AE2 </td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT receives a valid DELETE Request <b>from</b> AE1 <b>containing</b>  To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE1_RESOURCE_ADDRESS</p>	IUT ← AE1	<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2002 (DELETED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>contaning</b>  Content <b>containing</b>  notification message <b>containing</b>  notificationEvent attribute <b>containing</b>  a valid representation attribute }</p>	IUT → AE1 IUT → AE2	
Test events	Direction							
<p>when {</p> <p>the IUT receives a valid DELETE Request <b>from</b> AE1 <b>containing</b>  To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE1_RESOURCE_ADDRESS</p>	IUT ← AE1							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2002 (DELETED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>contaning</b>  Content <b>containing</b>  notification message <b>containing</b>  notificationEvent attribute <b>containing</b>  a valid representation attribute }</p>	IUT → AE1 IUT → AE2							

## TP/oneM2M/CSE/SUB/DEL/003

<b>TP Id</b>	TP/oneM2M/CSE/SUB/DEL/003							
<b>Test objective</b>	Check that the IUT sends a Notify request to the subscriber resource when eventNotificationCriteria/notificationEventType attribute is set to "Delete_of_Direct_Child_Resource" and an delete operation has been performed on a child resource of the subscribed-to resource							
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.8-3							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>      a CHILD_RESOURCE_ADDRESS child resource <b>and</b>      subscription child resource <b>containing</b>      notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>      eventNotificationCriteria attribute <b>containing</b>      notificationEventType <b>set to</b> 4 (Delete_of_Direct_Child_Resource)  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid DELETE Request <b>from</b> AE1 <b>containing</b>  <b>To set to</b> CHILD_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE1_RESOURCE_ADDRESS</p> <p>}</p> </td> <td>IUT ← AE1</td> </tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2002 (DELETED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      CHILD_RESOURCE_TYPE resource}</p> </td> <td> IUT → AE1   IUT → AE2 </td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT receives a valid DELETE Request <b>from</b> AE1 <b>containing</b>  <b>To set to</b> CHILD_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE1_RESOURCE_ADDRESS</p> <p>}</p>	IUT ← AE1	<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2002 (DELETED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      CHILD_RESOURCE_TYPE resource}</p>	IUT → AE1  IUT → AE2	
Test events	Direction							
<p>when {</p> <p>the IUT receives a valid DELETE Request <b>from</b> AE1 <b>containing</b>  <b>To set to</b> CHILD_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE1_RESOURCE_ADDRESS</p> <p>}</p>	IUT ← AE1							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2002 (DELETED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      CHILD_RESOURCE_TYPE resource}</p>	IUT → AE1  IUT → AE2							

## 7.2.2.4.3 UPDATE Operation

TP/oneM2M/CSE/SUB/UPD/001

<b>TP Id</b>	TP/oneM2M/CSE/SUB/UPD/001	
<b>Test objective</b>	Check that the IUT sends Notify request to the subscriber resource when an update operation has been performed on the subscribed-to resource	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.11.2	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME <b>set to</b> VALUE_1 <b>and</b>      subscription child resource <b>containing</b>      notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource  <b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME <b>set to</b> VALUE_2  <b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>contaning</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      All attributes  <b>}</b></p>	IUT ← AE1  IUT → AE1  IUT → AE2

## TP/oneM2M/CSE/SUB/UPD/002

<b>TP Id</b>	TP/oneM2M/CSE/SUB/UPD/002							
<b>Test objective</b>	Check that the IUT sends a Notify request to the subscriber resource when the notificationContentType attribute is set to "modified attributes" and an update operation has been performed on the subscribed-to resource							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.11.2, ETSI TS 118 104 [2], clause 7.5.1.2.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME <b>set to</b> VALUE_1 <b>and</b>      subscription child resource <b>containing</b>      notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>      notificationContentType attribute <b>set to</b> 2 (modified attributes)  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> }       </td><td>IUT ← AE1</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> }       </td><td> IUT → AE1  IUT → AE2       </td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> }	IUT ← AE1	<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> }	IUT → AE1 IUT → AE2	
Test events	Direction							
<p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> }	IUT ← AE1							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> }	IUT → AE1 IUT → AE2							

## TP/oneM2M/CSE/SUB/UPD/003

<b>TP Id</b>	TP/oneM2M/CSE/SUB/UPD/003							
<b>Test objective</b>	Check that the IUT sends a Notify request to the subscriber resource when the notificationContentType attribute is set to "ResourceID" and an update operation has been performed on the subscribed-to resource							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.11.2, ETSI TS 118 104 [2], clause 7.5.1.2.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME <b>set to</b> VALUE_1 <b>and</b>      subscription child resource <b>containing</b>      notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>      notificationContentType attribute <b>set to</b> 3 (ResourceID)  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> <p>}</p> </td> <td>IUT ← AE1</td> </tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      subscribed-to ResourceID</p> <p>}</p> </td> <td> IUT → AE1  IUT → AE2 </td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> <p>}</p>	IUT ← AE1	<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      subscribed-to ResourceID</p> <p>}</p>	IUT → AE1 IUT → AE2	
Test events	Direction							
<p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> <p>}</p>	IUT ← AE1							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      subscribed-to ResourceID</p> <p>}</p>	IUT → AE1 IUT → AE2							

## TP/oneM2M/CSE/SUB/UPD/004

<b>TP Id</b>	TP/oneM2M/CSE/SUB/UPD/004							
<b>Test objective</b>	Check that the IUT decreases the expirationCounter attribute of a subscription resource when the Hosting CSE of the subscribed-to resource successfully sends the notification request to subscriber resource(s)							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.11.2, ETSI TS 118 104 [2], clause 7.5.1.2.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME <b>set to</b> VALUE_1 <b>and</b>      subscription child resource <b>containing</b>      notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>      expirationCounter attribute <b>set to</b> MAX_NUMBER_NOTIFICATION  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>  <b>To set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE1_RESOURCE_ADDRESS <b>and</b>  <b>Content containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> <p>}</p> </td> <td>IUT ← AE1</td> </tr> <tr> <td> <p>then {</p> <p>the IUT <b>decreases</b> the expirationCounter attribute of the subscription resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request</p> <p>}</p> </td> <td> <p>IUT → AE1</p> <p>IUT → AE2</p> </td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>  <b>To set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE1_RESOURCE_ADDRESS <b>and</b>  <b>Content containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> <p>}</p>	IUT ← AE1	<p>then {</p> <p>the IUT <b>decreases</b> the expirationCounter attribute of the subscription resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request</p> <p>}</p>	<p>IUT → AE1</p> <p>IUT → AE2</p>	
Test events	Direction							
<p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>  <b>To set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE1_RESOURCE_ADDRESS <b>and</b>  <b>Content containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> <p>}</p>	IUT ← AE1							
<p>then {</p> <p>the IUT <b>decreases</b> the expirationCounter attribute of the subscription resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request</p> <p>}</p>	<p>IUT → AE1</p> <p>IUT → AE2</p>							

## TP/oneM2M/CSE/SUB/UPD/005

<b>TP Id</b>	TP/oneM2M/CSE/SUB/UPD/005							
<b>Test objective</b>	Check that the IUT deletes the subscription resource when the expirationCounter meets zero							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.11.2, ETSI TS 118 104 [2], clause 7.5.1.2.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME <b>set to</b> VALUE_1 <b>and</b>      subscription child resource <b>containing</b>      notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>      expirationCounter attribute <b>set to</b> 1  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource   </p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2   </p> } </td><td>IUT ← AE1</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>decreases</b> the expirationCounter attribute of the subscription resource  <b>and</b> the IUT <b>deletes</b> the subscription resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request   </p> } </td><td> IUT → AE1  IUT → AE2 </td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2   </p> }	IUT ← AE1	<p>then {</p> <p>the IUT <b>decreases</b> the expirationCounter attribute of the subscription resource  <b>and</b> the IUT <b>deletes</b> the subscription resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request   </p> }	IUT → AE1 IUT → AE2	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2   </p> }	IUT ← AE1							
<p>then {</p> <p>the IUT <b>decreases</b> the expirationCounter attribute of the subscription resource  <b>and</b> the IUT <b>deletes</b> the subscription resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request   </p> }	IUT → AE1 IUT → AE2							

## TP/oneM2M/CSE/SUB/UPD/006

<b>TP Id</b>	TP/oneM2M/CSE/SUB/UPD/006							
<b>Test objective</b>	Check that the IUT does not send a Notify request to the subscriber resource when the "attribute" condition tag of eventNotificationCriteria attribute is set to LIST_OF_ATTRIBUTE and does not contain the ATTRIBUTE_NAME attribute updated.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.8, ETSI TS 118 104 [2], clause 7.5.1.2.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME <b>set to</b> VALUE_1 <b>and</b>      subscription child resource <b>containing</b>      notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>      eventNotificationCriteria attribute <b>containing</b>      attribute condition tag <b>set to</b> LIST_OF_ATTRIBUTE <b>containing</b>      no ATTRIBUTE_NAME attribute  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> <p>}</p> </td> <td>IUT ← AE1</td> </tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>does not send</b> a NOTIFY Request</p> <p>}</p> </td> <td>IUT → AE1</td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> <p>}</p>	IUT ← AE1	<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>does not send</b> a NOTIFY Request</p> <p>}</p>	IUT → AE1	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> <p>}</p>	IUT ← AE1							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>does not send</b> a NOTIFY Request</p> <p>}</p>	IUT → AE1							

## TP/oneM2M/CSE/SUB/UPD/007

<b>TP Id</b>	TP/oneM2M/CSE/SUB/UPD/007							
<b>Test objective</b>	Check that the IUT sends batched notifications to the subscriber resource when the number value of the batchNotify attribute is set to NUMBER and when this number have been reached							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.12.1							
<b>Config Id</b>	CF01							
<b>Parent release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME <b>set to</b> VALUE_1 <b>and</b>      subscription child resource <b>having</b>      notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>      batchNotify attribute <b>containing</b>      number attribute <b>set to</b> NUMBER<b>and</b>      duration attribute <b>set to</b> TIME_LIMIT  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource  <b>and</b> the IUT <b>having</b> received (NUMBER- 1) valid UPDATE Requests <b>from</b>      AE1_RESOURCE_ADDRESS <b>to</b> subscribed-to resource  <b>and</b> the timer has <b>not reached</b> the TIME_LIMIT duration value  }</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      a valid ATTRIBUTE_NAME attribute  }</p> </td> <td>IUT ← AE1</td> </tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> NUMBER times a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      a valid notificationEvent attribute  }</p> </td> <td> IUT → AE1   IUT → AE2 </td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      a valid ATTRIBUTE_NAME attribute  }</p>	IUT ← AE1	<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> NUMBER times a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      a valid notificationEvent attribute  }</p>	IUT → AE1  IUT → AE2	
Test events	Direction							
<p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      a valid ATTRIBUTE_NAME attribute  }</p>	IUT ← AE1							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> NUMBER times a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      a valid notificationEvent attribute  }</p>	IUT → AE1  IUT → AE2							

## TP/oneM2M/CSE/SUB/UPD/008

<b>TP Id</b>	TP/oneM2M/CSE/SUB/UPD/008					
<b>Test objective</b>	Check that the IUT sends the latest notification to the subscriber resource when latestNotify is set to TRUE, the number value of the batchNotify attribute is set to NUMBER and when this number has been reached					
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.12.1					
<b>Config Id</b>	CF01					
<b>Parent release</b>	Release 1					
<b>PICS Selection</b>	PICS_CSE					
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME <b>set to</b> VALUE_1 <b>and</b>      subscription child resource <b>having</b>      notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>      latestNotify attribute <b>set to</b> TRUE <b>and</b>      batchNotify attribute <b>containing</b>      number attribute <b>set to</b> NUMBER <b>and</b>      duration attribute <b>set to</b> TIME_LIMIT  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource  <b>and</b> the IUT <b>having</b> received (NUMBER - 1) valid UPDATE Requests <b>from</b>      AE1_RESOURCE_ADDRESS <b>to</b> subscribed-to resource  <b>and</b> the timer has <b>not reached</b> the TIME_LIMIT duration value  }</p>					
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      a valid ATTRIBUTE_NAME attribute  }</p> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      the latest notification message <b>containing</b>      a valid notificationEvent attribute}</p> </td> <td>IUT ← AE1  IUT → AE1  IUT → AE2</td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      a valid ATTRIBUTE_NAME attribute  }</p> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      the latest notification message <b>containing</b>      a valid notificationEvent attribute}</p>	IUT ← AE1  IUT → AE1  IUT → AE2	
Test events	Direction					
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      a valid ATTRIBUTE_NAME attribute  }</p> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      the latest notification message <b>containing</b>      a valid notificationEvent attribute}</p>	IUT ← AE1  IUT → AE1  IUT → AE2					

## TP/oneM2M/CSE/SUB/UPD/009

<b>TP Id</b>	TP/oneM2M/CSE/SUB/UPD/009							
<b>Test objective</b>	Check that the IUT sends a Notify request to the subscriber resource when the "attribute" condition tag of eventNotificationCriteria attribute is set to ATTRIBUTE_NAME and an update operation has been performed on the subscribed-to resource							
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.8, ETSI TS 118 104 [2], clause 7.5.1.2.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME <b>set to</b> VALUE_1 <b>and</b>      subscription child resource <b>containing</b>      notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>      eventNotificationCriteria attribute <b>containing</b>      attribute condition tag <b>set to</b> ATTRIBUTE_NAME  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> }       </td><td>IUT ← AE1</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      All attributes</p> }       </td><td> IUT → AE1  IUT → AE2       </td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> }	IUT ← AE1	<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      All attributes</p> }	IUT → AE1 IUT → AE2	
Test events	Direction							
<p>when {</p> <p>the IUT receives a valid UPDATE Request <b>from</b> AE1 <b>containing</b>      To <b>set to</b> SUBSCRIBED_TO_RESOURCE_ADDRESS <b>and</b>      From <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>      Content <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_2</p> }	IUT ← AE1							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 2004 (UPDATED)  <b>and</b> the IUT <b>sends</b> a NOTIFY Request <b>containing</b>      Content <b>containing</b>      notification message <b>containing</b>      notificationEvent attribute <b>containing</b>      representation attribute <b>containing</b>      &lt;subscribed-to type&gt; resource <b>containing</b>      All attributes</p> }	IUT → AE1 IUT → AE2							

## 7.2.2.4.4 NOTIFY Operation

TP/oneM2M/CSE/SUB/NTF/001

<b>TP Id</b>	TP/oneM2M/CSE/SUB/NTF/001							
<b>Test objective</b>	Check that the IUT rejects the creation of the <subscription> resource when the notificationURI is not the originator and the IUT have received the Notify response containing Response Status Code indicating SUBSCRIPTION_CREATOR_HAS_NO_PRIVILEGE							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.11.2, ETSI TS 118 104 [2], clause 7.4.8.2.1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<pre> with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having</b> a resource PARENT_RESOURCE_ADDRESS <b>allowing</b>         the AE to perform CREATE operation     <b>and</b> notificationURI <b>not being</b> the originator     <b>and</b> the IUT <b>having</b> sent the NOTIFY Request to the NOTI_URI_ADDRESS <b>containing</b>         verificationRequest <b>set to</b> TRUE } </pre>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>             the IUT <b>receives</b> a valid Response <b>containing</b>                 Response Status Code <b>set to</b> 4101             (SUBSCRIPTION_CREATOR_HAS_NO_PRIVILEGE) <b>}</b> </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then {</b>             the IUT <b>does not create</b> the subscription resource             <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>                 Response Status Code <b>set to</b> 4101             (SUBSCRIPTION_CREATOR_HAS_NO_PRIVILEGE) <b>and</b> <b>no Content</b> <b>}</b> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4101             (SUBSCRIPTION_CREATOR_HAS_NO_PRIVILEGE) <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>does not create</b> the subscription resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4101             (SUBSCRIPTION_CREATOR_HAS_NO_PRIVILEGE) <b>and</b> <b>no Content</b> <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4101             (SUBSCRIPTION_CREATOR_HAS_NO_PRIVILEGE) <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>does not create</b> the subscription resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4101             (SUBSCRIPTION_CREATOR_HAS_NO_PRIVILEGE) <b>and</b> <b>no Content</b> <b>}</b>	IUT → AE							

## TP/oneM2M/CSE/SUB/NTF/002

<b>TP Id</b>	TP/oneM2M/CSE/SUB/NTF/002	
<b>Test objective</b>	Check that the IUT rejects the creation of the <subscription> resource when the notificationURI is not the originator and the IUT have received the Notify response containing Response Status Code indicating SUBSCRIPTION_HOST_HAS_NO_PRIVILEGE	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.11.2, ETSI TS 118 104 [2], clause 7.4.8.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and</b> the IUT <b>having</b> a resource PARENT_RESOURCE_ADDRESS <b>allowing</b></p> <p>the AE to perform CREATE operation</p> <p><b>and</b> notificationURI <b>not being</b> the originator</p> <p><b>and</b> the IUT <b>having</b> sent the NOTIFY Request to the NOTI_URI_ADDRESS <b>containing</b></p> <p>verificationRequest <b>set to</b> TRUE</p> }	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid Response containing Response Status Code <b>set to</b> 5205 (SUBSCRIPTION_HOST_HAS_NO_PRIVILEGE) <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>does not create</b> the subscription resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 5205 (SUBSCRIPTION_HOST_HAS_NO_PRIVILEGE) <b>and</b> <b>no Content</b> <b>}</b>	IUT → AE

## TP/oneM2M/CSE/SUB/NTF/003

<b>TP Id</b>	TP/oneM2M/CSE/SUB/NTF/003							
<b>Test objective</b>	Check that the IUT sends batched notifications to the subscriber resource when the duration value of the batchNotify attribute is set to TIME_LIMIT and when this timer expires							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.12.1							
<b>Config Id</b>	CF01							
<b>Parent release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME attribute <b>set to</b> VALUE_1 <b>and</b>      subscription child resource <b>having</b>      notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>      batchNotify attribute <b>containing</b>        duration attribute <b>set to</b> TIME_LIMIT  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource  <b>and</b> the IUT <b>having</b> received a valid UPDATE Request <b>from</b> AE1_RESOURCE_ADDRESS <b>to</b>  subscribed-to resource  <b>and</b> timer has not reached TIME_LIMIT  }</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>when {     the timer expires after the TIME_LIMIT duration value }</td> <td>IUT ← AE1</td> </tr> <tr> <td>then {     The IUT <b>sends</b> a NOTIFY Request <b>containing</b>     Content <b>containing</b>     notification message <b>containing</b>     a valid notificationEvent attribute }</td> <td>IUT → AE2</td> </tr> </tbody> </table>	Test events	Direction	when { the timer expires after the TIME_LIMIT duration value }	IUT ← AE1	then { The IUT <b>sends</b> a NOTIFY Request <b>containing</b> Content <b>containing</b> notification message <b>containing</b> a valid notificationEvent attribute }	IUT → AE2	
Test events	Direction							
when { the timer expires after the TIME_LIMIT duration value }	IUT ← AE1							
then { The IUT <b>sends</b> a NOTIFY Request <b>containing</b> Content <b>containing</b> notification message <b>containing</b> a valid notificationEvent attribute }	IUT → AE2							

## TP/oneM2M/CSE/SUB/NTF/004

<b>TP Id</b>	TP/oneM2M/CSE/SUB/NTF/004							
<b>Test objective</b>	Check that the IUT sends the latest notification to the subscriber resource when latestNotify is set to TRUE, the duration value of the batchNotify attribute is set to TIME_LIMIT and when this timer expires							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.12.1							
<b>Config Id</b>	CF01							
<b>Parent release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>      ATTRIBUTE_NAME <b>set to</b> VALUE_1 <b>and</b>      subscription child resource <b>having</b>      notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>      latestNotify attribute <b>set to</b> TRUE <b>and</b>      batchNotify attribute <b>containing</b>      duration attribute <b>set to</b> TIME_LIMIT  <b>and</b> the AE1 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource  <b>and</b> the IUT <b>having</b> received a valid UPDATE Request <b>from</b> AE1_RESOURCE_ADDRESS <b>to</b>      subscribed-to resource  <b>and</b> timer has not reached TIME_LIMIT</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td><b>when</b> {     the timer expires after the TIME_LIMIT duration value }</td> <td>IUT ← AE1</td> </tr> <tr> <td><b>then</b> {     The IUT <b>sends</b> a NOTIFY Request <b>containing</b>         Content <b>containing</b>             the <b>latest</b> notification message <b>containing</b>                 a valid notificationEvent attribute }</td> <td>IUT → AE2</td> </tr> </tbody> </table>	Test events	Direction	<b>when</b> { the timer expires after the TIME_LIMIT duration value }	IUT ← AE1	<b>then</b> { The IUT <b>sends</b> a NOTIFY Request <b>containing</b> Content <b>containing</b> the <b>latest</b> notification message <b>containing</b> a valid notificationEvent attribute }	IUT → AE2	
Test events	Direction							
<b>when</b> { the timer expires after the TIME_LIMIT duration value }	IUT ← AE1							
<b>then</b> { The IUT <b>sends</b> a NOTIFY Request <b>containing</b> Content <b>containing</b> the <b>latest</b> notification message <b>containing</b> a valid notificationEvent attribute }	IUT → AE2							

