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Integration Reference Point (IRP) overview and usage guide
(3GPP TS 32.103 version 12.3.0 Release 12)**



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Foreword

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Introduction

This specification provides the IRP Overview for 3GPP specifications, addressing Interface IRPs, NRM IRPs, Measurement / Trace /SON specifications, as well as their relationships with each other.

1 Scope

The present document gives an overview about 3GPP's management interface capabilities and related functionality. It provides high-level information about IRP Framework, available IRPs as well as their relationship with each other. This document is intended to be a guide into the world of 3GPP management specifications, enabling also non-subject matter experts to gain an understanding about 3GPP's management solutions.

In addition Annex A provides IRP packaging suggestions, intended to guide service providers as well as equipment and solutions providers to identify and choose suitable standardized management interface capabilities.

2 References

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- [2] 3GPP TS 32.150: "Telecommunication management; Integration Reference Point (IRP) Concept and definitions".
- [3] 3GPP TS 32.101: "Telecommunication management; Principles and high level requirements".
- [4] 3GPP TS 32.102: "Telecommunication management; Architecture".
- [5] 3GPP TS 32.111-1: "Telecommunication management; Fault Management; Part 1: 3G fault management requirements".
- [6] 3GPP TS 32.111-2: "Telecommunication management; Fault Management; Part 2: Alarm Integration Reference Point (IRP): Information Service (IS)".
- [7] 3GPP TS 32.111-6: "Telecommunication management; Fault Management; Part 6: Alarm Integration Reference Point (IRP): Solution Set (SS) definitions".
- [8] 3GPP TS 32.121: "Telecommunication management; Advanced Alarm Management (AAM) Integration Reference Point (IRP): Requirements".
- [9] 3GPP TS 32.122: "Telecommunication management; Advanced Alarm Management (AAM) Integration Reference Point (IRP): Information Service (IS)".
- [10] 3GPP TS 32.126: "Telecommunication management; Advanced Alarm Management (AAM) Integration Reference Point (IRP); Solution Set (SS) definitions".
- [11] 3GPP TS 32.140: "Telecommunication management; Subscription Management (SuM) requirements".
- [12] 3GPP TS 32.141: "Telecommunication management; Subscription Management (SuM) architecture".
- [13] 3GPP TS 32.151: "Telecommunication management; Integration Reference Point (IRP) Information Service (IS) template".
- [14] 3GPP TS 32.152: "Telecommunication management; Integration Reference Point (IRP) Information Service (IS) Unified Modelling Language (UML) repertoire".

