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TECHNICAL SPECIFICATION

Universal Mobile Telecommunications System (UMTS);
LTE;
Telecommunication management;
Inventory Management (IM) Network Resource Model (NRM)
Integration Reference Point (IRP);
Requirements
(3GPP TS 28.631 version 17.0.0 Release 17)

Reference

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Contents

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

x   the first digit:

1   presented to TSG for information;

2   presented to TSG for approval;

3   or greater indicates TSG approved document under change control.

y   the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

z   the third digit is incremented when editorial only changes have been incorporated in the document.

Ready for Converged Management

This specification is part of a set that has been developed for converged management solutions.

Introduction

The present document is part of a TS-family covering the 3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Telecommunication management; as identified below:

32.690:   Inventory Management (IM): Requirements

28.631:   Inventory Management (IM) Network Resource Model (NRM) Integration Reference Point (IRP); Requirements

28.632:   Inventory Management (IM) Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)

28.633:   Inventory Management (IM) Network Resource Model Integration Reference Point (IRP), Solution Set (SS) definitions

Inventory Management (IM), in general, provides the operator with the ability to assure correct and effective operation of the 3G network as it evolves. IM actions have the objective to monitor the actual configuration on the Network Elements (NEs) and Network Resources (NRs), and they may be initiated by the operator or by functions in the Operations Systems (OSs) or NEs. The final goal of IM is the establishment of an accurate and timely model of the actual inventory in the NEs or NRs.

IM actions may be requested to reflect changes initiated by Configuration Management (CM) actions or to make sure that the inventory model is in synch with the actual inventory. IM actions are initiated either as single actions on single NEs of the 3G network or as part of a complex procedure involving actions on many resources/objects in one or several NEs.

1 Scope

The present document defines, in addition to the requirements defined in 3GPP TS 32.101 [1], 3GPP TS 32.102 [2] and 3GPP TS 32.600 [3], the requirements for the present IRP: Inventory Management (IM)Network Resource Model (NRM) IRP.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1]   3GPP TS 32.101: "Telecommunication management; Principles and high level requirements".

[2]   3GPP TS 32.102: "Telecommunication management; Architecture".

[3]   3GPP TS 32.600: "Telecommunication management; Configuration Management (CM); Concept and high-level requirements".

[4]   3GPP TS 28.622: "Telecommunication management; Generic Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)".

[5]   3GPP TS 32.107: "Telecommunication management; Fixed Mobile Convergence (FMC) Federated Network Information Model (FNIM)".

[6]   3GPP TS 28.620: "Telecommunication management; Fixed Mobile Convergence (FMC) Federated Network Information Model (FNIM) Umbrella Information Model (UIM)".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

data: See 3GPP TS 32.600 [3].

IRP: See 3GPP TS 32.101 [1].

Network Resource Model (NRM): See 3GPP TS 28.622 [4].

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

EPS	Evolved Packet System
IRP	Integration Reference Point
NRM	Network Resource Model
SON	Self-Organized Network

4 Requirements

The following general and high-level requirements apply for the present IRP:

A) IRP-related requirements in 3GPP TS 32.101 [1].

B) IRP-related requirements in 3GPP TS 32.102 [2].

C) IRP-related requirements in 3GPP TS 32.600 [3].

The NRM defined by this IRP:

D)   Shall support communications for telecommunication network management purposes, including management of converged networks.

E)   Is a member of the Federated Network Information Model (FNIM) [5] and its information is derived from FNIM Umbrella Information Model (UIM) [6]

In addition to the above, the following more specific requirements apply:

REQ-IM_NRM-CON-001: The NRM defined by this IRP shall provide inventory data over Itf-N of network entities in the 3G network.

REQ-IM_NRM-CON-002: The NRM defined by this IRP shall provide inventory data over Itf-N of network entities in the EPS network including those installed by SON functionality.

Annex A (informative):Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
2014-06	SA#64	SP-140358	001	-	remove the feature support statements	11.0.0	11.1.0
2014-09	-	-	-	-	Update to Rel-12 version (MCC)	11.1.0	**12.0.0**
2016-01	-	-	-	-	Update to Rel-13 version (MCC)	12.0.0	**13.0.0**
2017-03	SA#75	-	-	-	Promotion to Release 14 without technical change	13.0.0	**14.0.0**
2018-06	-	-	-	-	Update to Rel-15 version (MCC)	14.0.0	**15.0.0**
2020-07	-	-	-	-	Update to Rel-16 version (MCC)	15.0.0	**16.0.0**
2022-03	-	-	-	-	Update to Rel-17 version (MCC)	16.0.0	**17.0.0**

History

Document history		
V17.0.0	April 2022	Publication