## TP/oneM2M/CSE/SUB/NTF/005

<b>TP Id</b>	TP/oneM2M/CSE/SUB/NTF/005															
<b>Test objective</b>	Check that the IUT sends the latest cached notification after IUT escapes from connectionless state when the pendingNotification is set to 1 (sendLatest)															
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.8															
<b>Config Id</b>	CF01															
<b>Parent Release</b>	Release 1															
<b>PICS Selection</b>	PICS_CSE															
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and</b> the IUT <b>having registered</b> the AE1</p> <p><b>and</b> the IUT <b>having registered</b> the AE2</p> <p><b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b></p> <p>subscription child resource <b>containing</b></p> <p>notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b></p> <p>pendingNotification attribute <b>set to 1</b> (sendLatest)</p> <p><b>and</b> the AE2 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource</p> <p><b>and</b> the IUT <b>being</b> in the "connectionless state" with AE2</p> <p><b>and</b> the IUT <b>having</b> frequently received from AE1 a valid UPDATE Requests to subscribed-to resource</p> <p><b>}</b></p>															
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td><b>when {</b></td><td></td></tr> <tr> <td>the IUT <b>escapes</b> from the "connectionless state" <b>}</b></td><td>NA</td></tr> <tr> <td><b>then {</b></td><td></td></tr> <tr> <td>The IUT <b>sends</b> a valid NOTIFY Request <b>containing</b></td><td></td></tr> <tr> <td>Content <b>containing</b></td><td></td></tr> <tr> <td>the latest notification message <b>}</b></td><td>IUT → AE2</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b>		the IUT <b>escapes</b> from the "connectionless state" <b>}</b>	NA	<b>then {</b>		The IUT <b>sends</b> a valid NOTIFY Request <b>containing</b>		Content <b>containing</b>		the latest notification message <b>}</b>	IUT → AE2	
<b>Test events</b>	<b>Direction</b>															
<b>when {</b>																
the IUT <b>escapes</b> from the "connectionless state" <b>}</b>	NA															
<b>then {</b>																
The IUT <b>sends</b> a valid NOTIFY Request <b>containing</b>																
Content <b>containing</b>																
the latest notification message <b>}</b>	IUT → AE2															

## TP/oneM2M/CSE/SUB/NTF/006

<b>TP Id</b>	TP/oneM2M/CSE/SUB/NTF/006							
<b>Test objective</b>	Check that the IUT sends the notifications of cached notification messages after IUT escapes from connectionless state when the pendingNotification is set to 2 (sendAllPending)							
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.8							
<b>Config Id</b>	CF01							
<b>Parent release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having created</b> a &lt;subscribed-to type&gt; resource <b>containing</b>  subscription child resource <b>having</b>  notificationURI attribute <b>set to</b> AE2_RESOURCE_ADDRESS <b>and</b>  pendingNotification attribute <b>set to</b> 2 (sendAllPending)  <b>and</b> the AE2 <b>having</b> privileges to perform RETRIEVE operation on the subscribed-to resource  <b>and</b> the IUT <b>being</b> in the "connectionless state" with AE2  <b>and</b> the IUT <b>having</b> received from AE1 a NUMBER of valid UPDATE Requests to subscribed-to resource  <b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td><b>when {</b> the IUT <b>escapes</b> from the "connectionless state" <b>}</b></td><td>NA</td></tr> <tr> <td><b>then {</b> The IUT <b>sends</b> NUMBER times a valid NOTIFY Request <b>contanining</b> Content <b>containing</b> notification message <b>containing</b> a valid notificationEvent attribute <b>}</b></td><td>IUT → AE2</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>escapes</b> from the "connectionless state" <b>}</b>	NA	<b>then {</b> The IUT <b>sends</b> NUMBER times a valid NOTIFY Request <b>contanining</b> Content <b>containing</b> notification message <b>containing</b> a valid notificationEvent attribute <b>}</b>	IUT → AE2	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>escapes</b> from the "connectionless state" <b>}</b>	NA							
<b>then {</b> The IUT <b>sends</b> NUMBER times a valid NOTIFY Request <b>contanining</b> Content <b>containing</b> notification message <b>containing</b> a valid notificationEvent attribute <b>}</b>	IUT → AE2							

## TP/oneM2M/CSE/SUB/NTF/007

<b>TP Id</b>	TP/oneM2M/CSE/SUB/NTF/007	
<b>Test objective</b>	Check that the IUT retargets the notification to the AE according to pointOfAccess in the <AE> resource.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.5 and clause 9.3.2.3.1, ETSI TS 118 104 [2], clause 7.3.3.9	
<b>Config Id</b>	CF02	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<pre> with {     the IUT <b>being</b> in the "initial state" <b>and</b>     the IUT <b>having</b> created the AE resource <b>containing</b>         POINT_OF_ACCESS attribute <b>and</b>         REQUEST_REACHABILITY <b>set to</b> true } </pre>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<pre> when {     the IUT <b>receives</b> a valid NOTIFY from CSE containing         To <b>set to</b> AE_RESOURCE_ADDRESS         From <b>set to</b> CSE_ID } </pre>	IUT ← CSE
	<pre> then {     the IUT <b>sends</b> the valid NOTIFY to POINT_OF_ACCESS } </pre>	IUT → AE

## TP/oneM2M/CSE/SUB/NTF/008

<b>TP Id</b>	TP/oneM2M/CSE/SUB/NTF/008	
<b>Test objective</b>	Check that the IUT retargets the notification to the AE according to pointOfAccess in the <AE> resource and forward the response back to the CSE.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.5 and clause 9.3.2.3.1, ETSI TS 118 104 [2], clause 7.3.3.9	
<b>Config Id</b>	CF02	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having</b> received a valid NOTIFY from CSE <b>and</b> The IUT <b>having</b> sent the NOTIFY to the AE <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid NOTIFY RESPONSE from the AE <b>}</b> <b>then {</b> the IUT <b>sends</b> the valid NOTIFY RESPONSE to the CSE <b>}</b>	<b>Direction</b> IUT ← AE IUT → CSE

## 7.2.2.5 Group Management (GMG)

### 7.2.2.5.1 CREATE Operation

TP/oneM2M/CSE/GMG/CRE/001

<b>TP Id</b>	TP/oneM2M/CSE/GMG/CRE/001							
<b>Test objective</b>	Check that the IUT rejects the creation of the group resource when member ID exceed max number of members.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.2, ETSI TS 118 104 [2], clause 7.3.13							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having</b> a resource PARENT_RESOURCE_ADDRESS allowing</p> <p>the AE to perform CREATE operation</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request from AE containing</p> <p>To <b>set to</b> PARENT_RESOURCE_ADDRESS and</p> <p>Resource Type <b>set to</b> 9 (group) and</p> <p>From <b>set to</b> AE-ID and</p> <p>Content <b>containing</b></p> <p>group resource <b>containing</b></p> <p>memberIDs attribute <b>set to</b></p> <p>LIST_OF_MEMBER_RESOURCE_IDS and</p> <p>maxNrOfMembers attribute <b>set to</b> MAX_NR_MEMBERS less</p> <p>than the number of memerIDs set in memberIDs attribute</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>does not create</b> the group resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 6010</p> <p>(MAX_NUMBER_OF_MEMBER_EXCEEDED)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request from AE containing</p> <p>To <b>set to</b> PARENT_RESOURCE_ADDRESS and</p> <p>Resource Type <b>set to</b> 9 (group) and</p> <p>From <b>set to</b> AE-ID and</p> <p>Content <b>containing</b></p> <p>group resource <b>containing</b></p> <p>memberIDs attribute <b>set to</b></p> <p>LIST_OF_MEMBER_RESOURCE_IDS and</p> <p>maxNrOfMembers attribute <b>set to</b> MAX_NR_MEMBERS less</p> <p>than the number of memerIDs set in memberIDs attribute</p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>does not create</b> the group resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 6010</p> <p>(MAX_NUMBER_OF_MEMBER_EXCEEDED)</p> <p>}</p>	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request from AE containing</p> <p>To <b>set to</b> PARENT_RESOURCE_ADDRESS and</p> <p>Resource Type <b>set to</b> 9 (group) and</p> <p>From <b>set to</b> AE-ID and</p> <p>Content <b>containing</b></p> <p>group resource <b>containing</b></p> <p>memberIDs attribute <b>set to</b></p> <p>LIST_OF_MEMBER_RESOURCE_IDS and</p> <p>maxNrOfMembers attribute <b>set to</b> MAX_NR_MEMBERS less</p> <p>than the number of memerIDs set in memberIDs attribute</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>does not create</b> the group resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 6010</p> <p>(MAX_NUMBER_OF_MEMBER_EXCEEDED)</p> <p>}</p>	IUT → AE							

TP/oneM2M/CSE/GMG/CRE/002

<b>TP Id</b>	TP/oneM2M/CSE/GMG/CRE/002							
<b>Test objective</b>	Check that the IUT rejects the creation of the group resource when the memberType cannot be retrieved due to lack of privilege.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.2, ETSI TS 118 104 [2], clause 7.3.13							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having</b> a resource PARENT_RESOURCE_ADDRESS <b>allowing</b></p> <p style="padding-left: 20px;">the AE to perform CREATE operation</p> <p>and the sub-group members <b>being</b> in the "initial state"</p> <p>and the AE <b>not having</b> privileges to perform RETRIEVE operation on the sub-group members</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p style="padding-left: 20px;">To <b>set to</b> PARENT_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">Resource Type <b>set to</b> RESOURCE_TYPE and</p> <p style="padding-left: 20px;">From <b>set to</b> AE-ID and</p> <p style="padding-left: 20px;">Content <b>containing</b></p> <p style="padding-left: 40px;">group resource representation <b>containing</b></p> <p style="padding-left: 40px;">memberIDs attribute <b>containing</b> sub-group members</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>does not create</b> the group resource</p> <p>and the IUT <b>sends</b> a valid valid Response <b>containing</b></p> <p style="padding-left: 20px;">Response Status Code <b>set to</b> 5105 (NO_PRIVILEGE)</p> } </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p style="padding-left: 20px;">To <b>set to</b> PARENT_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">Resource Type <b>set to</b> RESOURCE_TYPE and</p> <p style="padding-left: 20px;">From <b>set to</b> AE-ID and</p> <p style="padding-left: 20px;">Content <b>containing</b></p> <p style="padding-left: 40px;">group resource representation <b>containing</b></p> <p style="padding-left: 40px;">memberIDs attribute <b>containing</b> sub-group members</p> }	IUT ← AE	<p>then {</p> <p>the IUT <b>does not create</b> the group resource</p> <p>and the IUT <b>sends</b> a valid valid Response <b>containing</b></p> <p style="padding-left: 20px;">Response Status Code <b>set to</b> 5105 (NO_PRIVILEGE)</p> }	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b></p> <p style="padding-left: 20px;">To <b>set to</b> PARENT_RESOURCE_ADDRESS and</p> <p style="padding-left: 20px;">Resource Type <b>set to</b> RESOURCE_TYPE and</p> <p style="padding-left: 20px;">From <b>set to</b> AE-ID and</p> <p style="padding-left: 20px;">Content <b>containing</b></p> <p style="padding-left: 40px;">group resource representation <b>containing</b></p> <p style="padding-left: 40px;">memberIDs attribute <b>containing</b> sub-group members</p> }	IUT ← AE							
<p>then {</p> <p>the IUT <b>does not create</b> the group resource</p> <p>and the IUT <b>sends</b> a valid valid Response <b>containing</b></p> <p style="padding-left: 20px;">Response Status Code <b>set to</b> 5105 (NO_PRIVILEGE)</p> }	IUT → AE							

## TP/oneM2M/CSE/GMG/CRE/003

<b>TP Id</b>	TP/oneM2M/CSE/GMG/CRE/003							
<b>Test objective</b>	Check that the IUT detects the presence of duplicate member IDs during the creation of the <group> resource and removes the duplicate member IDs prior to creation of the <group> resource.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.2							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> created a resource at TARGET_RESOURCE_ADDRESS <b>allowing</b>  a child resource type group  <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the  TARGET_RESOURCE_ADDRESS  <b>and</b> the IUT <b>having</b> created a resource at MEMBER_RESOURCE_ADDRESS</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> an valid CREATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  Resource Type <b>set to</b> 9 (group) <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS,  MEMBER_RESOURCE_ADDRESS</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>creates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED)  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS</p> } </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> an valid CREATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  Resource Type <b>set to</b> 9 (group) <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS,  MEMBER_RESOURCE_ADDRESS</p> }	IUT ← AE	<p>then {</p> <p>the IUT <b>creates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED)  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS</p> }	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> an valid CREATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  Resource Type <b>set to</b> 9 (group) <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS,  MEMBER_RESOURCE_ADDRESS</p> }	IUT ← AE							
<p>then {</p> <p>the IUT <b>creates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED)  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS</p> }	IUT → AE							
<p>NOTE: TARGET_RESOURCE_ADDRESS : &lt;CSEBase&gt;, &lt;remoteCSE&gt;  MEMBER_RESOURCE_ADDRESS : any oneM2M resource type.</p>								

## TP/oneM2M/CSE/GMG/CRE/004

<b>TP Id</b>	TP/oneM2M/CSE/GMG/CRE/004							
<b>Test objective</b>	Check that the IUT validates the resource type during the creation of the <group> resource when memberType attribute is not 'mixed'.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.2, ETSI TS 118 104 [2], clause 7.4.14.2.1							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a resource at TARGET_RESOURCE_ADDRESS <b>allowing</b>              a child resource type group  <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the              TARGET_RESOURCE_ADDRESS  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS              <b>having</b> resourceType attribute RESOURCE_TYPE</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>              To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>              Resource Type <b>set to</b> 9 (group) <b>and</b>              From <b>set to</b> AE-ID <b>and</b>              Content <b>containing</b>                  group resource <b>containing</b>                      memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS                      <b>and</b>                      memberType attribute <b>set to</b> RESOURCE_TYPE</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT <b>creates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>              Response Status Code <b>set to</b> 2001 (CREATED)              Content <b>containing</b>                  group resource <b>containing</b>                      memberTypeValidated attribute <b>set to</b> TRUE</p> <p>}</p> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>              To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>              Resource Type <b>set to</b> 9 (group) <b>and</b>              From <b>set to</b> AE-ID <b>and</b>              Content <b>containing</b>                  group resource <b>containing</b>                      memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS                      <b>and</b>                      memberType attribute <b>set to</b> RESOURCE_TYPE</p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>creates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>              Response Status Code <b>set to</b> 2001 (CREATED)              Content <b>containing</b>                  group resource <b>containing</b>                      memberTypeValidated attribute <b>set to</b> TRUE</p> <p>}</p>	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>              To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>              Resource Type <b>set to</b> 9 (group) <b>and</b>              From <b>set to</b> AE-ID <b>and</b>              Content <b>containing</b>                  group resource <b>containing</b>                      memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS                      <b>and</b>                      memberType attribute <b>set to</b> RESOURCE_TYPE</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>creates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>              Response Status Code <b>set to</b> 2001 (CREATED)              Content <b>containing</b>                  group resource <b>containing</b>                      memberTypeValidated attribute <b>set to</b> TRUE</p> <p>}</p>	IUT → AE							
<p>NOTE: TARGET_RESOURCE_ADDRESS : &lt;CSEBase&gt;, &lt;remoteCSE&gt;          MEMBER_RESOURCE_ADDRESS : any oneM2M resource type.</p>								

TP/oneM2M/CSE/GMG/CRE/005

<b>TP Id</b>	TP/oneM2M/CSE/GMG/CRE/005							
<b>Test objective</b>	Check that the IUT handles unsuccessful validation of the resource type during the creation of the <group> resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute is SET_MIXED.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.2, ETSI TS 118 104 [2], clause 7.4.14.2.1							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a resource at TARGET_RESOURCE_ADDRESS <b>allowing</b>  a child resource type group  <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the  TARGET_RESOURCE_ADDRESS  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS <b>having</b>  resourceType attribute RESOURCE_TYPE_1</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  Resource Type <b>set to</b> 9 (group) <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS  <b>and</b> memberType attribute <b>set to</b> RESOURCE_TYPE_2  <b>and</b> consistencyStrategy attribute <b>set to</b> SET_MIXED</p> } </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT <b>creates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>  memberType attribute <b>set to</b> MIXED</p> } </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  Resource Type <b>set to</b> 9 (group) <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS  <b>and</b> memberType attribute <b>set to</b> RESOURCE_TYPE_2  <b>and</b> consistencyStrategy attribute <b>set to</b> SET_MIXED</p> }	IUT ← AE	<p>then {</p> <p>the IUT <b>creates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>  memberType attribute <b>set to</b> MIXED</p> }	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  Resource Type <b>set to</b> 9 (group) <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS  <b>and</b> memberType attribute <b>set to</b> RESOURCE_TYPE_2  <b>and</b> consistencyStrategy attribute <b>set to</b> SET_MIXED</p> }	IUT ← AE							
<p>then {</p> <p>the IUT <b>creates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>  memberType attribute <b>set to</b> MIXED</p> }	IUT → AE							
NOTE: TARGET_RESOURCE_ADDRESS : <CSEBase>, <remoteCSE> MEMBER_RESOURCE_ADDRESS : any oneM2M resource type.								

TP/oneM2M/CSE/GMG/CRE/006

<b>TP Id</b>	TP/oneM2M/CSE/GMG/CRE/006
<b>Test objective</b>	Check that the IUT handles unsuccessful validation of the resource type during the creation of the <group> resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute is ABANDON_MEMBER.,.
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.2, ETSI TS 118 104 [2], clause 7.4.14.2.1
<b>Parent Release</b>	Release 1
<b>Config Id</b>	CF01
<b>PICS Selection</b>	PICS_CSE
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a resource at TARGET_RESOURCE_ADDRESS <b>allowing</b>              a child resource type group  <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the              TARGET_RESOURCE_ADDRESS  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_1              <b>having</b> resourceType attribute RESOURCE_TYPE_1  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_2              <b>having</b> resourceType attribute RESOURCE_TYPE_2</p> <p>}</p>

Expected behaviour	Test events	Direction
	<pre> <b>when {</b>     the IUT <b>receives</b> a valid CREATE Request <b>from AE containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         Resource Type <b>set to</b> 9 (group) <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Content <b>containing</b>             group resource <b>containing</b>                 memberIDs attribute <b>set to</b>                     MEMBER_RESOURCE_ADDRESS_1,                     MEMBER_RESOURCE_ADDRESS_2 <b>and</b>                     memberType attribute <b>set to</b> RESOURCE_TYPE_1 <b>and</b>                     consistencyStrategy attribute <b>set to</b> ABANDON_MEMBER <b>}</b> </pre>	IUT ← AE
	<pre> <b>then {</b>     the IUT <b>creates</b> the group resource     <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2001 (CREATED) <b>and</b>         Content <b>containing</b>             group resource <b>containing</b>                 memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>                 memberIDs attribute <b>set to</b>                     MEMBER_RESOURCE_ADDRESS_1 <b>}</b> </pre>	IUT → AE

NOTE: TARGET\_RESOURCE\_ADDRESS : <CSEBase>, <remoteCSE>  
MEMBER\_RESOURCE\_ADDRESS : any oneM2M resource type.