- [15] 3GPP TS 32.153: "Telecommunication management; Integration Reference Point (IRP) technology specific templates, rules and guidelines".
- [16] 3GPP TS 32.154: "Telecommunication management; Backward and Forward Compatibility (BFC); Concept and definitions".
- [17] 3GPP TS 32.155: "Telecommunication management; Requirements template".
- [18] 3GPP TS 32.156: "Telecommunication management; Fixed Mobile Convergence (FMC) model repertoire".
- [19] 3GPP TS 32.157: "Telecommunication management; Integration Reference Point (IRP) Information Service (IS) template".
- [20] 3GPP TS 32.176: Void
- [21] 3GPP TS 32.300: "Telecommunication management; Configuration Management (CM); Name convention for Managed Objects".
- [22] 3GPP TS 32.301: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP); Requirements".
- [23] 3GPP TS 32.302: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP); Information Service (IS)".
- [24] 3GPP TS 32.306: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP); Solution Set (SS) definitions".
- [25] 3GPP TS 32.311: "Telecommunication management; Generic Integration Reference Point (IRP) management; Requirements".
- [26] 3GPP TS 32.312: "Telecommunication management; Generic Integration Reference Point (IRP) management; Information Service (IS)".
- [27] 3GPP TS 32.316: "Telecommunication management; Generic Integration Reference Point (IRP) management; Solution Set (SS) definitions".
- [28] 3GPP TS 32.321: "Telecommunication management; Test management Integration Reference Point (IRP); Requirements".
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- [30] 3GPP TS 32.326: "Telecommunication management; Test management Integration Reference Point (IRP); Solution Set (SS) definitions".
- [31] 3GPP TS 32.331: "Telecommunication management; Notification Log (NL) Integration Reference Point (IRP); Requirements",
- [32] 3GPP TS 32.332: "Telecommunication management; Notification Log (NL) Integration Reference Point (IRP); Information Service (IS)".
- [33] 3GPP TS 32.336: "Telecommunication management; Notification Log (NL) Integration Reference Point (IRP); Solution Set (SS) definitions".
- [34] 3GPP TS 32.341: "Telecommunication management; File Transfer (FT) Integration Reference Point (IRP); Requirements".
- [35] 3GPP TS 32.342: "Telecommunication management; File Transfer (FT) Integration Reference Point (IRP); Information Service (IS)".
- [36] 3GPP TS 32.346: "Telecommunication management; File Transfer (FT) Integration Reference Point (IRP); Solution Set (SS) definitions".
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- [38] 3GPP TS 32.352: "Telecommunication management; Communication Surveillance (CS) Integration Reference Point (IRP); Information Service (IS)".
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- [41] 3GPP TS 32.362: "Telecommunication management; Entry Point (EP) Integration Reference Point (IRP); Information Service (IS)".
- [42] 3GPP TS 32.366: "Telecommunication management; Entry Point (EP) Integration Reference Point (IRP); Solution Set (SS) definitions".
- [43] 3GPP TS 32.381: "Telecommunication management; Partial Suspension of Itf-N Integration Reference Point (IRP); Requirements".
- [44] 3GPP TS 32.382: "Telecommunication management; Partial Suspension of Itf-N Integration Reference Point (IRP); Information Service (IS)".
- [45] 3GPP TS 32.386: "Telecommunication management; Partial Suspension of Itf-N Integration Reference Point (IRP); Solution Set (SS) definitions".
- [46] 3GPP TS 32.391: "Telecommunication management; Delta synchronization Integration Reference Point (IRP); Requirements".
- [47] 3GPP TS 32.392: "Telecommunication management; Delta synchronization Integration Reference Point (IRP); Information Service (IS)".
- [48] 3GPP TS 32.396: "Telecommunication management; Delta synchronization Integration Reference Point (IRP); Solution Set (SS) definitions".
- [49] 3GPP TS 32.401: "Telecommunication management; Performance Management (PM); Concept and requirements".
- [50] 3GPP TS 32.405: "Telecommunication management; Performance Management (PM); Performance measurements; Universal Terrestrial Radio Access Network (UTRAN)".
- [51] 3GPP TS 32.406: "Telecommunication management; Performance Management (PM); Performance measurements; Core Network (CN) Packet Switched (PS) domain".
- [52] 3GPP TS 32.407: "Telecommunication management; Performance Management (PM); Performance measurements; Core Network (CN) Circuit Switched (CS) domain; UMTS and combined UMTS/GSM".
- [53] 3GPP TS 32.408: "Telecommunication management; Performance Management (PM); Performance measurements; Teleservice".
- [54] 3GPP TS 32.409: "Telecommunication management; Performance Management (PM); Performance measurements; IP Multimedia Subsystem (IMS)".
- [55] 3GPP TS 32.410: "Telecommunication management; Key Performance Indicators (KPI) for UMTS and GSM".
- [56] 3GPP TS 32.411: "Telecommunication management; Performance Management (PM) Integration Reference Point (IRP); Requirements".
- [57] 3GPP TS 32.412: "Telecommunication management; Performance Management (PM) Integration Reference Point (IRP); Information Service (IS)".
- [58] 3GPP TS 32.416: "Telecommunication management; Performance Management (PM) Integration Reference Point (IRP); Solution Set (SS) definitions".
- [59] 3GPP TS 32.421: "Telecommunication management; Subscriber and equipment trace; Trace concepts and requirements".

