

**Source:** TSG CN WG 1  
**Title:** Presence service based on Session Initiation Protocol (SIP);Functional models, information flows and protocol details  
**Agenda item:** 11  
**Document for:** INFORMATION,- Draft technical report 3GPP TS 24.841 v1.0.0

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### **Presentation of Technical Report to TSG or WG**

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**Presentation to:** TSG CN Meeting #20  
**Document for presentation:** TR, Version 1.0.0  
**Presented for:** Information

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#### **Abstract of document:**

The document is a temporary container for the functional models, flows and protocol details for the presence service within the IP Multimedia (IM) Core Network (CN) subsystem based on the Session Initiation Protocol (SIP) and SIP Events. The contents of this report when stable will be moved into the Technical Specification 3GPP TS 23.218 [3], 3GPP TS 24.228 [4] and 3GPP TS 24.229 [5] and a new Technical Specification for Presence.

Where possible the document specifies the requirements for this protocol by reference to specifications produced by the IETF within the scope of SIP and SIP Events. Where this is not possible, extensions to SIP are defined within the present document. The document has therefore been structured in order to allow both forms of specification.

The document includes information applicable to network operators, service providers and manufacturers.

Agreed material is held in this TR for an interim period of time, and the material transferred into release 6 versions of 23.218, 24.228 and 24.229 at a later time.

This TR will not be published.

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#### **Changes since last presentation to TSG Meeting #:**

First time seen in a Plenary.

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#### **Outstanding Issues:**

As this document is meant to be a repository for information to create all the documentation in WG CN1 for Presence, the outstanding issues are all the remaining Presence open issues. WG CN1 has been maintaining an issues list for this work item, and the contents of this are attached.

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#### **Contentious Issues:**

None of the issues identified are contentious within WG CN1.

Some of the issues identified are still undergoing resolution in WG SA2, e.g. those relating to PSI's; these are generic within the IM CN subsystem, rather than specific to Presence.

There are issues in the referenced IETF documentation where resolution is providing contentious. Fundamental discussions are still ongoing on "What is a tuple"

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# Presence WID open issues list

## Introduction

This open item list identifies the tasks within that work item that still need to be resolved in TR 24.841 for Rel-6, and subsequently for changes made to TS 23.218, 24.228 and 24.229.

This study has been done to identify the still missing principal decisions and other major open issues in the Presence WID under CN1 control. The intention is not to take this open items list to the granularity of a individual CRs.

Because of these reasons the list is not exhaustive so it should not be considered as comprehensive list of all CRs that are needed to complete the CN1 Presence WID. It can be foreseen that not only the CRs to close the listed open items but also other CRs outside the list will be needed.

But the intention is to list all such open items which are likely to impact the scheduling and work amount estimates on the work item.

This document takes no position in how an open item is closed unless it is explicitly stated. So it may happen that an open item in the CN1 document is covered by removing the whole clause from the TR.

It is the intention of the maintainer to maintain this document until it becomes redundant at the full stabilisation of Rel-6 Presence related CN1 TSs.

The colour coding of the table is as follows:

After CN1 Meeting	27	28	29	30							
<b>Red</b> = not done	41	36	30	23							
<b>Yellow</b> = partly done	0	5	11	12							
<b>Green</b> = completed	0	3	10	16							
Total	41	44	51	51							

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## Proposal

The document should be noted.

Volunteers are requested for unassigned open issues, along with the necessary technical input in the future.

Input is requested on identifying other open issues, or missing information or incorrect status in any of the issues.