TP/oneM2M/CSE/GMG/CRE/007

<b>TP Id</b>	TP/oneM2M/CSE/GMG/CRE/007							
<b>Test objective</b>	Check that the IUT handles unsuccessful validation of the resource type during the creation of the group resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute is ABANDON_GROUP.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.2, ETSI TS 118 104 [2], clause 7.4.14.2.1							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a resource at TARGET_RESOURCE_ADDRESS <b>allowing</b>      a child resource type &lt;group&gt;  <b>and</b> the AE <b>having</b> privileges to perform CREATE operation on the      TARGET_RESOURCE_ADDRESS  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_1 <b>having</b>      resourceType attribute RESOURCE_TYPE_1  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_2 <b>having</b>      resourceType attribute RESOURCE_TYPE_2</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>      Resource Type <b>set to</b> 9 (group) <b>and</b>  <b>From set to</b> AE-ID <b>and</b>      Content <b>containing</b>      group resource <b>containing</b>      memberIDs attribute <b>set to</b>      MEMBER_RESOURCE_ADDRESS_1,      MEMBER_RESOURCE_ADDRESS_2 <b>and</b>      memberType attribute <b>set to</b> RESOURCE_TYPE_1 <b>and</b>      consistencyStrategy attribute <b>set to</b> ABANDON_GROUP</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT <b>does not create</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 4110      (GROUP_MEMBER_TYPE_INCONSISTENT)</p> <p>}</p> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>      Resource Type <b>set to</b> 9 (group) <b>and</b>  <b>From set to</b> AE-ID <b>and</b>      Content <b>containing</b>      group resource <b>containing</b>      memberIDs attribute <b>set to</b>      MEMBER_RESOURCE_ADDRESS_1,      MEMBER_RESOURCE_ADDRESS_2 <b>and</b>      memberType attribute <b>set to</b> RESOURCE_TYPE_1 <b>and</b>      consistencyStrategy attribute <b>set to</b> ABANDON_GROUP</p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>does not create</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 4110      (GROUP_MEMBER_TYPE_INCONSISTENT)</p> <p>}</p>	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>      Resource Type <b>set to</b> 9 (group) <b>and</b>  <b>From set to</b> AE-ID <b>and</b>      Content <b>containing</b>      group resource <b>containing</b>      memberIDs attribute <b>set to</b>      MEMBER_RESOURCE_ADDRESS_1,      MEMBER_RESOURCE_ADDRESS_2 <b>and</b>      memberType attribute <b>set to</b> RESOURCE_TYPE_1 <b>and</b>      consistencyStrategy attribute <b>set to</b> ABANDON_GROUP</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>does not create</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>      Response Status Code <b>set to</b> 4110      (GROUP_MEMBER_TYPE_INCONSISTENT)</p> <p>}</p>	IUT → AE							
<p>NOTE: TARGET_RESOURCE_ADDRESS : &lt;CSEBase&gt;, &lt;remoteCSE&gt;</p> <p>MEMBER_RESOURCE_ADDRESS : any oneM2M resource type.</p>								

## 7.2.2.5.2 UPDATE Operation

TP/oneM2M/CSE/GMG/UPD/001

<b>TP Id</b>	TP/oneM2M/CSE/GMG/UPD/001	
<b>Test objective</b>	Check that the IUT rejects the update of the group resource when the memberType cannot be retrieved due to lack of privilege.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.4, ETSI TS 118 104 [2], clause 7.3.13	
<b>Parent Release</b>	Release 1	
<b>Config Id</b>	CF01	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having</b> a resource PARENT_RESOURCE_ADDRESS <b>allowing</b>            the AE to perform UPDATE operation  <b>and</b> the sub-group members <b>being</b> in the "initial state"  <b>and</b> the AE <b>not having</b> privileges to perform RETRIEVE operation on the sub-group members</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>            To <b>set to</b> PARENT_RESOURCE_ADDRESS <b>and</b>            Resource Type <b>set to</b> RESOURCE_TYPE <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            Content <b>containing</b>            group resource representation</p> <p><b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> 5105 (NO_PRIVILEGE)</p> <p><b>}</b></p>	IUT $\leftarrow$ AE
		IUT $\rightarrow$ AE

## TP/oneM2M/CSE/GMG/UPD/002

<b>TP Id</b>	TP/oneM2M/CSE/GMG/UPD/002							
<b>Test objective</b>	Check that the IUT detects the presence of duplicate member IDs during an update of the <group> resource and removes the duplicate member IDs prior to updating the <group> resource.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.4, ETSI TS 118 104 [2], clause 7.4.14.2.4							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_1  <b>and</b> the IUT <b>having</b> created a &lt;group&gt; resource at GROUP_RESOURCE_ADDRESS  <b>containing</b>  memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS_1  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the  GROUP_RESOURCE_ADDRESS  <b>and</b> the IUT <b>having</b> created a resource at MEMBER_RESOURCE_ADDRESS_2  }</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> GROUP_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_2,  MEMBER_RESOURCE_ADDRESS_2  }</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>updates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED)  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_2  }</p> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> GROUP_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_2,  MEMBER_RESOURCE_ADDRESS_2  }</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>updates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED)  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_2  }</p>	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> GROUP_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_2,  MEMBER_RESOURCE_ADDRESS_2  }</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>updates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED)  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_2  }</p>	IUT → AE							

## TP/oneM2M/CSE/GMG/UPD/003

<b>TP Id</b>	TP/oneM2M/CSE/GMG/UPD/003							
<b>Test objective</b>	Check that the IUT validates the resource type during an UPDATE of the <group> resource when memberType attribute is not 'mixed'.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.4, ETSI TS 118 104 [2], clause 7.4.14.2.4							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the AE  <b>and the IUT having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b>  memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS_1  memberType attribute <b>set to</b> RESOURCE_TYPE_1  <b>and the AE having</b> privileges to perform UPDATE operation on the  TARGET_RESOURCE_ADDRESS  <b>and the IUT having</b> a resource at MEMBER_RESOURCE_ADDRESS_1 <b>having</b>  resourceType attribute RESOURCE_TYPE_1  <b>and the IUT having</b> a resource at MEMBER_RESOURCE_ADDRESS_2 <b>having</b>  resourceType attribute RESOURCE_TYPE_1  <b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_2  <b>}</b> </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then {</b>  the IUT <b>updates</b> the group resource  <b>and the IUT sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED)  Content <b>containing</b>  group resource <b>containing</b>  memberTypeValidated attribute <b>set to</b> TRUE  <b>}</b> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> Content <b>containing</b> group resource <b>containing</b> memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS_2 <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>updates</b> the group resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) Content <b>containing</b> group resource <b>containing</b> memberTypeValidated attribute <b>set to</b> TRUE <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> Content <b>containing</b> group resource <b>containing</b> memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS_2 <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>updates</b> the group resource <b>and the IUT sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) Content <b>containing</b> group resource <b>containing</b> memberTypeValidated attribute <b>set to</b> TRUE <b>}</b>	IUT → AE							

TP/oneM2M/CSE/GMG/UPD/004

<b>TP Id</b>	TP/oneM2M/CSE/GMG/UPD/004							
<b>Test objective</b>	Check that the IUT handles unsuccessful validation of the resource type during an UPDATE of the <group> resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute is SET_MIXED.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.4, ETSI TS 118 104 [2], clause 7.4.14.2.4							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b>  memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS_1 <b>and</b>  memberType attribute <b>set to</b> RESOURCE_TYPE_1 <b>and</b>  memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>  consistencyStrategy attribute <b>set to</b> SET_MIXED  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the  TARGET_RESOURCE_ADDRESS  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_1 <b>having</b>  resourceType attribute RESOURCE_TYPE_1  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_2 <b>having</b>  resourceType attribute RESOURCE_TYPE_2</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_1,  MEMBER_RESOURCE_ADDRESS_2</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>updates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>  memberType attribute <b>set to</b> MIXED</p> } </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_1,  MEMBER_RESOURCE_ADDRESS_2</p> }	IUT ← AE	<p>then {</p> <p>the IUT <b>updates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>  memberType attribute <b>set to</b> MIXED</p> }	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_1,  MEMBER_RESOURCE_ADDRESS_2</p> }	IUT ← AE							
<p>then {</p> <p>the IUT <b>updates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>  memberType attribute <b>set to</b> MIXED</p> }	IUT → AE							

TP/oneM2M/CSE/GMG/UPD/005

<b>TP Id</b>	TP/oneM2M/CSE/GMG/UPD/005						
<b>Test objective</b>	Check that the IUT handles unsuccessful validation of the resource type during an UPDATE of the group resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute is ABANDON_MEMBER.						
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.4, ETSI TS 118 104 [2], clause 7.4.14.2.4						
<b>Parent Release</b>	Release 1						
<b>Config Id</b>	CF01						
<b>PICS Selection</b>	PICS_CSE						
<b>Initial conditions</b>	<pre> with {     the IUT <b>being</b> in the "initial state"     and the IUT <b>having registered</b> the AE     and the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b>         memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS_1 <b>and</b>         memberType attribute <b>set to</b> RESOURCE_TYPE_1 <b>and</b>         memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>         consistencyStrategy attribute <b>set to</b> ABANDON_MEMBER     and the AE <b>having</b> privileges to perform UPDATE operation on the         TARGET_RESOURCE_ADDRESS     and the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_1 <b>having</b>         resourceType attribute RESOURCE_TYPE_1     and the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_2 <b>having</b>         resourceType attribute RESOURCE_TYPE_2 } </pre>						
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when {     the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Content <b>containing</b>             group resource <b>containing</b>                 memberIDs attribute <b>set to</b>                     MEMBER_RESOURCE_ADDRESS_1,                     MEMBER_RESOURCE_ADDRESS_2 } </pre> </td> <td>IUT ← AE</td> </tr> <tr> <td> <pre> then {     the IUT <b>updates</b> the group resource     and the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>         Content <b>containing</b>             group resource <b>containing</b>                 memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>                 memberIDs attribute <b>set to</b>                     MEMBER_RESOURCE_ADDRESS_1 } </pre> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<pre> when {     the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Content <b>containing</b>             group resource <b>containing</b>                 memberIDs attribute <b>set to</b>                     MEMBER_RESOURCE_ADDRESS_1,                     MEMBER_RESOURCE_ADDRESS_2 } </pre>	IUT ← AE	<pre> then {     the IUT <b>updates</b> the group resource     and the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>         Content <b>containing</b>             group resource <b>containing</b>                 memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>                 memberIDs attribute <b>set to</b>                     MEMBER_RESOURCE_ADDRESS_1 } </pre>	IUT → AE
Test events	Direction						
<pre> when {     the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Content <b>containing</b>             group resource <b>containing</b>                 memberIDs attribute <b>set to</b>                     MEMBER_RESOURCE_ADDRESS_1,                     MEMBER_RESOURCE_ADDRESS_2 } </pre>	IUT ← AE						
<pre> then {     the IUT <b>updates</b> the group resource     and the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b>         Content <b>containing</b>             group resource <b>containing</b>                 memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>                 memberIDs attribute <b>set to</b>                     MEMBER_RESOURCE_ADDRESS_1 } </pre>	IUT → AE						

## TP/oneM2M/CSE/GMG/UPD/006

<b>TP Id</b>	TP/oneM2M/CSE/GMG/UPD/006							
<b>Test objective</b>	Check that the IUT handles unsuccessful validation of the resource type during the creation of the group resource when memberType attribute is not 'mixed' and the consistencyStrategy attribute is ABANDON_GROUP.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.4, ETSI TS 118 104 [2], clause 7.4.14.2.4							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b>  memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS_1 <b>and</b>  memberType attribute <b>set to</b> RESOURCE_TYPE_1 <b>and</b>  memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>  consistencyStrategy attribute <b>set to</b> ABANDON_GROUP  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the  TARGET_RESOURCE_ADDRESS  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_1 <b>having</b>  resourceType attribute RESOURCE_TYPE_1  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_2 <b>having</b>  resourceType attribute RESOURCE_TYPE_2</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_1,  MEMBER_RESOURCE_ADDRESS_2</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>updates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED)</p> } </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_1,  MEMBER_RESOURCE_ADDRESS_2</p> }	IUT ← AE	<p>then {</p> <p>the IUT <b>updates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED)</p> }	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Content <b>containing</b>  group resource <b>containing</b>  memberIDs attribute <b>set to</b>  MEMBER_RESOURCE_ADDRESS_1,  MEMBER_RESOURCE_ADDRESS_2</p> }	IUT ← AE							
<p>then {</p> <p>the IUT <b>updates</b> the group resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2004 (UPDATED)</p> }	IUT → AE							

## TP/oneM2M/CSE/GMG/UPD/007

<b>TP Id</b>	TP/oneM2M/CSE/GMG/UPD/007							
<b>Test objective</b>	Check that the IUT detects when the number of memberIDs exceeds the limitation of maxNrOfMembers.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.4, ETSI TS 118 104 [2], clause 7.4.14.2.4							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> the AE</p> <p>and the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b> memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS_1, MEMBER_RESOURCE_ADDRESS_2 <b>and</b> maxNrOfMembers attribute <b>set to</b> 2</p> <p>and the AE <b>having</b> privileges to perform UPDATE operation on the TARGET_RESOURCE_ADDRESS</p> <p>and the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_1 <b>having</b> resourceType attribute <b>set to</b> RESOURCE_TYPE_1</p> <p>and the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_2 <b>having</b> resourceType attribute <b>set to</b> RESOURCE_TYPE_1</p> <p>and the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_3 <b>having</b> resourceType attribute <b>set to</b> RESOURCE_TYPE_1</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE-ID <b>and</b></p> <p>Content <b>containing</b></p> <p>group resource <b>containing</b></p> <p>memberIDs attribute <b>set to</b></p> <p>MEMBER_RESOURCE_ADDRESS_1,</p> <p>MEMBER_RESOURCE_ADDRESS_2,</p> <p>MEMBER_RESOURCE_ADDRESS_3</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>does not update</b> the group resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 6010</p> <p>(MAX_NUMBER_OF_MEMBER_EXCEEDED)</p> } </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE-ID <b>and</b></p> <p>Content <b>containing</b></p> <p>group resource <b>containing</b></p> <p>memberIDs attribute <b>set to</b></p> <p>MEMBER_RESOURCE_ADDRESS_1,</p> <p>MEMBER_RESOURCE_ADDRESS_2,</p> <p>MEMBER_RESOURCE_ADDRESS_3</p> }	IUT ← AE	<p>then {</p> <p>the IUT <b>does not update</b> the group resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 6010</p> <p>(MAX_NUMBER_OF_MEMBER_EXCEEDED)</p> }	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE-ID <b>and</b></p> <p>Content <b>containing</b></p> <p>group resource <b>containing</b></p> <p>memberIDs attribute <b>set to</b></p> <p>MEMBER_RESOURCE_ADDRESS_1,</p> <p>MEMBER_RESOURCE_ADDRESS_2,</p> <p>MEMBER_RESOURCE_ADDRESS_3</p> }	IUT ← AE							
<p>then {</p> <p>the IUT <b>does not update</b> the group resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 6010</p> <p>(MAX_NUMBER_OF_MEMBER_EXCEEDED)</p> }	IUT → AE							

TP/oneM2M/CSE/GMG/UPD/008

<b>TP Id</b>	TP/oneM2M/CSE/GMG/UPD/008							
<b>Test objective</b>	Check that the IUT detects when the value provided for maxNrOfMembers attribute is less than the value of the currentNrOfMembers attribute.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.4, ETSI TS 118 104 [2], clause 7.4.14.2.4							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> the AE</p> <p>and the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b></p> <p>memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS_1, MEMBER_RESOURCE_ADDRESS_2, MEMBER_RESOURCE_ADDRESS_3 <b>and</b></p> <p>maxNrOfMembers attribute <b>set to</b> 3</p> <p>and the AE <b>having</b> privileges to perform UPDATE operation on the TARGET_RESOURCE_ADDRESS</p> <p>and the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_1 <b>having</b></p> <p>resourceType attribute <b>set to</b> RESOURCE_TYPE_1</p> <p>and the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_2 <b>having</b></p> <p>resourceType attribute <b>set to</b> RESOURCE_TYPE_1</p> <p>and the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_3 <b>having</b></p> <p>resourceType attribute <b>set to</b> RESOURCE_TYPE_1</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {           the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>           To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>           From <b>set to</b> AE-ID <b>and</b>           Content <b>containing</b> group resource <b>containing</b>           maxNrOfMembers attribute <b>set to</b> 2         }       </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then</b> {           the IUT <b>does not update</b> the group resource           <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>           Response Status Code <b>set to</b> 6010            (MAX_NUMBER_OF_MEMBER_EXCEEDED)         }       </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when</b> {           the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> Content <b>containing</b> group resource <b>containing</b> maxNrOfMembers attribute <b>set to</b> 2         }	IUT ← AE	<b>then</b> {           the IUT <b>does not update</b> the group resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 6010 (MAX_NUMBER_OF_MEMBER_EXCEEDED)         }	IUT → AE	
Test events	Direction							
<b>when</b> {           the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> Content <b>containing</b> group resource <b>containing</b> maxNrOfMembers attribute <b>set to</b> 2         }	IUT ← AE							
<b>then</b> {           the IUT <b>does not update</b> the group resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 6010 (MAX_NUMBER_OF_MEMBER_EXCEEDED)         }	IUT → AE							

TP/oneM2M/CSE/GMG/UPD/009

<b>TP Id</b>	TP/oneM2M/CSE/GMG/UPD/009
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<b>Test objective</b>	Check that the IUT handles validation of the resource type during an UPDATE of the <group> resource when memberIDs contains a sub-group on a temporarily unreachable Hosting CSE.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.4, ETSI TS 118 104 [2], clause 7.4.14.2.4							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF02							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> to the remoteCSE</p> <p>and the IUT <b>having registered</b> the AE</p> <p>and the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b></p> <p>memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS_1<b>and</b></p> <p>memberType attribute <b>set to</b> RESOURCE_TYPE_1 <b>and</b></p> <p>memberTypeValidated attribute <b>set to</b> TRUE <b>and</b></p> <p>consistencyStrategy attribute <b>set to</b> ABANDON_MEMBER</p> <p>and the AE <b>having</b> privileges to perform UPDATE operation on the</p> <p>TARGET_RESOURCE_ADDRESS</p> <p>and the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_1 <b>having</b></p> <p>resourceType attribute <b>set to</b> RESOURCE_TYPE_1</p> <p>and the remoteCSE <b>having</b> a group resource at MEMBER_RESOURCE_ADDRESS_2 <b>containing</b></p> <p>memberType attribute <b>set to</b> RESOURCE_TYPE_1</p> <p>and the remoteCSE <b>having</b> onlineStatus <b>set to</b> False</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE-ID <b>and</b></p> <p>Content <b>containing</b></p> <p>group resource <b>containing</b></p> <p>memberIDs attribute <b>set to</b></p> <p>MEMBER_RESOURCE_ADDRESS_1,</p> <p>MEMBER_RESOURCE_ADDRESS_2</p> } </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>updates</b> the group resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2004 (UPDATED)</p> <p>Content <b>containing</b></p> <p>group resource <b>containing</b></p> <p>memberTypeValidated attribute <b>set to</b> FALSE <b>and</b></p> <p>memberIDs attribute <b>set to</b></p> <p>MEMBER_RESOURCE_ADDRESS_1,</p> <p>MEMBER_RESOURCE_ADDRESS_2</p> } </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE-ID <b>and</b></p> <p>Content <b>containing</b></p> <p>group resource <b>containing</b></p> <p>memberIDs attribute <b>set to</b></p> <p>MEMBER_RESOURCE_ADDRESS_1,</p> <p>MEMBER_RESOURCE_ADDRESS_2</p> }	IUT ← AE	<p>then {</p> <p>the IUT <b>updates</b> the group resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2004 (UPDATED)</p> <p>Content <b>containing</b></p> <p>group resource <b>containing</b></p> <p>memberTypeValidated attribute <b>set to</b> FALSE <b>and</b></p> <p>memberIDs attribute <b>set to</b></p> <p>MEMBER_RESOURCE_ADDRESS_1,</p> <p>MEMBER_RESOURCE_ADDRESS_2</p> }	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE-ID <b>and</b></p> <p>Content <b>containing</b></p> <p>group resource <b>containing</b></p> <p>memberIDs attribute <b>set to</b></p> <p>MEMBER_RESOURCE_ADDRESS_1,</p> <p>MEMBER_RESOURCE_ADDRESS_2</p> }	IUT ← AE							
<p>then {</p> <p>the IUT <b>updates</b> the group resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2004 (UPDATED)</p> <p>Content <b>containing</b></p> <p>group resource <b>containing</b></p> <p>memberTypeValidated attribute <b>set to</b> FALSE <b>and</b></p> <p>memberIDs attribute <b>set to</b></p> <p>MEMBER_RESOURCE_ADDRESS_1,</p> <p>MEMBER_RESOURCE_ADDRESS_2</p> }	IUT → AE							

TP/oneM2M/CSE/GMG/UPD/010

<b>TP Id</b>	TP/oneM2M/CSE/GMG/UPD/010
<b>Test objective</b>	Check that the IUT handles validation of the resource type during an UPDATE of the group resource when memberIDs contains a sub-group on a previously unreachable Hosting CSE that has become reachable
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.4, ETSI TS 118 104 [2], clause 7.4.14.2.4
<b>Parent Release</b>	Release 1
<b>Config Id</b>	CF01
<b>PICS Selection</b>	PICS_CSE
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> to the remoteCSE</p> <p>and the IUT <b>having registered</b> the AE</p> <p>and the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b> memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS_1, MEMBER_RESOURCE_ADDRESS_2 <b>and</b></p> <p>memberType attribute <b>set to</b> RESOURCE_TYPE_1 <b>and</b></p> <p>memberTypeValidated attribute <b>set to</b> FALSE <b>and</b></p> <p>consistencyStrategy attribute <b>set to</b> ABANDON_MEMBER</p> <p>and the AE <b>having</b> privileges to perform UPDATE operation on the TARGET_RESOURCE_ADDRESS</p> <p>and the AE <b>having</b> a subscription to TARGET_RESOURCE_ADDRESS</p> <p>and the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS_1 <b>having</b> resourceType attribute <b>set to</b> RESOURCE_TYPE_1</p> <p>and the remoteCSE <b>having</b> a group resource at MEMBER_RESOURCE_ADDRESS_2 <b>containing</b></p> <p>memberType attribute <b>set to</b> RESOURCE_TYPE_2</p> <p>and the remoteCSE <b>having</b> onlineStatus <b>set to</b> False</p> <p>}</p>

Expected behaviour	Test events	Direction
	<pre data-bbox="707 182 1583 396"> <b>when {</b>     the IUT <b>receives</b> a valid UPDATE Request <b>from</b> remoteCSE <b>containing</b>         To <b>set to</b> REMOTE_CSE_ADDRESS <b>and</b>         From <b>set to</b> CSE-ID <b>and</b>         Content <b>containing</b>             remoteCSE resource <b>containing</b>                 onlineStatus attribute <b>set to</b> TRUE <b>}</b> </pre>	IUT ← AE
	<pre data-bbox="707 396 1583 650"> <b>then {</b>     the IUT <b>sends</b> a NOTIFY Request <b>containing</b>         Content <b>containing</b>             group resource <b>containing</b>                 memberTypeValidated attribute <b>set to</b> TRUE <b>and</b>                 memberIDs attribute <b>set to</b>                     MEMBER_RESOURCE_ADDRESS_1,                     MEMBER_RESOURCE_ADDRESS_2 <b>}</b> </pre>	IUT → AE