- [60] 3GPP TS 32.422: "Telecommunication management; Subscriber and equipment trace; Trace control and configuration management".
- [61] 3GPP TS 32.423: "Telecommunication management; Subscriber and equipment trace; Trace data definition and management".
- [62] 3GPP TS 32.425: "Telecommunication management; Performance Management (PM); Performance measurements Evolved Universal Terrestrial Radio Access Network (E-UTRAN)".
- [63] 3GPP TS 32.426: "Telecommunication management; Performance Management (PM); Performance measurements Evolved Packet Core (EPC) network".
- [64] 3GPP TS 32.432: "Telecommunication management; Performance measurement: File format definition".
- [65] 3GPP TS 32.435: "Telecommunication management; Performance measurement; eXtensible Markup Language (XML) file format definition".
- [66] 3GPP TS 32.436: "Telecommunication management; Performance measurement: Abstract Syntax Notation 1 (ASN.1) file format definition".
- [67] 3GPP TS 32.441: "Telecommunication management; Trace Management Integration Reference Point (IRP); Requirements".
- [68] 3GPP TS 32.442: "Telecommunication management; Trace Management Integration Reference Point (IRP); Information Service (IS)".
- [69] 3GPP TS 32.446: "Telecommunication management; Trace Management Integration Reference Point (IRP); Solution Set (SS) definitions".
- [70] 3GPP TS 32.451: "Telecommunication management; Key Performance Indicators (KPI) for Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Requirements".
- [71] 3GPP TS 32.452: "Telecommunication management; Performance Management (PM); Performance measurements Home Node B (HNB) Subsystem (HNS)".
- [72] 3GPP TS 32.453: "Telecommunication management; Performance Management (PM); Performance measurements Home enhanced Node B (HeNB) Subsystem (HeNS)".
- [73] 3GPP TS 32.454: "Telecommunication management; Key Performance Indicators (KPI) for the IP Multimedia Subsystem (IMS); Definitions".
- [74] 3GPP TS 32.455: "Telecommunication management; Key Performance Indicators (KPI) for the Evolved Packet Core (EPC); Definitions".
- [75] 3GPP TS 32.500: "Telecommunication management; Self-Organizing Networks (SON); Concepts and requirements".
- [76] 3GPP TS 32.501: "Telecommunication management; Self-configuration of network elements; Concepts and requirements".
- [77] 3GPP TS 32.502: "Telecommunication management; Self-configuration of network elements Integration Reference Point (IRP); Information Service (IS)".
- [78] 3GPP TS 32.506: "Telecommunication management; Self-configuration of network elements Integration Reference Point (IRP); Solution Set (SS) definitions".
- [79] 3GPP TS 32.511: "Telecommunication management; Automatic Neighbour Relation (ANR) management; Concepts and requirements".
- [80] 3GPP TS 32.521: "Telecommunication management; Self-Organizing Networks (SON) Policy Network Resource Model (NRM) Integration Reference Point (IRP); Requirements".
- [81] 3GPP TS 32.522: "Telecommunication management; Self-Organizing Networks (SON) Policy Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)".

- [82] 3GPP TS 32.526: "Telecommunication management; Self-Organizing Networks (SON); Policy Network Resource Model (NRM) Integration Reference Point (IRP); Solution Set (SS) definitions".
- [83] 3GPP TS 32.531: "Telecommunication management; Software management (SwM); Concepts and Integration Reference Point (IRP) Requirements".
- [84] 3GPP TS 32.532: "Telecommunication management; Software management (SwM); Integration Reference Point (IRP); Information Service (IS)".
- [85] 3GPP TS 32.536: "Telecommunication management; Software management Integration Reference Point (IRP); Solution Set (SS) definitions".
- [86] 3GPP TS 32.541: "Telecommunication management; Self-Organizing Networks (SON); Self-healing concepts and requirements".
- [87] 3GPP TS 32.551: "Telecommunication management; Energy Saving Management (ESM); Concepts and requirements".
- [88] 3GPP TS 32.600: "Telecommunication management; Configuration Management (CM); Concept and high-level requirements".
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- [91] 3GPP TS 32.606: "Telecommunication management; Configuration Management (CM); Basic CM Integration Reference Point (IRP); Solution Set (SS) definitions".
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- [93] 3GPP TS 32.612: "Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP); Information Service (IS)".
- [94] 3GPP TS 32.616: "Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP); Solution Set (SS) definitions".
- [95] 3GPP TS 32.621: "Telecommunication management; Generic Network Resource Model (NRM) Integration Reference Point (IRP); Requirements".
- [96] 3GPP TS 32.622: "Telecommunication management; Generic Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)".
- [97] 3GPP TS 32.626: "Telecommunication management; State management data definition Integration Reference Point (IRP); Solution Set (SS) definitions".
- [98] 3GPP TS 32.631: "Telecommunication management; Configuration Management (CM); Core network resources Integration Reference Point (IRP); Requirements".
- [99] 3GPP TS 32.632: "Telecommunication management; Configuration Management (CM); Core Network Resources Integration Reference Point (IRP); Network Resource Model (NRM)".
- [100] 3GPP TS 32.636: "Telecommunication management; Configuration Management (CM); Core network resources Integration Reference Point (IRP); Solution Set (SS) Definitions".
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- [102] 3GPP TS 32.642: "Telecommunication management; Configuration Management (CM); UTRAN network resources Integration Reference Point (IRP); Network Resource Model (NRM)".
- [103] 3GPP TS 32.646: "Telecommunication management; Configuration Management (CM); UTRAN network resources Integration Reference Point (IRP); Solution Set (SS) definitions".