## Open issues

No.	Issue	TR / TS	CRs	Comment
1	<b>General issues</b>			
2	<b>Issues related to dependent IETF drafts</b>			
2.1	The namespace in the XML schema for Instant Messaging xmlns:im="urn:ietf:params:xml:ns:cpim-pidf:im" has not been defined yet in IETF.			
2.2	It needs further investigation whether draft-roach-sip-list-template-00.txt effects the flows and changes the Event the UE is subscribing for.		N1-030525 N1-030526	
2.3	The mechanism for modifying the authorisation policy document			Need to await agreement of solution by SIMPLE working group before this can be completed
2.4	The PUBLISH method is expected to undergo major revision in the near future, e.g. to provide a dialog based mechanism, and a review of the headers.			draft-olson-simple-publish-02.txt provided which does not contain a dialog mechanism. It has now been agreed that there will be no dialog mechanism for publish. Some revisions are expected which will need to be taken into account
2.5	One solution to the requirements that are expressed in draft-kiss-simple-winfo-filter-reqs-00 is in draft-khartabil-simple-winfo-filter-00. When the SIMPLE WG agrees the way forward for solutions to the requirements in this draft, the references will require amendment to reflect the agreed solution document.			
2.6	One solution to the requirements that are expressed in draft-moran-simple-pres-filter-reqs-00 is in draft-khartabil-simple-presence-filter-00. When the SIMPLE WG agrees the way forward for solutions to the requirements in this draft, the references will require amendment to reflect the agreed solution document.			

2.7	One solution to the requirements that are expressed in draft-lonnfors-simple-presinfo-deliv-reqs-00 is in draft-lonnfors-simple-partial-notify-00. When the SIMPLE WG agrees the way forward for solutions to the requirements in this draft, the above reference will require amendment to reflect the agreed solution document.			
3	<b>Issues related to clause 5 (23.218)</b> <b>Note - this material could well be directed to the proposed new TS on Presence</b>			
3.1	Inclusion of contents for clause 5.1 (Introduction)	24.841		
3.2	Inclusion of contents for clause 5.2 (Presence Server (PS))	24.841		
3.3	Inclusion of contents for clause 5.3.1 (Network-based Presence User Agent (PUA))	24.841		
3.4	Inclusion of contents for clause 5.3.2 (Presence Network Agents (PNA))	24.841		
3.5	Inclusion of contents for clause 5.3.3 (Presence external agent)	24.841		
3.6	Inclusion of contents for clause 5.4 (Network-based watcher applications)	24.841		
3.7	Inclusion of contents for clause 5.5 (Presence List Server (PLS))	24.841		Entity is now a Resource List Server
4	<b>Issues related to clause 6 (24.228)</b> <b>Note that this material could be directed to the flows clause of the new TS on presence</b>			
4.1	<b>Missing general material</b>			
4.1.1	Material to indicate the general addresses used within the presence service flows (to go to 24.228 clause 4)	24.841		
4.2	<b>Missing flows</b>			
4.2.1	Flows relating to Pi interface	24.841		
4.2.2	The Presence User Agent in the UE is also able to publish certain tuples of the presence information. Another call flow example is needed to describe partial publishing. Controversial - some organisations think that we do not need partial publishing.	24.841		
4.3	<b>Missing elements within flows</b>			
4.3.1	Flows need updating to show charging headers	24.841		
4.3.2	Flows need updating to show P-Access-Network-Info header	24.841	N1-030237	
4.3.3	Flows need updating to show the non-stripping of headers at the P-CSCF in the direction of the UE	24.841	N1-030237	Nokia
4.3.4	Flows need updating to show the storage of information at the P-CSCF and S-CSCF to be	24.841	--	Lucent? 24.228 has