## 7.2.2.5.3 RETRIEVE Operation

TP/oneM2M/CSE/GMG/RET/001

<b>TP Id</b>	TP/oneM2M/CSE/GMG/RET/001							
<b>Test objective</b>	Check that the IUT performs a RETRIEVE request for each resource in memberIDs with a relative address appended to fanOutPoint that includes a virtual resource.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.7							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b>  membersAccessControlPolicyIDs attribute <b>set to</b> ACP_RESOURCE_ID <b>indicating to</b>  allow the AE privileges to perform RETRIEVE operation <b>and</b>  memberType attribute <b>set to</b> 3 (container) <b>and</b>  memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS1,  MEMBER_RESOURCE_ADDRESS2</p> <p><b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS1 <b>containing</b>  resourceType attribute <b>set to</b> container <b>and</b>  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS2 <b>containing</b>  resourceType attribute <b>set to</b> container <b>and</b>  <b>and</b> MEMBER_RESOURCE_ADDRESS1 and MEMBER_RESOURCE_ADDRESS2  <b>containing</b>  a child resource <b>containing</b>  resourceType attribute <b>set to</b> contentInstance</p> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> ARGET_RESOURCE_ADDRESS/fopt/NAME/la <b>and</b>  From <b>set to</b> AE-ID  <b>}</b> </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then {</b>  the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2000 (OK) <b>and</b>  Content <b>containing</b>  aggregatedResponse message <b>containing</b>  Response for MEMBER_RESOURCE_ADDRESS1/NAME/la,  Response for MEMBER_RESOURCE_ADDRESS2/NAME/la  <b>}</b> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> ARGET_RESOURCE_ADDRESS/fopt/NAME/la <b>and</b> From <b>set to</b> AE-ID <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> aggregatedResponse message <b>containing</b> Response for MEMBER_RESOURCE_ADDRESS1/NAME/la, Response for MEMBER_RESOURCE_ADDRESS2/NAME/la <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> ARGET_RESOURCE_ADDRESS/fopt/NAME/la <b>and</b> From <b>set to</b> AE-ID <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> aggregatedResponse message <b>containing</b> Response for MEMBER_RESOURCE_ADDRESS1/NAME/la, Response for MEMBER_RESOURCE_ADDRESS2/NAME/la <b>}</b>	IUT → AE							

## 7.2.2.5.4 BASIC OPERATION

TP/oneM2M/CSE/GMG/001

<b>TP Id</b>	TP/oneM2M/CSE/GMG/001							
<b>Test objective</b>	Check that the IUT allows a <group>/fanoutPoint OPERATION when the Originator has OPERATION_PERMISSION specified in membersAccessControlPolicyIDs attribute in the group resource.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.7							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b> membersAccessControlPolicyIDs attribute <b>set to</b> allow the AE to perform OPERATION <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS1 <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS2 <b>}</b>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid OPERATION Request <b>from</b> AE <b>containing</b>                To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b>                From <b>set to</b> AE-ID  <b>}</b> </td><td>IUT <math>\leftarrow</math> AE</td></tr> <tr> <td> <b>then {</b>            the IUT <b>sends</b> a valid Response <b>containing</b>                Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>and</b>                Content <b>containing</b>                    aggregatedResponse <b>containing</b>                        Response for MEMBER_RESOURCE_ADDRESS1,                        Response for MEMBER_RESOURCE_ADDRESS2  <b>}</b> </td><td>IUT <math>\rightarrow</math> AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid OPERATION Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b> From <b>set to</b> AE-ID <b>}</b>	IUT $\leftarrow$ AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>and</b> Content <b>containing</b> aggregatedResponse <b>containing</b> Response for MEMBER_RESOURCE_ADDRESS1, Response for MEMBER_RESOURCE_ADDRESS2 <b>}</b>	IUT $\rightarrow$ AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid OPERATION Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b> From <b>set to</b> AE-ID <b>}</b>	IUT $\leftarrow$ AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>and</b> Content <b>containing</b> aggregatedResponse <b>containing</b> Response for MEMBER_RESOURCE_ADDRESS1, Response for MEMBER_RESOURCE_ADDRESS2 <b>}</b>	IUT $\rightarrow$ AE							

<b>TP Id</b>	<b>OPERATION</b>	<b>RESPONSE_STATUS_CODE</b>
TP/oneM2M/CSE/GMG/001_CRE	CREATE	2000 (OK)
TP/oneM2M/CSE/GMG/001_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/GMG/001_UPD	UPDATE	2000 (OK)
TP/oneM2M/CSE/GMG/001_DEL	DELETE	2000 (OK)

## TP/oneM2M/CSE/GMG/002

<b>TP Id</b>	TP/oneM2M/CSE/GMG/002							
<b>Test objective</b>	Check that IUT denies a <group>/fanOutPoint OPERATION when the Originator does not have OPERATION_PERMISSION specified in membersAccessControlPolicyIDs in the group resource.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.7							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b>  membersAccessControlPolicyIDs attribute <b>set to</b> ACP_RESOURCE_ID <b>indicating to</b>  allow the AE to perform all operations except OPERATION  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS1  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS2</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p><b>when {</b></p> <p>the IUT <b>receives</b> a valid OPERATION Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b>  From <b>set to</b> AE-ID</p> <p><b>}</b></p></td> <td>IUT ← AE</td> </tr> <tr> <td> <p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4103  (ORIGINATOR_HAS_NO_PRIVILEGE)</p> <p><b>}</b></p></td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid OPERATION Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b>  From <b>set to</b> AE-ID</p> <p><b>}</b></p>	IUT ← AE	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4103  (ORIGINATOR_HAS_NO_PRIVILEGE)</p> <p><b>}</b></p>	IUT → AE	
Test events	Direction							
<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid OPERATION Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b>  From <b>set to</b> AE-ID</p> <p><b>}</b></p>	IUT ← AE							
<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4103  (ORIGINATOR_HAS_NO_PRIVILEGE)</p> <p><b>}</b></p>	IUT → AE							

TP Id	OPERATION
TP/oneM2M/CSE/GMG/002_CRE	CREATE
TP/oneM2M/CSE/GMG/002_RET	RETRIEVE
TP/oneM2M/CSE/GMG/002_UPD	UPDATE
TP/oneM2M/CSE/GMG/002_DEL	DELETE

## TP/oneM2M/CSE/GMG/003

<b>TP Id</b>	TP/oneM2M/CSE/GMG/003							
<b>Test objective</b>	Check that the IUT allows a <group>/fanoutPoint OPERATION when the Originator has OPERATION_PERMISSION specified in accessControlPolicyIDs and the membersAccessControlPolicyIDs is empty in the <group> resource.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.7							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b>  membersAccessControlPolicyIDs attribute <b>set to empty</b> <b>and</b>  accessControlPolicyIDs attribute <b>set to ACP_RESOURCE_ID</b> <b>indicating to</b> allow the  AE privileges to perform OPERATION  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS1  <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS2</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {  the IUT <b>receives</b> a valid OPERATION Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b>  From <b>set to</b> AE-ID } </td><td>IUT ← AE</td></tr> <tr> <td> <b>then</b> {  the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set RESPONSE_STATUS_CODE</b>  Content <b>containing</b>  aggregatedResponse message <b>containing</b>  Response for MEMBER_RESOURCE_ADDRESS1,  Response for MEMBER_RESOURCE_ADDRESS2 } </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<b>when</b> { the IUT <b>receives</b> a valid OPERATION Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b> From <b>set to</b> AE-ID }	IUT ← AE	<b>then</b> { the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set RESPONSE_STATUS_CODE</b> Content <b>containing</b> aggregatedResponse message <b>containing</b> Response for MEMBER_RESOURCE_ADDRESS1, Response for MEMBER_RESOURCE_ADDRESS2 }	IUT → AE	
Test events	Direction							
<b>when</b> { the IUT <b>receives</b> a valid OPERATION Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b> From <b>set to</b> AE-ID }	IUT ← AE							
<b>then</b> { the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set RESPONSE_STATUS_CODE</b> Content <b>containing</b> aggregatedResponse message <b>containing</b> Response for MEMBER_RESOURCE_ADDRESS1, Response for MEMBER_RESOURCE_ADDRESS2 }	IUT → AE							

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/GMG/003_CRE	CREATE	2000 (OK)
TP/oneM2M/CSE/GMG/003_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/GMG/003_UPD	UPDATE	2000 (OK)
TP/oneM2M/CSE/GMG/003_DEL	DELETE	2000 (OK)

## TP/oneM2M/CSE/GMG/004

<b>TP Id</b>	TP/oneM2M/CSE/GMG/004							
<b>Test objective</b>	Check that IUT rejects a <group>/fanOutPoint OPERATION when the Originator does not have OPERATION_PERMISSION specified in accessControlPolicyIDs and the membersAccessControlPolicyIDs is empty in the group resource.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.7							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> the AE</p> <p>and the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b> membersAccessControlPolicyIDs attribute <b>set to</b> empty <b>and</b> accessControlPolicyIDs attribute <b>set to</b> ACP_RESOURCE_ID <b>indicating to</b> allow the AE privileges to perform all operations except OPERATION</p> <p>and the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS1</p> <p>and the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS2</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {           the IUT <b>receives</b> a valid OPERATION Request <b>from</b> AE <b>containing</b>           To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b>           From <b>set to</b> AE-ID         }       </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then</b> {           the IUT <b>sends</b> a valid Response <b>containing</b>           Response Status Code <b>set to</b> 4103           (ORIGINATOR_HAS_NO_PRIVILEGE)         }       </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when</b> {           the IUT <b>receives</b> a valid OPERATION Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b> From <b>set to</b> AE-ID         }	IUT ← AE	<b>then</b> {           the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4103           (ORIGINATOR_HAS_NO_PRIVILEGE)         }	IUT → AE	
Test events	Direction							
<b>when</b> {           the IUT <b>receives</b> a valid OPERATION Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b> From <b>set to</b> AE-ID         }	IUT ← AE							
<b>then</b> {           the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4103           (ORIGINATOR_HAS_NO_PRIVILEGE)         }	IUT → AE							

TP Id	OPERATION
TP/oneM2M/CSE/GMG/004_CRE	CREATE
TP/oneM2M/CSE/GMG/004_RET	RETRIEVE
TP/oneM2M/CSE/GMG/004_UPD	UPDATE
TP/oneM2M/CSE/GMG/004_DEL	DELETE

## TP/oneM2M/CSE/GMG/005

<b>TP Id</b>	TP/oneM2M/CSE/GMG/005						
<b>Test objective</b>	Check that IUT performs an <i>OPERATION</i> request for each resource in memberIDs with no relative address appended to it.						
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.7						
<b>Parent Release</b>	Release 1						
<b>Config Id</b>	CF01						
<b>PICS Selection</b>	PICS_CSE						
<b>Initial conditions</b>	<pre>with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the IUT <b>having</b> a &lt;group&gt; resource at TARGET_RESOURCE_ADDRESS <b>containing</b>         membersAccessControlPolicyIDs attribute <b>set to</b> allow the AE privileges to perform         CREATE <b>and</b>         memberType attribute <b>set to</b> AE AE <b>and</b>         memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS1,                            MEMBER_RESOURCE_ADDRESS2     <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS1 <b>containing</b>         resourceType <b>set to</b> AE     <b>and</b> the IUT <b>having</b> a resource at MEMBER_RESOURCE_ADDRESS2 <b>containing</b>         resourceType <b>set to</b> AE }</pre>						
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when {     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Resource Type <b>set to</b> 3 (container) <b>and</b>         Content <b>containing</b>             container resource representation }</pre> </td> <td>IUT ← AE</td> </tr> <tr> <td> <pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>and</b>         Content <b>containing</b>             aggregatedResponse message <b>containing</b>                 Response for MEMBER_RESOURCE_ADDRESS1 <b>and</b>                 Response for MEMBER_RESOURCE_ADDRESS2 }</pre> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<pre>when {     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Resource Type <b>set to</b> 3 (container) <b>and</b>         Content <b>containing</b>             container resource representation }</pre>	IUT ← AE	<pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>and</b>         Content <b>containing</b>             aggregatedResponse message <b>containing</b>                 Response for MEMBER_RESOURCE_ADDRESS1 <b>and</b>                 Response for MEMBER_RESOURCE_ADDRESS2 }</pre>	IUT → AE
Test events	Direction						
<pre>when {     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Resource Type <b>set to</b> 3 (container) <b>and</b>         Content <b>containing</b>             container resource representation }</pre>	IUT ← AE						
<pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>and</b>         Content <b>containing</b>             aggregatedResponse message <b>containing</b>                 Response for MEMBER_RESOURCE_ADDRESS1 <b>and</b>                 Response for MEMBER_RESOURCE_ADDRESS2 }</pre>	IUT → AE						

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/GMG/005_CRE	CREATE	2000 (OK)
TP/oneM2M/CSE/GMG/005_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/GMG/005_UPD	UPDATE	2000 (OK)
TP/oneM2M/CSE/GMG/005_DEL	DELETE	2000 (OK)

## TP/oneM2M/CSE/GMG/006

<b>TP Id</b>	TP/oneM2M/CSE/GMG/006						
<b>Test objective</b>	Check that IUT performs an <i>OPERATION</i> request for each resource in memberIDs with a relative address appended to it.						
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.7.7						
<b>Parent Release</b>	Release 1						
<b>Config Id</b>	CF01						
<b>PICS Selection</b>	PICS_CSE						
<b>Initial conditions</b>	<pre> with {     the IUT <b>being</b> in the "initial state"     <b>and the IUT having registered</b> the AE     <b>and the IUT having</b> a &lt;group&gt; resource at TARGET_RESOURCE_ADDRESS <b>containing</b>         membersAccessControlPolicyIDs attribute <b>set to</b> allow the AE privileges to             perform CREATE <b>and</b>         memberType attribute <b>set to</b> AE <b>and</b>         memberIDs attribute <b>set to</b> MEMBER_RESOURCE_ADDRESS1,                                 MEMBER_RESOURCE_ADDRESS2     <b>and the IUT having</b> a resource at MEMBER_RESOURCE_ADDRESS1 <b>containing</b>         resourceType attribute <b>set to</b> AE     <b>and the IUT having</b> a resource at MEMBER_RESOURCE_ADDRESS2 <b>containing</b>         resourceType attribute <b>set to</b> AE     <b>and the IUT having</b> a resource at MEMBER_RESOURCE_ADDRESS1 <b>containing</b>         resourceType attribute <b>set to</b> container <b>and</b>         resourceName attribute <b>set to</b> NAME     <b>and the IUT having</b> a resource at MEMBER_RESOURCE_ADDRESS2 <b>containing</b>         resourceType attribute <b>set to</b> container <b>and</b>         resourceName attribute <b>set to</b> NAME } </pre>						
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when {     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt/NAME <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Content <b>containing</b>             contentInstance resource representation } </pre> </td> <td>IUT ← AE</td> </tr> <tr> <td> <pre> then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>and</b>         Content <b>containing</b>             aggregatedResponse message <b>containing</b>                 Response for MEMBER_RESOURCE_ADDRESS1 <b>and</b>                 Response for MEMBER_RESOURCE_ADDRESS2 } </pre> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<pre> when {     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt/NAME <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Content <b>containing</b>             contentInstance resource representation } </pre>	IUT ← AE	<pre> then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>and</b>         Content <b>containing</b>             aggregatedResponse message <b>containing</b>                 Response for MEMBER_RESOURCE_ADDRESS1 <b>and</b>                 Response for MEMBER_RESOURCE_ADDRESS2 } </pre>	IUT → AE
Test events	Direction						
<pre> when {     the IUT <b>receives</b> a valid CREATE Request <b>from</b> AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt/NAME <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Content <b>containing</b>             contentInstance resource representation } </pre>	IUT ← AE						
<pre> then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>and</b>         Content <b>containing</b>             aggregatedResponse message <b>containing</b>                 Response for MEMBER_RESOURCE_ADDRESS1 <b>and</b>                 Response for MEMBER_RESOURCE_ADDRESS2 } </pre>	IUT → AE						

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/GMG/006_CRE	CREATE	2000 (OK)
TP/oneM2M/CSE/GMG/006_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/GMG/006_UPD	UPDATE	2000 (OK)
TP/oneM2M/CSE/GMG/006_DEL	DELETE	2000 (OK)

TP/oneM2M/CSE/GMG/007

TP Id	TP/oneM2M/CSE/GMG/007							
Test objective	Check that the IUT denies a <group>/fanOutPoint RETRIEVE when there is no memberID in <group> resource.							
Reference	ETSI TS 118 104 [2], clause 7.4.14.2.4							
Parent Release	Release 1							
Config Id	CF01							
PICS Selection	PICS_CSE							
Initial conditions	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> the AE</p> <p>and the IUT <b>having</b> a group resource at TARGET_RESOURCE_ADDRESS <b>containing</b> membersAccessControlPolicyIDs attribute <b>set to</b> ACP_RESOURCE_ID <b>indicating to</b> allow the AE to perform all operations <b>and</b></p> <p>no memberID attribute</p> <p>}</p>							
Expected behaviour	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b></p> <p>From <b>set to</b> AE-ID</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4109 (NO_MEMBER)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b></p> <p>From <b>set to</b> AE-ID</p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4109 (NO_MEMBER)</p> <p>}</p>	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS/fopt <b>and</b></p> <p>From <b>set to</b> AE-ID</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4109 (NO_MEMBER)</p> <p>}</p>	IUT → AE							

## 7.2.2.6 Discovery (DIS)

### 7.2.2.6.1 RETRIEVE Operation

TP/oneM2M/CSE/DIS/001

<b>TP Id</b>	TP/oneM2M/CSE/DIS/001	
<b>Test objective</b>	Check that the IUT returns successfully a list all discovered resource addresses	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.6, ETSI TS 118 104 [2], clause 7.2.3.13	
<b>Parent Release</b>	Release 1	
<b>Config Id</b>	CF01	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the IUT <b>having</b> a container resource TARGET_RESOURCE_ADDRESS <b>containing</b> a child resource <b>and</b> the AE <b>having</b> privileges to perform DISCOVERY operation <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Filter Criteria <b>containing</b> filterUsage <b>set to</b> 1 (Discovery Criteria) <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> URIList representation <b>}</b>	<b>Expected behaviour</b>

## TP/oneM2M/CSE/DIS/002

<b>TP Id</b>	TP/oneM2M/CSE/DIS/002							
<b>Test objective</b>	Check that the IUT returns successfully appropriate list of discovered resource when the filter criteria is provided in the request							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.3 and clause 10.2.6, ETSI TS 118 104 [2], clause 7.2.3.13							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a container resource <i>TARGET_RESOURCE_ADDRESS</i> <b>containing</b>  a child resource <b>and</b>  the AE <b>having</b> privileges to perform RETRIEVE operation</p> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> <i>TARGET_RESOURCE_ADDRESS</i> <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Filter Criteria <b>set to</b> FILTER_CRITERIA_CONDITIONS <b>containing</b>  filterUsage <b>set to</b> 1 (Discovery Criteria)  <b>}</b> </td><td>IUT ← AE</td></tr> <tr> <td> <b>then {</b>  the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2000 (OK) <b>and</b>  Content <b>containing</b>  URIList representation  <b>}</b> </td><td>IUT → AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> <i>TARGET_RESOURCE_ADDRESS</i> <b>and</b> From <b>set to</b> AE-ID <b>and</b> Filter Criteria <b>set to</b> FILTER_CRITERIA_CONDITIONS <b>containing</b> filterUsage <b>set to</b> 1 (Discovery Criteria) <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> URIList representation <b>}</b>	IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> <i>TARGET_RESOURCE_ADDRESS</i> <b>and</b> From <b>set to</b> AE-ID <b>and</b> Filter Criteria <b>set to</b> FILTER_CRITERIA_CONDITIONS <b>containing</b> filterUsage <b>set to</b> 1 (Discovery Criteria) <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> URIList representation <b>}</b>	IUT → AE							

## TP/oneM2M/CSE/DIS/003

<b>TP Id</b>	TP/oneM2M/CSE/DIS/003							
<b>Test objective</b>	Check that the IUT returns the empty address list when no result matching with filter criteria is discovered							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.3 and clause 10.2.6, ETSI TS 118 104 [2], clause 7.2.3.13							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a container resource TARGET_RESOURCE_ADDRESS <b>containing</b>  a child resource <b>and</b>  the AE <b>having</b> privileges to perform RETRIEVE operation  <b>and</b> FILTER_CRITERIA_CONDITIONS <b>not being</b> applicable to the IUT</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Expected behaviour</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>  the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Filter Criteria <b>set to</b> FILTER_CRITERIA_CONDITIONS <b>containing</b>  filterUsage <b>set to</b> 1 (Discovery Criteria)  <b>}</b> </td><td></td></tr> <tr> <td> <b>then {</b>  the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2000 (OK) <b>and</b>  Content <b>containing</b>  URIList element <b>set to</b> empty list  <b>}</b> </td><td></td></tr> </tbody> </table>	<b>Test events</b>	<b>Expected behaviour</b>	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> Filter Criteria <b>set to</b> FILTER_CRITERIA_CONDITIONS <b>containing</b> filterUsage <b>set to</b> 1 (Discovery Criteria) <b>}</b>		<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> URIList element <b>set to</b> empty list <b>}</b>		
<b>Test events</b>	<b>Expected behaviour</b>							
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> Filter Criteria <b>set to</b> FILTER_CRITERIA_CONDITIONS <b>containing</b> filterUsage <b>set to</b> 1 (Discovery Criteria) <b>}</b>								
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> URIList element <b>set to</b> empty list <b>}</b>								

