

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.3614

(01/2014)

SERIES Q: SWITCHING AND SIGNALLING

Signalling requirements and protocols for the NGN –
Service and session control protocols – supplementary
services

Originating identification presentation and originating identification restriction protocol specification as next-generation network supplementary service

Recommendation ITU-T Q.3614

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Recommendation ITU-T Q.3614

Originating identification presentation and originating identification restriction protocol specification as next-generation network supplementary service

Summary

Recommendation ITU-T Q.3614 specifies the protocol for originating identification presentation and originating identification restriction (OIP/OIR) as a next-generation network (NGN) supplementary service.

History

Edition	Recommendation	Approval	Study Group	Unique ID*
1.0	ITU-T Q.3614	2014-01-13	11	11.1002/1000/12107830-en

Keywords

Internet Protocol multimedia subsystem (IMS), next-generation network (NGN), originating identification presentation and originating identification restriction (OIP/OIR), session initiation protocol (SIP).

* To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/12107830-en>.

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Recommendation ITU-T Q.3614

Originating identification presentation and originating identification restriction protocol specification as next-generation network supplementary service

1 Scope

This Recommendation specifies the protocol description of the originating identification presentation (OIP) and the originating identification restriction (OIR) supplementary services, based on the requirements and architecture of the ISDN CLIP and CLIR supplementary service. This document provides the protocol details in the NGN service control based on session initiation protocol (SIP).

NOTE – It can be noted that the behaviour described in this Recommendation does not take into account other behaviours that are specified in other applications, and care needs to be taken when designing the filters (for example) when two or more applications are involved in a session.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

- [ITU-T I.210] Recommendation ITU-T I.210 (1993), *Principles of telecommunication services supported by an ISDN and the means to describe them*.
- [3GPP TS 23.228] 3rd Generation Partnership Project V12.3.0 (2013-12), *Technical Specification Group Services and System Aspects; IP Multimedia Subsystem (IMS); Stage 2 (Release 12)*.
- [ETSI EN 300 089] ETSI EN 300 089 V3.1.1 (2000), *Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) supplementary service; Service description*.
- [ETSI EN 300 090] ETSI EN 300 090 (2000), *Integrated Services Digital Network (ISDN); Calling Line Identification Restriction (CLIR) supplementary service; Service description*.
- [ETSI TS 124 229] 3GPP TS 124 229 (2013), *Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; IP multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3 (3GPP TS 24.229 version 11.9.0 Release 11)*.
- [ETSI TS 124.607] 3GPP TS 24.607 (2013), *Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.607 version 11.2.0 Release 11)*.
- [ETSI TS 183 007] ETSI TS 183 007 V2.0.0 (2008), *Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); PSTN/ISDN simulation services; Originating Identification Presentation*

(OIP) and Originating Identification Restriction (OIR); Protocol specification.

- [IETF RFC 3261] IETF RFC 3261 (2002), *SIP: Session Initiation Protocol*.
- [IETF RFC 3323] IETF RFC 3323 (2002), *A Privacy Mechanism for the Session Initiation Protocol (SIP)*.
- [IETF RFC 3325] IETF RFC 3325 (2002), *Private Extensions to the Session Initiation Protocol (SIP) for Asserted Identity within Trusted Networks*.
- [IETF RFC 3966] IETF RFC 3966 (2004), *The tel URI for Telephone Numbers*.
- [IETF RFC 3986] IETF RFC 3986 (2005), *Uniform Resource Identifier (URI): Generic Syntax*.
- [IETF RFC 4825] IETF RFC 4825 (2007), *The Extensible Markup Language (XML) Configuration Access Protocol (XCAP)*.

3 Definitions

3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

- 3.1.1 **dialog**: See [IETF RFC 3261].
- 3.1.2 **header**: See [IETF RFC 3261].
- 3.1.3 **header field**: See [IETF RFC 3261].
- 3.1.4 **proxy**: See [IETF RFC 3261].
- 3.1.5 **public user identity**: See [3GPP TS 23.228].
- 3.1.6 **request**: See [IETF RFC 3261].
- 3.1.7 **response**: See [IETF RFC 3261].
- 3.1.8 **session**: See [IETF RFC 3261].
- 3.1.9 **supplementary service**: See [ITU-T I.210], clause 2.4.
- 3.1.10 **tag**: See [IETF RFC 3261].
- 3.1.11 **(SIP) transaction**: See [IETF RFC 3261].

3.2 Terms defined in this Recommendation

This Recommendation defines the following terms:

3.2.1 identity information: All the information identifying a user, including trusted (network-generated) and/or untrusted (user-generated) addresses.

NOTE – Identity information takes the form of either an SIP URI (see [IETF RFC 3986]) or a "tel" URI (see [IETF RFC 3966]).

3.2.2 incoming initial request: All requests intended to initiate either a dialog or a stand-alone transaction terminated by the served user or the specific network entity.

3.2.3 originating UE: Sender of an SIP request intended to initiate either a dialog (e.g., INVITE, SUBSCRIBE), or a stand-alone transaction. (e.g., OPTIONS, MESSAGE).

3.2.4 outgoing (communication): Communication outgoing from the user side of the interface.

3.2.5 outgoing initial request: All requests intended to initiate either a dialog or a stand-alone transaction received from the served user or the specific network entity.

3.2.6 stand-alone transaction: SIP transaction that is not part of a dialog and does not initiate a dialog.

NOTE – An OPTIONS or a MESSAGE request sent outside of an SIP dialog would be considered to be part of a stand-alone transaction.

3.2.7 terminating UE: Recipient of an SIP request intended either to initiate a dialog or to initiate either a dialog or a stand-alone transaction.

3.2.8 trusted identity information: Network generated user public identity information.

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

AS	Application Server
CCBS	Completion of Communication to Busy Subscriber
CDIV	Communication Diversion
CLIP	Calling Line Identification Presentation
CLIR	Calling Line Identification Restriction
CSCF	Call Session Control Function
CW	Communication Waiting
HOLD	communication Hold
IBCF	Interconnection Border Control Function
ICB	Incoming Communication Barring
IFC	Initial Filter Criteria
IM	IP Multimedia
IMS	IP Multimedia Subsystem
IP	Internet Protocol
ISDN	Integrated Services Digital Network
MCID	Malicious Communication Identification
MGCF	Media Gateway Control Function
NGN	Next Generation Network
OIP	Originating Identification Presentation
OIR	Originating Identification Restriction
PSTN	Public Switched Telephone Network
SC	Service Control
SDP	Session Description Protocol
SIP	Session Initiation Protocol
UE	User Equipment
URI	Universal Resource Identifier