	consistent with 24.228 presentation			been aligned with 24.841, rather than the other way round, so there is now no need for this in 24.841 - see N1-030521
4.3.5	PUBLISH flows need updating to show new headers introduced in olson-publish-01	24.841	N1-030110 N1-030448	Subsequent versions may introduce further changes.  Nokia, Nortel?
4.3.6	Flows relating to PNA to PS should be removed because 23.141 CR010R5 and CR026R1 specify that this interface should not be standardised	24.841	N1-030791	Requires removal of current clause 6.2.3.  Nokia, Nortel?
4.3.7	Changes in 6.1.3.1, 6.1.3.2 to accommodate 23.228 6.1.0 requirements on PSI routing	24.841	N1-030901	Nokia  Status partly done because stage 2 is still undergoing revision
4.3.8	Remove event header from responses  <a href="http://www.ietf.org/mail-archive/working-groups/sip/current/msg07854.html">http://www.ietf.org/mail-archive/working-groups/sip/current/msg07854.html</a>	24.841, 24.228	N1-030796	Nokia
5	<b>Issues related to clause 7 (24.229)</b>  <b>Note that some of this material could be directed to the new TS on presence</b>			
5.1	<b>Issues relating to clause 7.1 (Introduction and general principles)</b>			
5.2	<b>Issues related to clause 7.2 (Application usage of SIP)</b>			
5.2.1	Issues relating to clause 7.2.1 (Application usage of SIP - procedures at the UE - usage of PUBLISH)	24.841	N1-030529	
5.2.2	Issues relating to clause 7.2.1 (Application usage of SIP - procedures at the UE - the behaviour for fetching presence information; the behaviour for subscribing for presence information; providing full state or partial state notifications)	24.841	N1-030530 N1-030533	Nokia  CR041 to 23.141 adds ability of watcher to indicate ability to handle partial notifications
5.2.3	Issues relating to clause 7.2.1 (Application usage of SIP - procedures at the UE - how the watchers subscribe and get notified of the presencelist event package and how the PLS collects the information)	24.841	N1-030526	Changed to resource list

5.2.4	Issues relating to clause 7.2.1 (Application usage of SIP - procedures at the UE - how the watcher information is collected by the Presence Server and provided to the presentity)	24.841	N1-030531	
5.2.5	Issues relating to clause 7.2.1 (Application usage of SIP - procedures at the UE - how the watchers can set filters in SUBSCRIBE requests)	24.841	N1-030532	Need to await agreement of solution by SIMPLE working group before this can be completed Nokia
5.2.6	Issues relating to clause 7.2.1 (Application usage of SIP - procedures at the UE - the details (syntax/semantics) of the authorization policy definitions; the usage of watcherinfo template package in IMS; the details how the authorisation policy is uploaded to Presence Server; the details how groups can be referenced; multiple value concept)	24.841	N1-030274	Authorization: Need to await agreement of solution by SIMPLE working group before this can be completed Nokia
5.2.7	Issues relating to clause 7.2.2 (Application usage of SIP - procedures at the Application Server - how the watchers applies filters in NOTIFY requests)	24.841	N1-030532	Need to await agreement of solution by SIMPLE working group before this can be completed Nokia
5.2.8	Issues relating to clause 7.2.2 (Application usage of SIP - procedures at the Application Server - the usage of PUBLISH request in IMS; when a PUA publishes; when a PNA publishes (how and what is transformed via ISC and Sh); the details of the Presence Server's composition policy (the latter may be a 23.218 issue))	24.841	N1-030529	how and what is transformed via ISC and Sh no longer an open issue
5.2.9	Issues relating to clause 7.2.2 (Application usage of SIP - procedures at the Application Server - the behaviour for fetching presence information; the behaviour for subscribing for presence information; providing full state or partial state notifications)	24.841	N1-030530 N1-030533	Nokia
5.2.10	Issues relating to clause 7.2.2 (Application usage of SIP - procedures at the Application Server - the details (syntax/semantics) of the authorisation policy definitions; the usage of watcherinfo template package in IMS; the details how the authorisation policy is uploaded to Presence Server; the details how groups can be referenced; multiple value concept)	24.841		Nokia Need to await agreement of solution by SIMPLE working group before this can be completed
5.2.11	Issues relating to clause 7.2.2 (Application usage of SIP - procedures at the Application Server - how the watchers subscribe and get notified of the presencelist event package and how the PLS collects	24.841	N1-030526	Changed to resource list