## TP/oneM2M/CSE/DIS/004

<b>TP Id</b>	TP/oneM2M/CSE/DIS /004						
<b>Test objective</b>	Check that the IUT returns successfully a list of discovered resource addresses with Non-hierarchical addressing form when the Discovery Result Type is provided in the request						
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.3 and clause 10.2.6, ETSI TS 118 104 [2], clause 7.2.3.13						
<b>Config Id</b>	CF01						
<b>PICS Selection</b>	PICS_CSE						
<b>Initial conditions</b>	<p>with {</p> <p style="padding-left: 20px;">the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having</b> a container resource <i>TARGET_RESOURCE_ADDRESS</i> <b>containing</b>  <b>a child resource and</b>  <b>the AE having</b> privileges to perform DISCOVERY operation</p> <p>}</p>						
<b>Expected behaviour</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 5px;"><b>Test events</b></th> <th style="text-align: center; padding: 5px;"><b>Expected behaviour</b></th> </tr> </thead> <tbody> <tr> <td style="padding: 10px;"> <b>when {</b>            the IUT <b>receives</b> a valid RETRIEVE Request from AE <b>containing</b>            To <b>set to</b> <i>TARGET_RESOURCE_ADDRESS</i> <b>and</b>            From <b>set to</b> <i>AE-ID</i> <b>and</b>            Discovery Result Type <b>set to</b> 2 (unstructured) <b>and</b>            Filter Criteria <b>containing</b>            filterUsage <b>set to</b> 1 (Discovery Criteria)  <b>}</b> </td> <td style="padding: 10px;"></td> </tr> <tr> <td style="padding: 10px;"> <b>then {</b>            the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> 2000 (OK) <b>and</b>            Content <b>containing</b>            URIList representation <b>containing</b>            unstructured addresses of discovered resources  <b>}</b> </td> <td style="padding: 10px;"></td> </tr> </tbody> </table>	<b>Test events</b>	<b>Expected behaviour</b>	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request from AE <b>containing</b> To <b>set to</b> <i>TARGET_RESOURCE_ADDRESS</i> <b>and</b> From <b>set to</b> <i>AE-ID</i> <b>and</b> Discovery Result Type <b>set to</b> 2 (unstructured) <b>and</b> Filter Criteria <b>containing</b> filterUsage <b>set to</b> 1 (Discovery Criteria) <b>}</b>		<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> URIList representation <b>containing</b> unstructured addresses of discovered resources <b>}</b>	
<b>Test events</b>	<b>Expected behaviour</b>						
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request from AE <b>containing</b> To <b>set to</b> <i>TARGET_RESOURCE_ADDRESS</i> <b>and</b> From <b>set to</b> <i>AE-ID</i> <b>and</b> Discovery Result Type <b>set to</b> 2 (unstructured) <b>and</b> Filter Criteria <b>containing</b> filterUsage <b>set to</b> 1 (Discovery Criteria) <b>}</b>							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> URIList representation <b>containing</b> unstructured addresses of discovered resources <b>}</b>							

## TP/oneM2M/CSE/DIS/005

<b>TP Id</b>	TP/oneM2M/CSE/DIS/005							
<b>Test objective</b>	Check that the IUT rejects the discovery requests to the resource TARGET_RESOURCE_ADDRESS when AE has no privilege to perform the discovery request for the resource TARGET_RESOURCE_ADDRESS							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.6.2 and clause 7.2.3.14, ETSI TS 118 104 [2], clause 7.3.3.14							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> the AE</p> <p>and the AE <b>having no</b> privileges to perform RETRIEVE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE containing            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE_ID <b>and</b>            Filter Criteria <b>containing</b>            filterUsage <b>set to</b> 1 (Discovery Criteria)  <b>}</b> </td><td>IUT ← AE</td></tr> <tr> <td> <b>then {</b>            the IUT sends a valid Response <b>containing</b>            Response Status Code <b>set to</b> 4103 (ACCESS_DENIED)  <b>}</b> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE containing To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Filter Criteria <b>containing</b> filterUsage <b>set to</b> 1 (Discovery Criteria) <b>}</b>	IUT ← AE	<b>then {</b> the IUT sends a valid Response <b>containing</b> Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE containing To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Filter Criteria <b>containing</b> filterUsage <b>set to</b> 1 (Discovery Criteria) <b>}</b>	IUT ← AE							
<b>then {</b> the IUT sends a valid Response <b>containing</b> Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) <b>}</b>	IUT → AE							

## TP/oneM2M/CSE/DIS/006

<b>TP Id</b>	TP/oneM2M/CSE/DIS/006	
<b>Test objective</b>	Check that the IUT responds with an error when the AE sends requests to discover the resource TARGET_RESOURCE_ADDRESS which does not exist in the Hosting CSE	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.6.2, ETSI TS 118 104 [2], clause 7.3.3.14	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and the IUT having registered</b> the AE</p> <p><b>and the IUT having not yet created</b> a containe resource TARGET_RESOURCE_ADDRESS</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Expected behaviour</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid RETRIEVE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE_ID <b>and</b></p> <p>Filter Criteria <b>containing</b></p> <p>filterUsage <b>set to</b> 1 (Discovery Criteria)</p> <p><b>}</b></p>	
	<p><b>then {</b></p> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4004 (NOT_FOUND)</p> <p><b>}</b></p>	

## TP/oneM2M/CSE/DIS/007

<b>TP Id</b>	TP/oneM2M/CSE/DIS/007	
<b>Test objective</b>	Check that the IUT responds the originator with an error when the originator sends a request including an invalid format of filter criteria to discover the resource TARGET_RESOURCE_ADDRESS	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.6, ETSI TS 118 104 [2], clause 7.3.3.6	
<b>Parent Release</b>	Release 1	
<b>Config Id</b>	CF01	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> the originator AE</p> <p>and the IUT <b>having</b> a container resource TARGET_RESOURCE_ADDRESS <b>containing</b> a child resource <b>and</b></p> <p>the AE <b>having</b> privileges to perform DISCOVERY operation</p> }	
<b>Expected behaviour</b>	<b>Test events</b> <pre>when {     the IUT receives a valid RETRIEVE Request from AE containing         To set to TARGET_RESOURCE_ADDRESS and         From set to AE_ID and         Filter Criteria set to FILTER_CRITERIA_CONDITIONS not being valid         format }</pre> <pre>then {     the IUT sends a valid Response containing         Response Status Code set to 4102 (CONTENTS_UNACCEPTABLE) }</pre>	<b>Expected behaviour</b> <pre>IUT ← AE</pre> <pre>IUT → AE</pre>

## TP/oneM2M/CSE/DIS/008

<b>TP Id</b>	TP/oneM2M/CSE/DIS/008						
<b>Test objective</b>	Check that the IUT responds the originator with an error when the originator sends a request to discover the resource TARGET_RESOURCE_ADDRESS including two conflicted filter criteria of different type FILTER_CRITERIA_CONDITION_1 and FILTER_CRITERIA_CONDITION_2 (E.G. <i>createBefore &lt; createdAfter</i> )						
<b>Reference</b>	ETSI TS 118 101 [1], clause 6.2.5, ETSI TS 118 104 [2], clause 7.3.3.17						
<b>Parent Release</b>	Release 1						
<b>Config Id</b>	CF01						
<b>PICS Selection</b>	PICS_CSE						
<b>Initial conditions</b>	<p>with {</p> <p style="padding-left: 20px;">the IUT <b>being</b> in the "initial state"</p> <p style="padding-left: 20px;"><b>and</b> the IUT <b>having registered</b> the originator AE</p> <p style="padding-left: 20px;"><b>and</b> the IUT <b>having</b> a container resource TARGET_RESOURCE_ADDRESS <b>containing</b></p> <p style="padding-left: 40px;"><b>a child resource</b> <b>and</b></p> <p style="padding-left: 40px;">the AE <b>having</b> privileges to perform RETRIEVE operation</p> <p>}</p>						
<b>Expected behaviour</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Test events</th> <th style="text-align: center; padding: 2px;">Direction</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"> <b>when</b> {                the IUT <b>receives</b> a valid RETRIEVE Request from AE <b>containing</b>          To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>          From <b>set to</b> AE_ID <b>and</b>          Filter Criteria <b>containing</b>              filterUsage <b>set to</b> 1 (Discovery Criteria) <b>and</b>              <b>having</b> conflict conditions         </td> <td style="text-align: center; padding: 2px;">IUT <math>\leftarrow</math> AE</td> </tr> <tr> <td style="padding: 2px;"> <b>then</b> {                the IUT <b>sends</b> a valid Response <b>containing</b>          Response Status Code <b>set to</b> 4102 (CONTENTS_UNACCEPTABLE)         </td> <td style="text-align: center; padding: 2px;">IUT <math>\rightarrow</math> AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when</b> { the IUT <b>receives</b> a valid RETRIEVE Request from AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Filter Criteria <b>containing</b> filterUsage <b>set to</b> 1 (Discovery Criteria) <b>and</b> <b>having</b> conflict conditions	IUT $\leftarrow$ AE	<b>then</b> { the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4102 (CONTENTS_UNACCEPTABLE)	IUT $\rightarrow$ AE
Test events	Direction						
<b>when</b> { the IUT <b>receives</b> a valid RETRIEVE Request from AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Filter Criteria <b>containing</b> filterUsage <b>set to</b> 1 (Discovery Criteria) <b>and</b> <b>having</b> conflict conditions	IUT $\leftarrow$ AE						
<b>then</b> { the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4102 (CONTENTS_UNACCEPTABLE)	IUT $\rightarrow$ AE						

TP Id	REQ Reference	FILTER_CRITERIA_CONDITION_1	FILTER_CRITERIA_CONDITION_2
TP/oneM2M/CSE/DIS/008_CRB/CRA	REQ-0004-07241	<i>createdBefore</i>	<i>createdAfter</i>
TP/oneM2M/CSE/DIS/008_MS/US	REQ-0004-07242	<i>unmodifiedSince</i>	<i>modifiedSince</i>
TP/oneM2M/CSE/DIS/008_STS/STB	REQ-0004-07243	<i>stateTagSmaller</i>	<i>stateTagBigger</i>
TP/oneM2M/CSE/DIS/008_EXB/EXA	REQ-0004-07244	<i>expireBefore</i>	<i>expireAfter</i>

## TP/oneM2M/CSE/DIS/009

<b>TP Id</b>	TP/oneM2M/CSE/DIS/009							
<b>Test objective</b>	Check that the IUT returns the empty address list when resources match the filter criteria but they do not include DISCOVERY permission.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.2.3 and clause 10.2.6, ETSI TS 118 104 [2], clause 7.2.3.13							
<b>Parent Release</b>	Release 1							
<b>Config Id</b>	CF01							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<pre>with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the IUT <b>having</b> a resource TARGET_RESOURCE_ADDRESS <b>not allowing</b>         the AE to perform DISCOVERY operation     <b>and</b> FILTER_CRITERIA_CONDITIONS <b>being</b> applicable to the IUT }</pre>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when {     the IUT <b>receives</b> a valid RETRIEVE Request from AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Filter Criteria <b>set to</b> FILTER_CRITERIA_CONDITIONS <b>containing</b>             filterUsage <b>set to</b> 1 (Discovery Criteria) }</pre> </td><td>IUT ← AE</td></tr> <tr> <td> <pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2000 (OK) <b>and</b>         Content <b>containing</b>             URIList element <b>set to</b> empty list }</pre> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<pre>when {     the IUT <b>receives</b> a valid RETRIEVE Request from AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Filter Criteria <b>set to</b> FILTER_CRITERIA_CONDITIONS <b>containing</b>             filterUsage <b>set to</b> 1 (Discovery Criteria) }</pre>	IUT ← AE	<pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2000 (OK) <b>and</b>         Content <b>containing</b>             URIList element <b>set to</b> empty list }</pre>	IUT → AE	
Test events	Direction							
<pre>when {     the IUT <b>receives</b> a valid RETRIEVE Request from AE <b>containing</b>         To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE-ID <b>and</b>         Filter Criteria <b>set to</b> FILTER_CRITERIA_CONDITIONS <b>containing</b>             filterUsage <b>set to</b> 1 (Discovery Criteria) }</pre>	IUT ← AE							
<pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 2000 (OK) <b>and</b>         Content <b>containing</b>             URIList element <b>set to</b> empty list }</pre>	IUT → AE							

## 7.2.2.7 Communication Management and Delivery Handling(CMDH)

### 7.2.2.7.1 Resource pollingChannel (PCH)

TP/oneM2M/CSE/PCH/001

<b>TP Id</b>	TP/oneM2M/CSE/PCH/001							
<b>Test objective</b>	Check that the IUT which hosts <pollingChannel> resource forwards a Notify request successfully to a target AE, once the IUT receives a polling request from AE (retrieve request to <pollingChannelURI> resource) See the note below.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.13.6, ETSI TS 118 104 [2], clause 7.4.22.2.2							
<b>Config Id</b>	CF02							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_PCH							
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" and the IUT <b>having registered</b> an AE1 and the AE <b>having a child</b> <pollingChannel> resource and the IUT <b>having received</b> a retrieve request from the AE <b>containing</b> To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS <b>}</b>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td><b>when {</b>            the IUT <b>receives</b> a NOTIFY Request <b>from</b> the CSE <b>containing</b>            To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> CSE_ID <b>}</b></td> <td>IUT ← CSE</td> </tr> <tr> <td><b>then {</b>            the IUT <b>sends</b> a RETRIEVE Response <b>to</b> the AE <b>containing</b>            Response Status Code <b>set to</b> 2000 (OK)            Content <b>containing</b>            the request <b>received</b> from the CSE  <b>}</b></td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a NOTIFY Request <b>from</b> the CSE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> CSE_ID <b>}</b>	IUT ← CSE	<b>then {</b> the IUT <b>sends</b> a RETRIEVE Response <b>to</b> the AE <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) Content <b>containing</b> the request <b>received</b> from the CSE <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a NOTIFY Request <b>from</b> the CSE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> CSE_ID <b>}</b>	IUT ← CSE							
<b>then {</b> the IUT <b>sends</b> a RETRIEVE Response <b>to</b> the AE <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) Content <b>containing</b> the request <b>received</b> from the CSE <b>}</b>	IUT → AE							
NOTE: Based on figure 10.2.13.1-1 in ETSI TS 118 101 [1] step 001, 002 and 003 in order. In this case, IUT is pending AE's polling request since there was no request to AE.								

## TP/oneM2M/CSE/PCH/002

<b>TP Id</b>	TP/oneM2M/CSE/PCH/002							
<b>Test objective</b>	Check that the IUT which hosts <pollingChannel> resource forwards a Notify request successfully to a target AE, once the IUT receives a polling request from the AE							
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.13.6, ETSI TS 118 104 [2], clause 7.4.22.2.2							
<b>Config Id</b>	CF02							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_PCH							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> an AE  <b>and</b> the AE <b>having</b> a child &lt;pollingChannel&gt; resource  <b>and</b> the IUT <b>having received</b> a NOTIFY Request <b>from</b> CSE <b>containing</b>        To <b>set to</b> AE_RESOURCE_ADDRESS and        From <b>set to</b> CSE_ID</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p><b>when {</b></p> <p>the IUT <b>receives</b> a retrieve Request <b>from</b> the AE <b>containing</b>        To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS</p> <p><b>}</b></p> </td><td>IUT ← AE</td></tr> <tr> <td> <p><b>then {</b></p> <p>the IUT <b>sends</b> a Response <b>to</b> the AE <b>containing</b>        Response Status Code <b>set to</b> 2000 (OK)        Content <b>containing</b>        the Request <b>received</b> from the CSE</p> <p><b>}</b></p> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p><b>when {</b></p> <p>the IUT <b>receives</b> a retrieve Request <b>from</b> the AE <b>containing</b>        To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS</p> <p><b>}</b></p>	IUT ← AE	<p><b>then {</b></p> <p>the IUT <b>sends</b> a Response <b>to</b> the AE <b>containing</b>        Response Status Code <b>set to</b> 2000 (OK)        Content <b>containing</b>        the Request <b>received</b> from the CSE</p> <p><b>}</b></p>	IUT → AE	
Test events	Direction							
<p><b>when {</b></p> <p>the IUT <b>receives</b> a retrieve Request <b>from</b> the AE <b>containing</b>        To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS</p> <p><b>}</b></p>	IUT ← AE							
<p><b>then {</b></p> <p>the IUT <b>sends</b> a Response <b>to</b> the AE <b>containing</b>        Response Status Code <b>set to</b> 2000 (OK)        Content <b>containing</b>        the Request <b>received</b> from the CSE</p> <p><b>}</b></p>	IUT → AE							
NOTE:	Based on figure 10.2.13.1-1 in ETSI TS 118 101 [1] step 002 is followed by 001 and 003. The CSE's request to AE is pended and will be sent as soon as AE sends polling request to CSE.							

## TP/oneM2M/CSE/PCH/003

<b>TP Id</b>	TP/oneM2M/CSE/PCH/003						
<b>Test objective</b>	Check that the IUT performs both forwarding the response to the CSE and sending response to AE after receiving a Notify Request from the AE sent to the <pollingChannelURI> resource						
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.13.8, ETSI TS 118 104 [2], clause 7.4.22.2.2						
<b>Config Id</b>	CF02						
<b>Parent Release</b>	Release 2						
<b>PICS Selection</b>	PICS_PCH						
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> an AE  <b>and</b> the AE1 <b>having</b> a child &lt;pollingChannel&gt; resource  <b>and</b> the IUT <b>having received</b> a retrieve Request from the AE <b>containing</b>  <b>To set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS  <b>and</b> the IUT <b>having received</b> a NOTIFY Request <b>from</b> the CSE <b>containing</b>  <b>To set to</b> AE_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> CSE_ID  <b>and</b> the IUT <b>sends</b> a Response to the AE <b>containing</b>  <b>Response Status Code set to</b> 2000 (OK)  <b>Content containing</b>  <b>the Request received</b> from the CSE</p> <p>}</p>						
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p><b>when {</b></p> <p>the IUT <b>receives</b> a NOTIFY Request <b>from</b> the AE <b>containing</b>  <b>To set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS <b>and</b>  <b>Content containing</b>  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE</p> <p><b>}</b></p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p><b>then {</b></p> <p>the IUT <b>sends</b> a Response <b>to</b> the CSE  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE</p> <p>the IUT <b>sends</b> the valid NOTIFY Response <b>to</b> the AE</p> <p><b>}</b></p> </td> <td>IUT → CSE  IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<p><b>when {</b></p> <p>the IUT <b>receives</b> a NOTIFY Request <b>from</b> the AE <b>containing</b>  <b>To set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS <b>and</b>  <b>Content containing</b>  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE</p> <p><b>}</b></p>	IUT ← AE	<p><b>then {</b></p> <p>the IUT <b>sends</b> a Response <b>to</b> the CSE  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE</p> <p>the IUT <b>sends</b> the valid NOTIFY Response <b>to</b> the AE</p> <p><b>}</b></p>	IUT → CSE IUT → AE
Test events	Direction						
<p><b>when {</b></p> <p>the IUT <b>receives</b> a NOTIFY Request <b>from</b> the AE <b>containing</b>  <b>To set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS <b>and</b>  <b>Content containing</b>  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE</p> <p><b>}</b></p>	IUT ← AE						
<p><b>then {</b></p> <p>the IUT <b>sends</b> a Response <b>to</b> the CSE  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE</p> <p>the IUT <b>sends</b> the valid NOTIFY Response <b>to</b> the AE</p> <p><b>}</b></p>	IUT → CSE IUT → AE						
NOTE: Based on figure 10.2.13.1-1 in ETSI TS 118 101 [1] step 005 and 006.							