- [107] 3GPP TS 32.661: "Telecommunication management; Configuration Management (CM); Kernel CM Requirements".
- [108] 3GPP TS 32.662: "Telecommunication management; Configuration Management (CM); Kernel CM Information Service (IS)".
- [109] 3GPP TS 32.671: "Telecommunication management; Configuration Management (CM); State Management Integration Reference Point (IRP); Requirements".
- [110] 3GPP TS 32.672: "Telecommunication management; Configuration Management (CM); State Management Integration Reference Point (IRP); Information Service (IS)".
- [111] 3GPP TS 32.676: "Telecommunication management; Configuration Management (CM); State Management Integration Reference Point (IRP); Common Object Request Broker Architecture (CORBA) Solution Set (SS)".
- [112] 3GPP TS 32.721: "Telecommunication management; Configuration Management (CM); Repeater network resources Integration Reference Point (IRP); Requirements".
- [113] 3GPP TS 32.722: "Telecommunication management; Configuration Management (CM); Repeater network resources Integration Reference Point (IRP); information Service (IS)".
- [114] 3GPP TS 32.726: "Telecommunication management; Configuration Management (CM); Repeater network resources Integration Reference Point (IRP); Solution Set (SS) definitions".
- [115] 3GPP TS 32.761: "Telecommunication management; Evolved Universal Terrestrial Radio Access Network (E-UTRAN) Network Resource Model (NRM) Integration Reference Point (IRP); Requirements".
- [116] 3GPP TS 32.762: "Telecommunication management; Evolved Universal Terrestrial Radio Access Network (E-UTRAN) Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)".
- [117] 3GPP TS 32.766: "Telecommunication management; Evolved Universal Terrestrial Radio Access Network (E-UTRAN) Network Resource Model (NRM) Integration Reference Point (IRP); Solution Set (SS) definitions".
- [118] 3GPP TS 52.402: "Telecommunication management; Performance Management (PM); Performance measurements – GSM".
- [119] 3GPP TS 32.181: "Telecommunication management; User Data Convergence (UDC); Framework for Model Handling and Management".
- [120] 3GPP TS 32.182: "Telecommunication management; User Data Convergence (UDC); Common baseline information model (CBIM)".
- [121] 3GPP TS 28.620: "Telecommunication management; Fixed Mobile Convergence (FMC) Federated Network Information Model (FNIM) Umbrella Information Model (UIM)".
- [122] 3GPP TS 28.621: "Telecommunication management; Generic Network Resource Model (NRM) Integration Reference Point (IRP); Requirements".
- [123] 3GPP TS 28.622: "Telecommunication management; Generic Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)".
- [124] 3GPP TS 28.623: "Telecommunication management; Generic Network Resource Model (NRM) Integration Reference Point (IRP); Solution Set (SS) definitions".
- [125] 3GPP TS 28.627: "Telecommunication management; Self-Organizing Networks (SON) Policy Network Resource Model (NRM) Integration Reference Point (IRP); Requirements".
- [126] 3GPP TS 28.628: "Telecommunication management; Self-Organizing Networks (SON) Policy Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)".