	the information)			
5.2.12	Issues relating to clause 7.2.2 (Application usage of SIP - procedures at the Application Server - this clause describes how the watcher information is collected by the Presence Server and provided to the presentity)	24.841	N1-030531	
5.2.13	Issues relating to clause 7.2.2 (Application usage of SIP - procedures at the Application Server - mechanism for the presentity to provide authorisation)	24.841		Need to await agreement of solution by SIMPLE working group before this can be completed
5.2.14	Issues relating to clause 7.2.2 (Application usage of SIP - procedures at the Application Server - mechanism to verify the identity of the user is FFS. One possible mechanism to verify the identity of the watcher is that the PS challenges the watcher by issuing a 401 (Unauthorized) response including a challenge (as per normal procedures described in RFC 3261). Later, when the PS receives a SUBSCRIBE request that contains credentials but it does not contain a P-Asserted-Identity, the PS will check the credentials to verify the identity of the watcher. Another possible mechanism is that an edge proxy, such as the I-CSCF verifies the identity of the user and inserts a P-Asserted-Identity.	24.841	N1-030273	<p>Issues revised to:</p> <p>it is not clear what are the mechanisms available to transport the credentials. These mechanisms can include, among others, P-Asserted-Identity, Authorization header, digital signatures, S/MIME body, etc.</p> <p>It needs to be investigated whether the <i>maximum number of times predefined in the PS configuration data</i> creates a potential denial of service attack, as it requires the PS to keep states between different different authentications trials.</p>
5.2.15	Change to S-CSCF handling to allow S-CSCF not to Record-Route for SUBSCRIBE requests/responses as a result of change in requirements in 23.141 CR025R0. It is assumed that this change will be made general for all SUBSCRIBE requests passing	24.841	N1-030460 N1-030800	Nokia

	through the S-CSCF, rather than being specific to presence related events, and will apply to both release 5 and release 6. Note that the storage of information for clearing of the dialog will need to be related to whether a dialog is now record routed or not.			
5.1.16	Incorporation of new requirement introduced by 23.141 CR023 as follows: " In case of presence information fetch or subscription from a watcher that has not been authorised by the subscription authorisation policies, the presence server shall put the fetch or subscription on hold until the watcher has been authorised, added to the subscription authorisation lists or until a preconfigured timer has expired."	24.841		Query as to whether behaviour is already described in simple-presence draft
5.2.17	Reference to RPIDS I-D  Rich Presence Information Data Format for Presence Based on the Session Initiation Protocol  draft-schulzrinne-simple-rpids-02.txt	24.841	N1-030793	Nokia
5.2.18	Reference to BINPIDF I-D  BINPIDF - External Object Extension to Presence Information Data Format  draft-lonnfors-simple-binpidf-00	24.841	N1-030902	Nokia
5.3	<b>Issues relating to clause 7.3 (Extensions within the present document)</b>			
5.3.1	new document type needed for partial notification.	24.841	N1-030533	Nortel?, Nokia
5.3.2	Changes to location information in 3gppPresence as a result of change of requirements defined in 23.141 CR017 R2	24.841	N1-030272	Nortel?
5.3.3	Add timestamp to location information in accordance with 23.141 CR040	24.841		
5.3.4	Addition of application identifiers to presence information as indicated in CR049 to 23.141	24.841		
5.4	<b>Issues relating to clause 7.4 (GPRS aspects when connected to the IM CN subsystem)</b>			
	None identified			
5.5	<b>Issues relating to clause 7.5 (Profiles of IETF RFCs for 3GPP usage)</b>			
5.5.1	Roles table needs extending to show presence entity roles	24.841		
5.5.2	PUBLISH method needs updating to show new headers introduced in olson-publish-01	24.841	N1-030110 N1-030528	Subsequent versions may introduce further changes which will be dealt with in this issue.  Nortel?, Nokia

5.5.3	PUBLISH method needs updating to show charging headers	24.841	N1-030764	Lucent?
5.5.4	PUBLISH method needs updating to show P-Access-Network-Info header	24.841	N1-030764	Lucent?