## TP/oneM2M/CSE/PCH/004

<b>TP Id</b>	TP/oneM2M/CSE/PCH/004						
<b>Test objective</b>	Check that the IUT which performs polling sends the Notify request to <pollingChannelURI> Hosting CSE after receiving response using polling channel						
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.13.8, ETSI TS 118 104 [2], clause 7.4.22.2.5						
<b>Config Id</b>	CF02						
<b>Parent Release</b>	Release 2						
<b>PICS Selection</b>	PICS_PCH						
<b>Initial conditions</b>	<pre> with {     the IUT <b>being</b> in the "initial state"     and the IUT <b>having registered</b> to a CSE     and the IUT <b>having</b> a &lt;pollingChannel&gt; resource     and the IUT <b>having sent</b> a retrieve Request to the CSE         To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS     and the CSE <b>having received</b> the Request <b>containing</b>         To <b>set to</b> CSE_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> ORIGINATOR_ID } </pre>						
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre> when {     the IUT <b>receives</b> a polling Response <b>from</b> the CSE <b>containing</b>         Response Status Code <b>set to</b> 2000 (OK) } </pre> </td> <td>IUT ← CSE1</td> </tr> <tr> <td> <pre> then {     the IUT <b>sends</b> a NOTIFY Request <b>to</b> the CSE <b>containing</b>         To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS <b>and</b>         Content <b>containing</b>             Response Status Code <b>set to</b> RESPONSE_STATUS_CODE } </pre> </td> <td>IUT → CSE1</td> </tr> </tbody> </table>	Test events	Direction	<pre> when {     the IUT <b>receives</b> a polling Response <b>from</b> the CSE <b>containing</b>         Response Status Code <b>set to</b> 2000 (OK) } </pre>	IUT ← CSE1	<pre> then {     the IUT <b>sends</b> a NOTIFY Request <b>to</b> the CSE <b>containing</b>         To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS <b>and</b>         Content <b>containing</b>             Response Status Code <b>set to</b> RESPONSE_STATUS_CODE } </pre>	IUT → CSE1
Test events	Direction						
<pre> when {     the IUT <b>receives</b> a polling Response <b>from</b> the CSE <b>containing</b>         Response Status Code <b>set to</b> 2000 (OK) } </pre>	IUT ← CSE1						
<pre> then {     the IUT <b>sends</b> a NOTIFY Request <b>to</b> the CSE <b>containing</b>         To <b>set to</b> POLLINGCHANNELURI_RESOURCE_ADDRESS <b>and</b>         Content <b>containing</b>             Response Status Code <b>set to</b> RESPONSE_STATUS_CODE } </pre>	IUT → CSE1						
NOTE: Based on figure 10.2.13.1-1 in ETSI TS 118 101 [1] step 004 and 005.							

## TP/oneM2M/CSE/PCH/005

<b>TP Id</b>	TP/oneM2M/CSE/PCH/005	
<b>Test objective</b>	Check that the IUT rejects a <pollingChannel> OPERATION of the AE when AE-ID is not same as the AE-ID of the parent resource	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.13.2, ETSI TS 118 104 [2], clause 7.4.21	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_PCH	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> an AE1</p> <p>and the IUT <b>having registered</b> an AE2</p> <p>and the IUT <b>having created</b> a pollingChannel resource on the AE1</p> }	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid OPERATION Request <b>from</b> the AE2 <b>containing</b> To set to POLLING_CHANNEL_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE2_ID <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4103 (ORIGINATOR_HAS_NO_PRIVILEGE) <b>}</b>	<b>Direction</b> IUT ← AE2 IUT → AE2

TP Id	Reference	OPERATION
TP/oneM2M/CSE/PCH/005_RET	ETSI TS 118 101 10.2.13.3	RETRIEVE
TP/oneM2M/CSE/PCH/005_UPD	ETSI TS 118 101 10.2.13.4	UPDATE
TP/oneM2M/CSE/PCH/005_DEL	ETSI TS 118 101 10.2.13.5	DELETE

## TP/oneM2M/CSE/PCH/006

<b>TP Id</b>	TP/oneM2M/CSE/PCH/006	
<b>Test objective</b>	Check that the IUT sends the response with a status to the CSE1 when the request expires according to its Request Expiration Timestamp	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.13.6	
<b>Config Id</b>	CF02	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_PCH	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> an AE</p> <p>and the AE <b>having</b> a child &lt;pollingChannel&gt; resource</p> <p>and the IUT <b>having received</b> a RETRIEVE Request <b>from</b> AE <b>containing</b></p> <p>To set to POLLINGCHANNELURI_RESOURCE_ADDRESS <b>and</b> Request Expiration Timestamp <b>set to</b> VALUE</p> <p>}</p>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when</b> { Request Expiration Timestamp expires }	IUT
	<b>then</b> { and the IUT <b>sends</b> a Response <b>to</b> the AE <b>containing</b> Response Status Code <b>set to</b> 4008 (REQUEST_TIMEOUT) }	IUT → AE

## 7.2.2.7.2 Response Type (RT)

## 7.2.2.7.2.1 nonBlockingRequestSynch (NBS)

TP/oneM2M/CSE/RT/NBS/001

<b>TP Id</b>	TP/oneM2M/CSE/RT/NBS/001							
<b>Test objective</b>	Check that the IUT rejects a Non-Blocking Synchronous Request <i>OPERATION</i> if the IUT does not support the <request> resource							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.2.2.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_NON_BLOCKING_REQUEST_SYNCH							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the Originator <b>having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>            Resource Type <b>set to</b> 3 (container) <b>and</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            ResponseType <b>set to</b> 1 (nonBlockingRequestSynch)  <b>}</b> </td><td>IUT ← AE</td></tr> <tr> <td> <b>then {</b>            the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> 5206            (NON_BLOCKING_REQUEST_NOT_SUPPORTED)  <b>}</b> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b> Resource Type <b>set to</b> 3 (container) <b>and</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> ResponseType <b>set to</b> 1 (nonBlockingRequestSynch) <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 5206 (NON_BLOCKING_REQUEST_NOT_SUPPORTED) <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b> Resource Type <b>set to</b> 3 (container) <b>and</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> ResponseType <b>set to</b> 1 (nonBlockingRequestSynch) <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 5206 (NON_BLOCKING_REQUEST_NOT_SUPPORTED) <b>}</b>	IUT → AE							

TP Id	OPERATION
TP/oneM2M/CSE/RT/NBS/001_CRE	CREATE
TP/oneM2M/CSE/RT/NBS/001_UPD	UPDATE
TP/oneM2M/CSE/RT/NBS/001_RET	RETRIEVE
TP/oneM2M/CSE/RT/NBS/001_DEL	DELETE

## TP/oneM2M/CSE/RT/NBS/002

<b>TP Id</b>	TP/oneM2M/CSE/RT/NBS/002							
<b>Test objective</b>	Check that the IUT responds to a Non-Blocking Synchronous Request <i>OPERATION</i> with the reference of a <request> resource provided within the Content parameter of the Response							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.2.2.1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_NON_BLOCKING_REQUEST_SYNCH							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the Originator <b>having</b> privileges to perform <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {           the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>            Resource Type <b>set to</b> 3 (container) <b>and</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            ResponseType <b>set to</b> 1 (nonBlockingRequestSynch)         }       </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then</b> {           and the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> 1001 (ACCEPTED for n onBlockingRequestSynch) <b>and</b>            Content <b>containing</b>            URI attribute <b>set to</b> REQUEST_RESOURCE_ADDRESS         }       </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when</b> {           the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b> Resource Type <b>set to</b> 3 (container) <b>and</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> ResponseType <b>set to</b> 1 (nonBlockingRequestSynch)         }	IUT ← AE	<b>then</b> {           and the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 1001 (ACCEPTED for n onBlockingRequestSynch) <b>and</b> Content <b>containing</b> URI attribute <b>set to</b> REQUEST_RESOURCE_ADDRESS         }	IUT → AE	
Test events	Direction							
<b>when</b> {           the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b> Resource Type <b>set to</b> 3 (container) <b>and</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> ResponseType <b>set to</b> 1 (nonBlockingRequestSynch)         }	IUT ← AE							
<b>then</b> {           and the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 1001 (ACCEPTED for n onBlockingRequestSynch) <b>and</b> Content <b>containing</b> URI attribute <b>set to</b> REQUEST_RESOURCE_ADDRESS         }	IUT → AE							

TP Id	OPERATION
TP/oneM2M/CSE/RT/NBS/002_CRE	CREATE
TP/oneM2M/CSE/RT/NBS/002_UPD	UPDATE
TP/oneM2M/CSE/RT/NBS/002_RET	RETRIEVE
TP/oneM2M/CSE/RT/NBS/002_DEL	DELETE

TP/oneM2M/CSE/RT/NBS/003

<b>TP Id</b>	TP/oneM2M/CSE/RT/NBS/003							
<b>Test objective</b>	Check that the IUT returns successfully the <request> resource after receiving a Non-Blocking Synchronous Request OPERATION and it contains the expected result in operationResult attribute							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.2.2.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_NON_BLOCKING_REQUEST_SYNCH							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the IUT <b>having received</b> a Non-Blocking Synchronous Request OPERATION  <b>and</b> the IUT <b>having created</b> a resource TARGET_RESOURCE_ADDRESS of type &lt;request&gt; under the AE resource</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid RETRIEVE Request from AE <b>containing</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE_ID <b>and</b>            ResponseType <b>set to</b> 3 (blockingRequest)  <b>no Content</b>  <b>}</b> </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then {</b>            the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> 2000 (OK) <b>and</b>            Content <b>containing</b>            request resource representation <b>containing</b>            operationResult attribute <b>containing</b>            expected response to OPERATION  <b>}</b> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request from AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> ResponseType <b>set to</b> 3 (blockingRequest) <b>no Content</b> <b>}</b>	IUT ← AE	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> request resource representation <b>containing</b> operationResult attribute <b>containing</b> expected response to OPERATION <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> the IUT <b>receives</b> a valid RETRIEVE Request from AE <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> ResponseType <b>set to</b> 3 (blockingRequest) <b>no Content</b> <b>}</b>	IUT ← AE							
<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 2000 (OK) <b>and</b> Content <b>containing</b> request resource representation <b>containing</b> operationResult attribute <b>containing</b> expected response to OPERATION <b>}</b>	IUT → AE							

TP Id	OPERATION
TP/oneM2M/CSE/RT/NBS/003_CRE	CREATE
TP/oneM2M/CSE/RT/NBS/003_UPD	UPDATE
TP/oneM2M/CSE/RT/NBS/003_RET	RETRIEVE
TP/oneM2M/CSE/RT/NBS/003_DEL	DELETE

## 7.2.2.7.2.2 nonBlockingRequestAsynch (NBA)

TP/oneM2M/CSE/RT/NBA/001

<b>TP Id</b>	TP/oneM2M/CSE/RT/NBA/001							
<b>Test objective</b>	Check that the IUT responds to a Non-Blocking Asynchronous Request <i>OPERATION</i> without a reference to a resource containing the context of the request if the IUT does not support the <request> resource							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.2.2.3							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_NON_BLOCKING_REQUEST_ASYNCNCH							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the Originator <b>having</b> privileges to perform <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {                       the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>             Resource Type <b>set to</b> 3 (container) <b>and</b>             To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>             From <b>set to</b> AE-ID <b>and</b>             ResponseType <b>set to</b> 2 (nonBlockingRequestAsynch)         </td> <td>IUT <math>\leftarrow</math> AE</td> </tr> <tr> <td> <b>then</b> {                       the IUT <b>sends</b> a valid Response <b>containing</b>             Response Status Code <b>set to</b> 1002 (ACCEPTED for nonBlockingRequestAsynch) <b>and</b>   <b>no</b> Content         </td> <td>IUT <math>\rightarrow</math> AE</td> </tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when</b> { the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b> Resource Type <b>set to</b> 3 (container) <b>and</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> ResponseType <b>set to</b> 2 (nonBlockingRequestAsynch)	IUT $\leftarrow$ AE	<b>then</b> { the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 1002 (ACCEPTED for nonBlockingRequestAsynch) <b>and</b> <b>no</b> Content	IUT $\rightarrow$ AE	
<b>Test events</b>	<b>Direction</b>							
<b>when</b> { the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b> Resource Type <b>set to</b> 3 (container) <b>and</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE-ID <b>and</b> ResponseType <b>set to</b> 2 (nonBlockingRequestAsynch)	IUT $\leftarrow$ AE							
<b>then</b> { the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 1002 (ACCEPTED for nonBlockingRequestAsynch) <b>and</b> <b>no</b> Content	IUT $\rightarrow$ AE							

<b>TP Id</b>	<b>OPERATION</b>
TP/oneM2M/CSE/RT/NBA/001_CRE	CREATE
TP/oneM2M/CSE/RT/NBA/001_UPD	UPDATE
TP/oneM2M/CSE/RT/NBA/001_RET	RETRIEVE
TP/oneM2M/CSE/RT/NBA/001_DEL	DELETE

## TP/oneM2M/CSE/RT/NBA/002

<b>TP Id</b>	TP/oneM2M/CSE/RT/NBA/002							
<b>Test objective</b>	Check that the IUT responds to a Non-Blocking Asynchronous Request <i>OPERATION</i> with the reference of a <request> resource provided within the Content parameter of the Response							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.2.2.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_NON_BLOCKING_REQUEST_ASYNCNCH							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the Originator <b>having</b> privileges to perform <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>  Resource Type <b>set to</b> 3 (container) <b>and</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  ResponseType <b>set to</b> 2 (nonBlockingRequestAsynch)</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p><b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 1002 (ACCEPTED for nonBlockingRequestAsynch) <b>and</b>  Content <b>containing</b>  URI attribute <b>set to</b> REQUEST_RESOURCE_ADDRESS</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>  Resource Type <b>set to</b> 3 (container) <b>and</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  ResponseType <b>set to</b> 2 (nonBlockingRequestAsynch)</p> <p>}</p>	IUT ← AE	<p>then {</p> <p><b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 1002 (ACCEPTED for nonBlockingRequestAsynch) <b>and</b>  Content <b>containing</b>  URI attribute <b>set to</b> REQUEST_RESOURCE_ADDRESS</p> <p>}</p>	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>  Resource Type <b>set to</b> 3 (container) <b>and</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  ResponseType <b>set to</b> 2 (nonBlockingRequestAsynch)</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p><b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 1002 (ACCEPTED for nonBlockingRequestAsynch) <b>and</b>  Content <b>containing</b>  URI attribute <b>set to</b> REQUEST_RESOURCE_ADDRESS</p> <p>}</p>	IUT → AE							

TP Id	OPERATION
TP/oneM2M/CSE/RT/NBA/002_CRE	CREATE
TP/oneM2M/CSE/RT/NBA/002_UPD	UPDATE
TP/oneM2M/CSE/RT/NBA/002_RET	RETRIEVE
TP/oneM2M/CSE/RT/NBA/002_DEL	DELETE

## TP/oneM2M/CSE/RT/NBA/003

<b>TP Id</b>	TP/oneM2M/CSE/RT/NBA/003							
<b>Test objective</b>	Check that the IUT sends the result of the requested Non-Blocking Asynchronous <i>OPERATION</i> as notification to the Originator when no notification target list is provided							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, 8.2.2.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_NON_BLOCKING_REQUEST_ASYNCNCH							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the Originator <b>having</b> privileges to perform <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>            Resource Type <b>set to</b> 3 (container) <b>and</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            ResponseType <b>set to</b> 2 (nonBlockingRequestAsynch)            NotificationURI <b>not set</b></p> }       </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response (Ack)  <b>and</b> the IUT <b>sends</b> a valid NOTIFY Request <b>containing</b>  Content <b>containing</b>  <b>ResponsePrimitive</b> representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> <b>containing</b>  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE</p> }       </td><td>IUT → AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>            Resource Type <b>set to</b> 3 (container) <b>and</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            ResponseType <b>set to</b> 2 (nonBlockingRequestAsynch)            NotificationURI <b>not set</b></p> }	IUT ← AE	<p>then {</p> <p>the IUT <b>sends</b> a valid Response (Ack)  <b>and</b> the IUT <b>sends</b> a valid NOTIFY Request <b>containing</b>  Content <b>containing</b>  <b>ResponsePrimitive</b> representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> <b>containing</b>  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE</p> }	IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>            Resource Type <b>set to</b> 3 (container) <b>and</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            ResponseType <b>set to</b> 2 (nonBlockingRequestAsynch)            NotificationURI <b>not set</b></p> }	IUT ← AE							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response (Ack)  <b>and</b> the IUT <b>sends</b> a valid NOTIFY Request <b>containing</b>  Content <b>containing</b>  <b>ResponsePrimitive</b> representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> <b>containing</b>  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE</p> }	IUT → AE							

<b>TP Id</b>	<b>OPERATION</b>	<b>RESPONSE_STATUS_CODE</b>
TP/oneM2M/CSE/RT/NBA/003_CRE	CREATE	2001 (CREATED)
TP/oneM2M/CSE/RT/NBA/003_UPD	UPDATE	2004 (UPDATED)
TP/oneM2M/CSE/RT/NBA/003_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/RT/NBA/003_DEL	DELETE	2002 (DELETED)

TP/oneM2M/CSE/RT/NBA/004

<b>TP Id</b>	TP/oneM2M/CSE/RT/NBA/004							
<b>Test objective</b>	Check that the IUT does not send the result of the requested Non-Blocking Asynchronous OPERATION as notification to the Originator when an empty notification target list is provided							
<b>Reference</b>	ETSI TS 118 101 [1], clause 8.1.2, 8.2.2.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_NON_BLOCKING_REQUEST_ASYNCNCH							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the AE  <b>and</b> the Originator <b>having</b> privileges to perform OPERATION on the resource TARGET_RESOURCE_ADDRESS</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid OPERATION Request from AE containing            Resource Type <b>set to</b> 3 (container) <b>and</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            ResponseType <b>set to</b> 2 (nonBlockingRequestAsynch) <b>and</b>            NotificationURI <b>set to</b> empty list</p> }       </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response (Ack)  <b>and the IUT does not send</b> a NOTIFY Response</p> }       </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid OPERATION Request from AE containing            Resource Type <b>set to</b> 3 (container) <b>and</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            ResponseType <b>set to</b> 2 (nonBlockingRequestAsynch) <b>and</b>            NotificationURI <b>set to</b> empty list</p> }	IUT ← AE	<p>then {</p> <p>the IUT <b>sends</b> a valid Response (Ack)  <b>and the IUT does not send</b> a NOTIFY Response</p> }	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid OPERATION Request from AE containing            Resource Type <b>set to</b> 3 (container) <b>and</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            ResponseType <b>set to</b> 2 (nonBlockingRequestAsynch) <b>and</b>            NotificationURI <b>set to</b> empty list</p> }	IUT ← AE							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response (Ack)  <b>and the IUT does not send</b> a NOTIFY Response</p> }	IUT → AE							

TP Id	OPERATION
TP/oneM2M/CSE/RT/NBA/004_CRE	CREATE
TP/oneM2M/CSE/RT/NBA/004_UPD	UPDATE
TP/oneM2M/CSE/RT/NBA/004_RET	RETRIEVE
TP/oneM2M/CSE/RT/NBA/004_DEL	DELETE

## TP/oneM2M/CSE/RT/NBA/005

<b>TP Id</b>	TP/oneM2M/CSE/RT/NBA/005							
<b>Test objective</b>	Check that the IUT sends the result of the requested Non-Blocking Asynchronous <i>OPERATION</i> as notification to the notification targets indicated in responseType/notificationURI attribute of the request							
<b>Reference</b>	ETSI TS 118 101 [1], clauses 8.1.2, 8.2.2.2							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_NON_BLOCKING_REQUEST_ASYNCNCH							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the AE1 <b>having</b> privileges to perform <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>  Resource Type <b>set to</b> 3 (container) <b>and</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Response Type parameter <b>containing</b>  responseTypeValue <b>set to</b> 2 (nonBlockingRequestAsynch) <b>and</b>  NotificationURI <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>  AE2_RESOURCE_ADDRESS</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response (Ack)  <b>and</b> the IUT <b>sends</b> a valid NOTIFY Request <b>containing</b> to AE1  Content <b>containing</b>  <b>ResponsePrimitive</b> representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> <b>containing</b>  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE  <b>and</b> the IUT <b>sends</b> a valid NOTIFY Request <b>containing</b> to AE2  Content <b>containing</b>  <b>ResponsePrimitive</b> representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> <b>containing</b>  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE</p> <p>}</p> </td> <td> IUT → AE1  IUT → AE1  IUT → AE2 </td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>  Resource Type <b>set to</b> 3 (container) <b>and</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Response Type parameter <b>containing</b>  responseTypeValue <b>set to</b> 2 (nonBlockingRequestAsynch) <b>and</b>  NotificationURI <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>  AE2_RESOURCE_ADDRESS</p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>sends</b> a valid Response (Ack)  <b>and</b> the IUT <b>sends</b> a valid NOTIFY Request <b>containing</b> to AE1  Content <b>containing</b>  <b>ResponsePrimitive</b> representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> <b>containing</b>  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE  <b>and</b> the IUT <b>sends</b> a valid NOTIFY Request <b>containing</b> to AE2  Content <b>containing</b>  <b>ResponsePrimitive</b> representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> <b>containing</b>  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE</p> <p>}</p>	IUT → AE1 IUT → AE1 IUT → AE2	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>  Resource Type <b>set to</b> 3 (container) <b>and</b>  To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE-ID <b>and</b>  Response Type parameter <b>containing</b>  responseTypeValue <b>set to</b> 2 (nonBlockingRequestAsynch) <b>and</b>  NotificationURI <b>set to</b> AE1_RESOURCE_ADDRESS <b>and</b>  AE2_RESOURCE_ADDRESS</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response (Ack)  <b>and</b> the IUT <b>sends</b> a valid NOTIFY Request <b>containing</b> to AE1  Content <b>containing</b>  <b>ResponsePrimitive</b> representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> <b>containing</b>  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE  <b>and</b> the IUT <b>sends</b> a valid NOTIFY Request <b>containing</b> to AE2  Content <b>containing</b>  <b>ResponsePrimitive</b> representation indicating the response of the original Non-Blocking Asynchronous <i>OPERATION</i> <b>containing</b>  <b>Response Status Code set to</b> RESPONSE_STATUS_CODE</p> <p>}</p>	IUT → AE1 IUT → AE1 IUT → AE2							

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/RT/NBA/005_CRE	CREATE	2001 (CREATED)
TP/oneM2M/CSE/RT/NBA/005_UPD	UPDATE	2004 (UPDATED)
TP/oneM2M/CSE/RT/NBA/005_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/RT/NBA/005_DEL	DELETE	2002 (DELETED)

### 7.2.2.7.2.3 BlockingRequest (BR)

TP/oneM2M/CSE/RT/BR/001

TP Id	TP/oneM2M/CSE/RT/BR/001							
Test objective	Check that the IUT responds successfully to a Blocking Request <i>OPERATION</i>							
Reference	ETSI TS 118 101 [1], clause 8.2.1							
Config Id	CF01							
Parent Release	Release 2							
PICS Selection								
Initial conditions	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the Originator <b>having</b> privileges to perform <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS</p> }							
Expected behaviour	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>            Resource Type <b>set to</b> 3 (container) <b>and</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            ResponseType <b>set to</b> 3 (blockingRequest)</p> }       </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> RESPONSE_STATUS_CODE</p> }       </td><td>IUT → AE</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>            Resource Type <b>set to</b> 3 (container) <b>and</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            ResponseType <b>set to</b> 3 (blockingRequest)</p> }	IUT ← AE	<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> RESPONSE_STATUS_CODE</p> }	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>from</b> AE <b>containing</b>            Resource Type <b>set to</b> 3 (container) <b>and</b>            To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE-ID <b>and</b>            ResponseType <b>set to</b> 3 (blockingRequest)</p> }	IUT ← AE							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> RESPONSE_STATUS_CODE</p> }	IUT → AE							

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/RT/BR/001_CRE	CREATE	2001 (CREATED)
TP/oneM2M/CSE/RT/BR/001_UPD	UPDATE	2004 (UPDATED)
TP/oneM2M/CSE/RT/BR/001_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/RT/BR/001_DEL	DELETE	2002 (DELETED)

## 7.2.2.8 Security(SEC)

### 7.2.2.8.1 CREATE Operation

TP/oneM2M/CSE/SEC/ACP/CRE/001

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/CRE/001							
<b>Test objective</b>	Check that the IUT accepts the creation of a accessControlPolicy resource with privileges attribute having multiple access control rules							
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.2 and clause 10.2.21							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> the AE</p> <p>and the AE <b>having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS and</p> <p>From <b>set to</b> AE_ID and</p> <p>Content <b>containing</b></p> <p>accessControlPolicy resource <b>containing</b></p> <p>privileges attribute <b>containing</b></p> <p>accessControlRule attribute <b>containing</b></p> <p>ACCESS_CONTROL_RULE_1 and</p> <p>ACCESS_CONTROL_RULE_2</p> <p>}</p> </td><td>IUT ← AE</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>creates</b> the accessControlPolicy resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2001 (CREATED)</p> <p>}</p> </td><td>IUT → AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS and</p> <p>From <b>set to</b> AE_ID and</p> <p>Content <b>containing</b></p> <p>accessControlPolicy resource <b>containing</b></p> <p>privileges attribute <b>containing</b></p> <p>accessControlRule attribute <b>containing</b></p> <p>ACCESS_CONTROL_RULE_1 and</p> <p>ACCESS_CONTROL_RULE_2</p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>creates</b> the accessControlPolicy resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2001 (CREATED)</p> <p>}</p>	IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<p>when {</p> <p>the IUT <b>receives</b> a valid CREATE Request <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS and</p> <p>From <b>set to</b> AE_ID and</p> <p>Content <b>containing</b></p> <p>accessControlPolicy resource <b>containing</b></p> <p>privileges attribute <b>containing</b></p> <p>accessControlRule attribute <b>containing</b></p> <p>ACCESS_CONTROL_RULE_1 and</p> <p>ACCESS_CONTROL_RULE_2</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>creates</b> the accessControlPolicy resource</p> <p>and the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2001 (CREATED)</p> <p>}</p>	IUT → AE							

## TP/oneM2M/CSE/SEC/ACP/CRE/002

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/CRE/002	
<b>Test objective</b>	Check that the IUT accepts the creation of a accessControlPolicy resource with selfPrivileges attribute having multiple access control rules	
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.2 and clause 10.2.21	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and the IUT having registered</b> the AE</p> <p><b>and the AE having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS</p> <p>}</p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>containing</b></p> <p>To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE_ID <b>and</b></p> <p>Content <b>containing</b></p> <p>accessControlPolicy resource <b>containing</b></p> <p>selfPrivileges attribute <b>containing</b></p> <p>accessControlRule attribute <b>containing</b></p> <p>ACCESS_CONTROL_RULE_1 <b>and</b></p> <p>ACCESS_CONTROL_RULE_2</p> <p><b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>creates</b> the accessControlPolicy resource</p> <p><b>and the IUT sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 2001 (CREATED)</p> <p><b>}</b></p>	IUT ← AE
		IUT → AE

## TP/oneM2M/CSE/SEC/ACP/CRE/003

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/CRE/003	
<b>Test objective</b>	Check that the IUT accepts the creation of a accessControlPolicy resource with privileges attribute having empty rules	
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.2 and clause 10.2.21	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the AE  <b>and the AE having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS  <b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>Content containing</b>  accessControlPolicy resource <b>containing</b>  privileges attribute <b>set to</b> empty list  <b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>creates</b> the accessControlPolicy resource  <b>and the IUT sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 2001 (CREATED)  <b>}</b></p>	IUT → AE

## TP/oneM2M/CSE/SEC/ACP/CRE/004

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/CRE/004	
<b>Test objective</b>	Check that the IUT responds with an error when the creation of a accessControlPolicy resource with selfPrivileges attribute having empty rules	
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.2 and clause 10.2.21	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and the IUT having registered</b> the AE  <b>and the AE having</b> privileges to perform CREATE operation on the resource TARGET_RESOURCE_ADDRESS  <b>}</b></p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p><b>when {</b></p> <p>the IUT <b>receives</b> a valid CREATE Request <b>containing</b>  <b>To set to</b> TARGET_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE_ID <b>and</b>  <b>Content containing</b>  accessControlPolicy resource <b>containing</b>  selfPrivileges attribute <b>set to</b> empty list  <b>}</b></p>	IUT ← AE
	<p><b>then {</b></p> <p>the IUT <b>does not create</b> the accessControlPolicy resource  <b>and the IUT sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4000 (BAD_REQUEST)  <b>}</b></p>	IUT → AE

## 7.2.2.8.2 UPDATE Operation

TP/oneM2M/CSE/SEC/ACP/UPD/001

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/UPD/001							
<b>Test objective</b>	Check that the IUT updates successfully the accessControlPolicyIDs attribute of the <AE> resource when the AE has privileges for UPDATE operation in any selfPrivileges of the <accessControlPolicy> resources which this attribute originally indicates.							
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.1.3.2-1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and the IUT having registered</b> the AE <b>containing</b></p> <p style="padding-left: 20px;">accessControlPolicyID attribute <b>set to</b> ACP_ID_1</p> <p><b>and the AE having</b> privileges to perform UPDATE operation on the AE_RESOURCE_ADDRESS in selfPrivileges</p> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b> <p>the IUT <b>receives</b> a valid UPDATE Request <b>containing</b></p> <p style="padding-left: 20px;">To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b></p> <p style="padding-left: 20px;">From <b>set to</b> AE_ID</p> <p style="padding-left: 20px;">Content <b>containing</b></p> <p style="padding-left: 40px;">AE resource <b>containing</b></p> <p style="padding-left: 60px;">accessControlPolicyIDs attribute <b>set to</b> ACP_ID_2</p> <p><b>}</b></p> </td><td>IUT ← AE</td></tr> <tr> <td> <b>then {</b> <p>the IUT <b>updates</b> the accessControlPolicyIDs attribute of AE resource</p> <p><b>and the IUT sends</b> a valid Response <b>containing</b></p> <p style="padding-left: 20px;">Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b></p> <p style="padding-left: 20px;">Content <b>containing</b></p> <p style="padding-left: 40px;">AE resource <b>containing</b></p> <p style="padding-left: 60px;">accessControlPolicyID attribute <b>set to</b> ACP_ID_2</p> <p><b>}</b></p> </td><td>IUT → AE</td></tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> <p>the IUT <b>receives</b> a valid UPDATE Request <b>containing</b></p> <p style="padding-left: 20px;">To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b></p> <p style="padding-left: 20px;">From <b>set to</b> AE_ID</p> <p style="padding-left: 20px;">Content <b>containing</b></p> <p style="padding-left: 40px;">AE resource <b>containing</b></p> <p style="padding-left: 60px;">accessControlPolicyIDs attribute <b>set to</b> ACP_ID_2</p> <p><b>}</b></p>	IUT ← AE	<b>then {</b> <p>the IUT <b>updates</b> the accessControlPolicyIDs attribute of AE resource</p> <p><b>and the IUT sends</b> a valid Response <b>containing</b></p> <p style="padding-left: 20px;">Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b></p> <p style="padding-left: 20px;">Content <b>containing</b></p> <p style="padding-left: 40px;">AE resource <b>containing</b></p> <p style="padding-left: 60px;">accessControlPolicyID attribute <b>set to</b> ACP_ID_2</p> <p><b>}</b></p>	IUT → AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> <p>the IUT <b>receives</b> a valid UPDATE Request <b>containing</b></p> <p style="padding-left: 20px;">To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b></p> <p style="padding-left: 20px;">From <b>set to</b> AE_ID</p> <p style="padding-left: 20px;">Content <b>containing</b></p> <p style="padding-left: 40px;">AE resource <b>containing</b></p> <p style="padding-left: 60px;">accessControlPolicyIDs attribute <b>set to</b> ACP_ID_2</p> <p><b>}</b></p>	IUT ← AE							
<b>then {</b> <p>the IUT <b>updates</b> the accessControlPolicyIDs attribute of AE resource</p> <p><b>and the IUT sends</b> a valid Response <b>containing</b></p> <p style="padding-left: 20px;">Response Status Code <b>set to</b> 2004 (UPDATED) <b>and</b></p> <p style="padding-left: 20px;">Content <b>containing</b></p> <p style="padding-left: 40px;">AE resource <b>containing</b></p> <p style="padding-left: 60px;">accessControlPolicyID attribute <b>set to</b> ACP_ID_2</p> <p><b>}</b></p>	IUT → AE							

## TP/oneM2M/CSE/SEC/ACP/UPD/002

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/UPD/002							
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries an UPDATE operation on the accessControlPolicyIDs attribute without having privileges for such operation in any selfPrivileges of the <accessControlPolicy> resources which this attribute originally indicates.							
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.1.3.2-1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b>  accessControlPolicyID attribute <b>set to</b> ACP_ID_1  <b>and</b> the AE <b>having no</b> privileges to perform UPDATE operation on the  AE_RESOURCE_ADDRESS in selfPrivileges</p> <p>}</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>containing</b>  To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID  Content <b>containing</b>  AE resource <b>containing</b>  accessControlPolicyID attribute <b>set to</b> ACP_ID_2</p> <p>}</p> </td> <td>IUT ← AE</td> </tr> <tr> <td> <p>then {</p> <p>the IUT <b>does not update</b> the accessControlPolicyIDs attribute of AE  resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4103 (ACCESS_DENIED)</p> <p>}</p> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>containing</b>  To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID  Content <b>containing</b>  AE resource <b>containing</b>  accessControlPolicyID attribute <b>set to</b> ACP_ID_2</p> <p>}</p>	IUT ← AE	<p>then {</p> <p>the IUT <b>does not update</b> the accessControlPolicyIDs attribute of AE  resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4103 (ACCESS_DENIED)</p> <p>}</p>	IUT → AE	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>containing</b>  To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>  From <b>set to</b> AE_ID  Content <b>containing</b>  AE resource <b>containing</b>  accessControlPolicyID attribute <b>set to</b> ACP_ID_2</p> <p>}</p>	IUT ← AE							
<p>then {</p> <p>the IUT <b>does not update</b> the accessControlPolicyIDs attribute of AE  resource  <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4103 (ACCESS_DENIED)</p> <p>}</p>	IUT → AE							

### 7.2.2.8.3 BASIC OPERATION

TP/oneM2M/CSE/SEC/ACP/001

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/001	
<b>Test objective</b>	Check that the IUT responds with an error when an ORIGINATOR tries an <i>OPERATION</i> without having privileges for performing the <i>OPERATION</i> on the TARGET_RESOURCE_TYPE resource.	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.1.3.2-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> the ORIGINATOR <b>having no</b> privileges to perform an <i>OPERATION</i> on the resource TARGET_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b> To <b>set to</b> TARGET_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> ORIGINATOR_ID <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) <b>}</b>	<b>Direction</b> IUT ← ORIGINATOR  IUT → ORIGINATOR

<b>TP Id</b>	<b>OPERATION</b>
TP/oneM2M/CSE/SEC/ACP/001_CRE	CREATE
TP/oneM2M/CSE/SEC/ACP/001_RET	RETRIEVE
TP/oneM2M/CSE/SEC/ACP/001_UPD	UPDATE
TP/oneM2M/CSE/SEC/ACP/001_DEL	DELETE

## TP/oneM2M/CSE/SEC/ACP/002

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/014							
<b>Test objective</b>	Check that the IUT responds successfully when the AE tries an <i>OPERATION</i> on its <AE> resource which has multiple accessControlPolicyID attribute							
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.1.3.2-1 and table 9.6.2.1-1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and the IUT having registered</b> the AE</p> <p><b>and the AE having</b> a child &lt;Container&gt; resource <b>containing</b></p> <p>accessControlPolicyID attribute <b>containing</b></p> <p>ACP_ID_1 <b>and</b></p> <p>ACP_ID_2</p> <p><b>and the AE having</b> privileges to perform an <i>OPERATION</i> on itself <b>given by</b> ACP_ID_2 only</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when {</b> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b></p> <p>To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE_ID</p> <b>}</b> </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then {</b> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> RESPONSE_STATUS_CODE</p> <b>}</b> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when {</b> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b></p> <p>To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE_ID</p> <b>}</b>	IUT ← AE	<b>then {</b> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> RESPONSE_STATUS_CODE</p> <b>}</b>	IUT → AE	
Test events	Direction							
<b>when {</b> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b></p> <p>To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE_ID</p> <b>}</b>	IUT ← AE							
<b>then {</b> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> RESPONSE_STATUS_CODE</p> <b>}</b>	IUT → AE							

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/SEC/ACP/002_CRE	CREATE	2001 (CREATED)
TP/oneM2M/CSE/SEC/ACP/002_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/SEC/ACP/002_UPD	UPDATE	2004 (UPDATED)
TP/oneM2M/CSE/SEC/ACP/002_DEL	DELETE	2002 (DELETED)

## TP/oneM2M/CSE/SEC/ACP/003

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/003	
<b>Test objective</b>	Check that the IUT responds successfully when an allowed DOMAIN tries an <i>OPERATION</i> on a AE_RESOURCE_TYPE resource.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and the IUT having registered</b> the AE <b>and the DOMAIN having</b> privileges to perform an <i>OPERATION</i> on the resource AE_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<b>when {</b> the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> DOMAIN <b>}</b>	IUT ← DOMAIN
	<b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>}</b>	IUT → DOMAIN

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/SEC/ACP/003_CRE	CREATE	2001 (CREATED)
TP/oneM2M/CSE/SEC/ACP/003_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/SEC/ACP/003_UPD	UPDATE	2004 (UPDATED)
TP/oneM2M/CSE/SEC/ACP/003_DEL	DELETE	2002 (DELETED)

## TP/oneM2M/CSE/SEC/ACP/004

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/004	
<b>Test objective</b>	Check that the IUT responds successfully when any ORIGINATOR tries an <i>OPERATION</i> on a AE_RESOURCE_TYPE resource for which all originators are allowed	
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.2.1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" <b>and</b> the IUT <b>having registered</b> the AE <b>and</b> any originator (*) <b>having</b> privileges to perform an <i>OPERATION</i> on the resource AE_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> ORIGINATOR <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Response containing Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>}</b>	<b>Direction</b> IUT ← ORIGINATOR  IUT → ORIGINATOR

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/SEC/ACP/004_CRE	CREATE	2001 (CREATED)
TP/oneM2M/CSE/SEC/ACP/004_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/SEC/ACP/004_UPD	UPDATE	2004 (UPDATED)
TP/oneM2M/CSE/SEC/ACP/004_DEL	DELETE	2002 (DELETED)

## TP/oneM2M/CSE/SEC/ACP/005

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/005							
<b>Test objective</b>	Check that the IUT responds successfully when the AE tries an <i>OPERATION</i> on a AE_RESOURCE_TYPE resource and that the request is within accessControlTimeWindow context.							
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.2.2-1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the AE <b>having</b> privileges to perform <i>OPERATION</i> on the AE_RESOURCE_ADDRESS <b>within</b> TIME_WINDOW</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {            the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b>            To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE_ID  <b>within</b> TIME_WINDOW         </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then</b> {            the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> RESPONSE_STATUS_CODE         </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when</b> { the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>within</b> TIME_WINDOW	IUT ← AE	<b>then</b> { the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> RESPONSE_STATUS_CODE	IUT → AE	
Test events	Direction							
<b>when</b> { the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>within</b> TIME_WINDOW	IUT ← AE							
<b>then</b> { the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> RESPONSE_STATUS_CODE	IUT → AE							

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/SEC/ACP/005_CRE	CREATE	2001 (CREATED)
TP/oneM2M/CSE/SEC/ACP/005_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/SEC/ACP/005_UPD	UPDATE	2004 (UPDATED)
TP/oneM2M/CSE/SEC/ACP/005_DEL	DELETE	2002 (DELETED)

## TP/oneM2M/CSE/SEC/ACP/006

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/006						
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries an <i>OPERATION</i> on a AE_RESOURCE_TYPE resource out of accessControlTimeWindow context.						
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.2.2-1						
<b>Config Id</b>	CF01						
<b>Parent Release</b>	Release 1						
<b>PICS Selection</b>	PICS_CSE						
<b>Initial conditions</b>	<pre>with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the AE <b>having</b> privileges to perform <i>OPERATION</i> on the     AE_RESOURCE_ADDRESS <b>within</b> TIME_WINDOW }</pre>						
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <pre>when {     the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b>         To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID         <b>out of</b> TIME_WINDOW }</pre> </td> <td>IUT ← AE</td> </tr> <tr> <td> <pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) }</pre> </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<pre>when {     the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b>         To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID         <b>out of</b> TIME_WINDOW }</pre>	IUT ← AE	<pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) }</pre>	IUT → AE
Test events	Direction						
<pre>when {     the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b>         To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID         <b>out of</b> TIME_WINDOW }</pre>	IUT ← AE						
<pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) }</pre>	IUT → AE						

TP Id	OPERATION
TP/oneM2M/CSE/SEC/ACP/006_CRE	CREATE
TP/oneM2M/CSE/SEC/ACP/006_RET	RETRIEVE
TP/oneM2M/CSE/SEC/ACP/006_UPD	UPDATE
TP/oneM2M/CSE/SEC/ACP/006_DEL	DELETE

## TP/oneM2M/CSE/SEC/ACP/007

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/007	
<b>Test objective</b>	Check that the IUT responds successfully when the AE tries an <i>OPERATION</i> on a AE_RESOURCE_TYPE resource and that the request is within accessControlLocationRegion context.	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.2.2-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE containing            a child locationPolicy resource <b>containing</b>            locationContainerID attribute <b>set to</b> CONTAINER_ID  <b>and</b> a child container resource <b>containing</b>            locationID attribute <b>set to</b> LOCATION_POLICY_ID <b>and</b>            contentInstance resource <b>containing</b>            content attribute <b>set to</b> LOCATION  <b>and</b> the AE <b>having</b> privileges to perform <i>OPERATION</i> on the AE_RESOURCE_ADDRESS  <b>within</b> LOCATION_RESTRICTION</p> <p>}</p>	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	when { the IUT receives a valid <i>OPERATION</i> containing To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> LOCATION <b>within</b> LOCATION_RESTRICTION }	IUT ← AE
	then { the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> RESPONSE_STATUS_CODE }	IUT → AE

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/SEC/ACP/007_CRE	CREATE	2001 (CREATED)
TP/oneM2M/CSE/SEC/ACP/007_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/SEC/ACP/007_UPD	UPDATE	2004 (UPDATED)
TP/oneM2M/CSE/SEC/ACP/007_DEL	DELETE	2002 (DELETED)

## TP/oneM2M/CSE/SEC/ACP/008

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/008						
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries an <i>OPERATION</i> on a AE_RESOURCE_TYPE resource out of accessControlLocationRegion context.						
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.2.2-1						
<b>Config Id</b>	CF01						
<b>Parent Release</b>	Release 1						
<b>PICS Selection</b>	PICS_CSE						
<b>Initial conditions</b>	<pre>with {     the IUT <b>being</b> in the "initial state"     <b>and</b> the IUT <b>having registered</b> the AE     <b>and</b> the AE <b>having</b> privileges to perform <i>OPERATION</i> on the         AE_RESOURCE_ADDRESS <b>within</b> LOCATION_RESTRICTION }</pre>						
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <pre>when {     the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b>         To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID         <b>out of</b> LOCATION_RESTRICTION }</pre> </td> <td>IUT ← AE</td> </tr> <tr> <td> <pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) }</pre> </td> <td>IUT → AE</td> </tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<pre>when {     the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b>         To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID         <b>out of</b> LOCATION_RESTRICTION }</pre>	IUT ← AE	<pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) }</pre>	IUT → AE
<b>Test events</b>	<b>Direction</b>						
<pre>when {     the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b>         To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>         From <b>set to</b> AE_ID         <b>out of</b> LOCATION_RESTRICTION }</pre>	IUT ← AE						
<pre>then {     the IUT <b>sends</b> a valid Response <b>containing</b>         Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) }</pre>	IUT → AE						

<b>TP Id</b>	<b>OPERATION</b>
TP/oneM2M/CSE/SEC/ACP/008_CRE	CREATE
TP/oneM2M/CSE/SEC/ACP/008_RET	RETRIEVE
TP/oneM2M/CSE/SEC/ACP/008_UPD	UPDATE
TP/oneM2M/CSE/SEC/ACP/008_DEL	DELETE

## TP/oneM2M/CSE/SEC/ACP/009

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/009							
<b>Test objective</b>	Check that the IUT responds successfully when the AE tries an <i>OPERATION</i> on a TARGET_RESOURCE_TYPE resource and that the request is within accessControlIpAddresses context.							
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.2.2-1							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the AE <b>having</b> privileges to perform <i>OPERATION</i> on the AE_RESOURCE_ADDRESS <b>within</b> IP_ADDRESS_RESTRICTION</p> }							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <b>when</b> {            the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b>            To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE_ID  <b>and</b> AE_IP_ADDRESS <b>within</b> IP_ADDRESS_RESTRICTION  }         </td> <td>IUT ← AE</td> </tr> <tr> <td> <b>then</b> {            the IUT <b>sends</b> a valid Response <b>containing</b>            Response Status Code <b>set to</b> RESPONSE_STATUS_CODE  }         </td> <td>IUT → AE</td> </tr> </tbody> </table>	Test events	Direction	<b>when</b> { the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> AE_IP_ADDRESS <b>within</b> IP_ADDRESS_RESTRICTION }	IUT ← AE	<b>then</b> { the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> RESPONSE_STATUS_CODE }	IUT → AE	
Test events	Direction							
<b>when</b> { the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> AE_IP_ADDRESS <b>within</b> IP_ADDRESS_RESTRICTION }	IUT ← AE							
<b>then</b> { the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> RESPONSE_STATUS_CODE }	IUT → AE							

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/SEC/ACP/009_CRE	CREATE	2001 (CREATED)
TP/oneM2M/CSE/SEC/ACP/009_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/SEC/ACP/009_UPD	UPDATE	2004 (UPDATED)
TP/oneM2M/CSE/SEC/ACP/009_DEL	DELETE	2002 (DELETED)

## TP/oneM2M/CSE/SEC/ACP/010

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/010	
<b>Test objective</b>	Check that the IUT responds with an error when the AE tries an <i>OPERATION</i> on a AE_RESOURCE_TYPE resource out of accessControlIpAddresses context.	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.2.2-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"</p> <p>and the IUT <b>having registered</b> the AE</p> <p>and the AE <b>having</b> privileges to perform <i>OPERATION</i> on the AE_RESOURCE_ADDRESS <b>within</b> IP_ADDRESS_RESTRICTION</p> }	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<p>when {</p> <p>the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b></p> <p>To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE_ID</p> <p>and AE_IP_ADDRESS <b>out of</b> IP_ADDRESS_RESTRICTION</p> }	IUT ← AE
	<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b></p> <p>Response Status Code <b>set to</b> 4103 (ACCESS_DENIED)</p> }	IUT → AE

<b>TP Id</b>	<b>OPERATION</b>
TP/oneM2M/CSE/SEC/ACP/010_CRE	CREATE
TP/oneM2M/CSE/SEC/ACP/010_RET	RETRIEVE
TP/oneM2M/CSE/SEC/ACP/010_UPD	UPDATE
TP/oneM2M/CSE/SEC/ACP/010_DEL	DELETE

## TP/oneM2M/CSE/SEC/ACP/011

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/011	
<b>Test objective</b>	Check that the IUT responds successfully when the AE tries an <i>OPERATION</i> on its child <container> resource whose accessControlPolicyID attribute is not set and AE has privileges for such <i>OPERATION</i> on its associated accessControlPolicy resource	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.1.3.2-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the AE <b>having</b> a child &lt;Container&gt; resource <b>containing</b>  <b>no</b> accessControlPolicyID attribute  <b>and</b> the AE <b>having</b> privileges to perform an <i>OPERATION</i> on the resource CONTAINER_RESOURCE_ADDRESS</p> <p>}</p>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when</b> { the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>}</b> <b>then</b> { the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> RESPONSE_STATUS_CODE <b>}</b>	<b>Direction</b> IUT ← AE IUT → AE

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/SEC/ACP/011_CRE	CREATE	2001 (CREATED)
TP/oneM2M/CSE/SEC/ACP/011_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/SEC/ACP/011_UPD	UPDATE	2004 (UPDATED)
TP/oneM2M/CSE/SEC/ACP/011_DEL	DELETE	2002 (DELETED)

## TP/oneM2M/CSE/SEC/ACP/012

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/012	
<b>Test objective</b>	Check that the IUT responds with an error when an ORIGINATOR tries an <i>OPERATION</i> on a <Container> resource with no accessControlPolicyID associated and such ORIGINATOR having no privileges for performing the <i>OPERATION</i> on the <Container> resource.	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.1.3.2-1	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE, PICS_ACP_SUPPORT	
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE  <b>and</b> the AE <b>having</b> a child &lt;Container&gt; resource <b>containing</b>  <b>no</b> accessControlPolicyID attribute  <b>and</b> the ORIGINATOR <b>having no</b> privileges to perform an <i>OPERATION</i> on the &lt;Container&gt; resource</p> <p>}</p>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> a valid <i>OPERATION</i> Request <b>containing</b> To <b>set to</b> CONTAINER_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> ORIGINATOR_ID <b>}</b> <b>then {</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4103 (ACCESS_DENIED) <b>}</b>	<b>Direction</b> IUT ← ORIGINATOR IUT → ORIGINATOR

TP Id	OPERATION
TP/oneM2M/CSE/SEC/ACP/012_CRE	CREATE
TP/oneM2M/CSE/SEC/ACP/012_RET	RETRIEVE
TP/oneM2M/CSE/SEC/ACP/012_UPD	UPDATE
TP/oneM2M/CSE/SEC/ACP/012_DEL	DELETE

## TP/oneM2M/CSE/SEC/ACP/013

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/013	
<b>Test objective</b>	Check that the IUT responds successfully when the creator AE tries an <i>OPERATION</i> on the AE resource whose accessControlPolicyIDs attribute is not set.	
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.1.3.2-1	
<b>Config Id</b>	CF01	
<b>Parent release</b>	Release 1	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p>with {</p> <p style="padding-left: 20px;">the IUT <b>being</b> in the "initial state"</p> <p style="padding-left: 20px;"><b>and</b> the IUT <b>having registered</b> the AE</p> <p style="padding-left: 20px;"><b>and</b> the &lt;AE&gt; resource <b>having no</b> accessControlPolicyIDs attribute</p> }	
<b>Expected behaviour</b>	<b>Test events</b> <p>when {</p> <p style="padding-left: 20px;">the IUT receives a valid <i>OPERATION</i> Request <b>containing</b></p> <p style="padding-left: 40px;">To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b></p> <p style="padding-left: 40px;">From <b>set to</b> AE_ID</p> }	IUT ← AE
	<p>then {</p> <p style="padding-left: 20px;">the IUT <b>sends</b> a valid Response <b>containing</b></p> <p style="padding-left: 40px;">Response Status Code <b>set to</b> RESPONSE_STATUS_CODE</p> }	IUT → AE

TP Id	OPERATION	RESPONSE_STATUS_CODE
TP/oneM2M/CSE/SEC/ACP/013_CRE	CREATE	2001 (CREATED)
TP/oneM2M/CSE/SEC/ACP/013_RET	RETRIEVE	2000 (OK)
TP/oneM2M/CSE/SEC/ACP/013_UPD	UPDATE	2004 (UPDATED)
TP/oneM2M/CSE/SEC/ACP/013_DEL	DELETE	2002 (DELETED)

## TP/oneM2M/CSE/SEC/ACP/014

<b>TP Id</b>	TP/oneM2M/CSE/SEC/ACP/014							
<b>Test objective</b>	Check that the IUT responds with an error when an AE2 tries an OPERATION on the AE1 resource whose accessControlPolicyIDs attribute is not set.							
<b>Reference</b>	ETSI TS 118 101 [1], table 9.6.1.3.2-1							
<b>Config Id</b>	CF01							
<b>Parent release</b>	Release 1							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p>with {</p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE1  <b>and</b> the IUT <b>having registered</b> the AE2  <b>and</b> the &lt;AE&gt; resource of AE1 <b>having no</b> accessControlPolicyIDs attribute  }</p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th>Test events</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td> <p>when {</p> <p>the IUT <b>receives</b> a valid OPERATION Request <b>containing</b>  <b>To set to</b> AE1_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE2_ID  }</p> </td><td>IUT ← AE2</td></tr> <tr> <td> <p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4103 (ACCESS_DENIED)  }</p> </td><td>IUT → AE2</td></tr> </tbody> </table>	Test events	Direction	<p>when {</p> <p>the IUT <b>receives</b> a valid OPERATION Request <b>containing</b>  <b>To set to</b> AE1_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE2_ID  }</p>	IUT ← AE2	<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4103 (ACCESS_DENIED)  }</p>	IUT → AE2	
Test events	Direction							
<p>when {</p> <p>the IUT <b>receives</b> a valid OPERATION Request <b>containing</b>  <b>To set to</b> AE1_RESOURCE_ADDRESS <b>and</b>  <b>From set to</b> AE2_ID  }</p>	IUT ← AE2							
<p>then {</p> <p>the IUT <b>sends</b> a valid Response <b>containing</b>  Response Status Code <b>set to</b> 4103 (ACCESS_DENIED)  }</p>	IUT → AE2							

TP Id	OPERATION
TP/oneM2M/CSE/SEC/ACP/014_CRE	CREATE
TP/oneM2M/CSE/SEC/ACP/014_RET	RETRIEVE
TP/oneM2M/CSE/SEC/ACP/014_UPD	UPDATE
TP/oneM2M/CSE/SEC/ACP/014_DEL	DELETE

## 7.2.2.9 FlexContainer

### 7.2.2.9.1 CREATE Operation

TP/oneM2M/CSE/FLXC/CRE/001

<b>TP Id</b>	TP/oneM2M/CSE/FLXC/CRE/001	
<b>Test objective</b>	Check that the IUT rejects the creation of the <flexContainer> resource when the resource representation does not comply with the schema definition.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.29, ETSI TS 118 104 [2], clause 7.4.29.2.1	
<b>Parent Release</b>	Release 2	
<b>Config Id</b>	CF01	
<b>PICS Selection</b>	PICS_CSE,	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" and the IUT <b>having registered</b> the AE and the AE <b>having</b> privileges to perform CREATE operation on the resource AE_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> an invalid CREATE request from AE <b>containing</b> To <b>set to</b> AE_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Resource Type <b>set to</b> 28 (flexContainer) <b>and</b> Content <b>containing</b> an invalid resource representation <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>does not create</b> the flexContainer resource <b>and</b> the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4000 (BAD_REQUEST) <b>}</b>	IUT → AE

## 7.2.2.9.2 UPDATE Operation

TP/oneM2M/CSE/FLXC/UPD/001

<b>TP Id</b>	TP/oneM2M/CSE/FLXC/UPD/001							
<b>Test objective</b>	Check that the IUT increments the field value of attribute <i>stateTag</i> in the <flexContainer> resource when a custom attribute of the resource is modified.							
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.35							
<b>Config Id</b>	CF01							
<b>Parent Release</b>	Release 2							
<b>PICS Selection</b>	PICS_CSE							
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"  <b>and</b> the IUT <b>having registered</b> the AE <b>containing</b>            a container resource FLEXCONTAINER_RESOURCE_ADDRESS <b>containing</b>            stateTag attribute  <b>and</b> the AE <b>having</b> privileges to perform UPDATE operation on the resource            FLEXCONTAINER_RESOURCE_ADDRESS</p> <p><b>}</b></p>							
<b>Expected behaviour</b>	<table border="1"> <thead> <tr> <th><b>Test events</b></th> <th><b>Direction</b></th> </tr> </thead> <tbody> <tr> <td> <b>when {</b>            the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b>            To <b>set to</b> FLEXCONTAINER_RESOURCE_ADDRESS <b>and</b>            From <b>set to</b> AE_ID <b>and</b>            Content <b>containing</b>            flexContainer resource <b>containing</b>            ATTRIBUTE_NAME attribute <b>set to</b> VALUE  <b>}</b> </td> <td>IUT <math>\leftarrow</math> AE</td> </tr> <tr> <td> <b>then {</b>            the IUT <b>increments</b> the stateTag attribute of            FLEXCONTAINER_RESOURCE_ADDRESS resource  <b>and</b> the IUT sends a valid Response <b>containing</b>            Response Status Code <b>set to</b> 2004 (UPDATED)  <b>}</b> </td> <td>IUT <math>\rightarrow</math> AE</td> </tr> </tbody> </table>	<b>Test events</b>	<b>Direction</b>	<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> FLEXCONTAINER_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> flexContainer resource <b>containing</b> ATTRIBUTE_NAME attribute <b>set to</b> VALUE <b>}</b>	IUT $\leftarrow$ AE	<b>then {</b> the IUT <b>increments</b> the stateTag attribute of FLEXCONTAINER_RESOURCE_ADDRESS resource <b>and</b> the IUT sends a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>}</b>	IUT $\rightarrow$ AE	
<b>Test events</b>	<b>Direction</b>							
<b>when {</b> the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b> To <b>set to</b> FLEXCONTAINER_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> flexContainer resource <b>containing</b> ATTRIBUTE_NAME attribute <b>set to</b> VALUE <b>}</b>	IUT $\leftarrow$ AE							
<b>then {</b> the IUT <b>increments</b> the stateTag attribute of FLEXCONTAINER_RESOURCE_ADDRESS resource <b>and</b> the IUT sends a valid Response <b>containing</b> Response Status Code <b>set to</b> 2004 (UPDATED) <b>}</b>	IUT $\rightarrow$ AE							

## TP/oneM2M/CSE/FLXC/UPD/002

<b>TP Id</b>	TP/oneM2M/CSE/FLXC/UPD/002	
<b>Test objective</b>	Check that the IUT does not increment the field value of attribute <i>stateTag</i> in the <flexContainer> resource when a common attribute of the resource is modified.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 9.6.35	
<b>Config Id</b>	CF01	
<b>Parent Release</b>	Release 2	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	<p><b>with {</b></p> <p>the IUT <b>being</b> in the "initial state"</p> <p><b>and the IUT having registered</b> the AE <b>containing</b></p> <p>a container resource FLEXCONTAINER_RESOURCE_ADDRESS <b>containing</b></p> <p>stateTag attribute</p> <p><b>and the AE having</b> privileges to perform UPDATE operation on the resource FLEXCONTAINER_RESOURCE_ADDRESS</p> <p><b>}</b></p>	
<b>Expected behaviour</b>	<p><b>Test events</b></p> <p><b>when {</b></p> <p>the IUT <b>receives</b> a valid UPDATE Request <b>from</b> AE <b>containing</b></p> <p>To <b>set to</b> FLEXCONTAINER_RESOURCE_ADDRESS <b>and</b></p> <p>From <b>set to</b> AE_ID <b>and</b></p> <p>Content <b>containing</b></p> <p>flexContainer resource <b>containing</b></p> <p>ATTRIBUTE_NAME attribute <b>set to</b> VALUE</p> <p><b>}</b></p> <p><b>then {</b></p> <p>the IUT <b>does not increment</b> the stateTag attribute of FLEXCONTAINER resource</p> <p><b>and the IUT sends a valid Response</b> <b>containing</b></p> <p>Response Status Code <b>set to</b> 2004 (UPDATED)</p> <p><b>}</b></p>	<p><b>Direction</b></p> <p>IUT ← AE</p> <p>IUT → AE</p>

## TP/oneM2M/CSE/FLXC/UPD/003

<b>TP Id</b>	TP/oneM2M/CSE/FLXC/UPD/003	
<b>Test objective</b>	Check that the IUT rejects the update of the <flexContainer> resource when the resource representation does not comply with the schema definition.	
<b>Reference</b>	ETSI TS 118 101 [1], clause 10.2.29, ETSI TS 118 104 [2], clause 7.4.29.2.3	
<b>Parent Release</b>	Release 2	
<b>Config Id</b>	CF01	
<b>PICS Selection</b>	PICS_CSE,	
<b>Initial conditions</b>	<b>with {</b> the IUT <b>being</b> in the "initial state" and the IUT <b>having registered</b> the AE and the AE <b>having</b> privileges to perform UPDATE operation on the resource FLXC_RESOURCE_ADDRESS <b>}</b>	
<b>Expected behaviour</b>	<b>Test events</b> <b>when {</b> the IUT <b>receives</b> an invalid UPDATE request <b>from</b> AE <b>containing</b> To <b>set to</b> FLXC_RESOURCE_ADDRESS <b>and</b> From <b>set to</b> AE_ID <b>and</b> Content <b>containing</b> flexContainer resource <b>containing</b> an invalid resource representation <b>}</b>	IUT ← AE
	<b>then {</b> the IUT <b>does not update</b> the flexContainer resource and the IUT <b>sends</b> a valid Response <b>containing</b> Response Status Code <b>set to</b> 4000 (BAD_REQUEST) <b>}</b>	IUT → AE

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## Annex A (informative): Conformance Test Requirement

### A.1 MQTT Protocol Conformance Test Requirement

Test Items		TS Clause	Obligation	Condition for Optional Item	Checking point	Fail condition
Commonly Repeated Items		ETSI TS 118 110 [5], clause 5.1	Mandatory		"QoS=1"	Fail when QoS is other than "1"
		ETSI TS 118 110 [5], clause 5.1	Mandatory		"Retain" flag set as "0"	Fail if DUT sends with "Retain" flag=1
Connection Items	Connect	ETSI TS 118 110 [5], clause 6.3	Mandatory		Prefix A:: or C:: is added to the ID	Fail if Prefix A:: or C:: are not added to the ID
		ETSI TS 118 110 [5], clause 6.3	Mandatory		if Clean session (ex: Retain) flag is set to "False" in CONNECT	Fail when clean session is "True" when DUT want to be connected
		ETSI TS 118 110 [5], clause 6.3	Mandatory		if "Will Flag" is not set in CONNECT	Fail when will flag is enabled
	Disconnect	ETSI TS 118 110 [5], clause 6.3	Mandatory		if Clean session (ex: Retain) flag is set to "True" in CONNECT	Fail when clean session is "False" when DUT want to be disconnected
Subscription Items		ETSI TS 118 110 [5], clause 5.1	Mandatory		if the message is set to Durable	Fail if the message is not Durable
		ETSI TS 118 110 [5], clause 6.4.4	Conditional	(for Initial Registration) when Originator does not know its ID	if DUT's Initial ID assigning /oneM2M/reg_req/<originator>/<receiver> oneM2M/reg_resp/<originator>/<receiver>	Fail if DUT's ID assigning is other than this
Publish Item		ETSI TS 118 110 [5], Figure 6.4.5-2	Conditional	when Originator knows its ID	if DUT's Initial ID assigning oneM2M/req/<Originator>/<Receiver>	Fail if DUT's ID assigning is other than this
		ETSI TS 118 110 [5], Figure 6.4.5-2	Conditional	When Originator uses wild card	if DUT's Initial ID assigning oneM2M/req/+/<Receiver>	Fail if DUT's ID assigning is other than this
		ETSI TS 118 110 [5], Clause 6.5.1	Conditional		if the has proper Primitive contents ("op", "fr", "to", "ri", "pc", "ty")	Fail if any of primitive contents feature wrong
Reception Item		ETSI TS 118 110 [5], Figure 6.4.5-2	Conditional	when Originator knows its ID	if DUT's Initial ID assigning oneM2M/resp/<Originator>/<Receiver>	Fail if DUT's ID assigning is other than this
		ETSI TS 118 110 [5], Figure 6.4.5-2	Conditional	When Originator uses wild card	if DUT's Initial ID assigning oneM2M/resp/<Originator>/+	Fail if DUT's ID assigning is other than this
		ETSI TS 118 110 [5], Figure 6.4.5-2	Conditional		server Delete received contents properly not storing data	Fail if Receiver stores message

Test Items	TS Clause	Obligation	Condition for Optional Item	Checking point	Fail condition
	ETSI TS 118 110 [5], Figure 6.4.5-2	Conditional		If the receiver sends PubACK when receives messages	Fail if the receiver does not send PubACK
	ETSI TS 118 110 [5], Clause 6.5.1	Mandatory		if the has proper Primitive contents ("op", "fr", "to", "ri", "pc", "ty")	Fail if any of primitive contents feature wrong

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## Annex B (informative): TP template

<b>TP Id</b>		
<b>Test objective</b>		
<b>Reference</b>		
<b>Config Id</b>		
<b>PICS Selection</b>		
<b>Initial conditions</b>		
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	<code>when { }</code>	IUT ← AE
	<code>then { }</code>	IUT → AE

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## History

Document history		
V2.13.1	December 2020	Publication