SIP Working Group
Internet-Draft
Expires: Sept 10, 2008
Intended Status: Standards Track (as PS)

James Polk
Cisco Systems
March 10, 2008

IANA Registration of New Session Initiation Protocol (SIP) Resource-Priority Namespaces

draft-ietf-sip-rph-new-namespaces-03.txt

Status of this Memo

By submitting this Internet-Draft, each author represents that any applicable patent or other IPR claims of which he or she is aware have been or will be disclosed, and any of which he or she becomes aware will be disclosed, in accordance with Section 6 of BCP 79.

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF), its areas, and its working groups. Note that other groups may also distribute working documents as Internet-Drafts.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

The list of current Internet-Drafts can be accessed at http://www.ietf.org/ietf/1id-abstracts.txt.

The list of Internet-Draft Shadow Directories can be accessed at http://www.ietf.org/shadow.html.

This Internet-Draft will expire on Sept 10, 2008.

Copyright Notice

Copyright (C) The IETF Trust (2008).

Abstract

This document creates additional Session Initiation Protocol (SIP) Resource-Priority namespaces to meet the requirements of the US Defense Information Systems Agency, and places these namespaces in the IANA registry.

Table of Contents

1. Introduction 2
1.1 Conventions used in this document 3
2. New RPH Namespaces Created 3
3. IANA Considerations 4
3.1 IANA Resource-Priority Namespace Registration 5
3.2 IANA Priority-Value Registrations 6
4. Security Considerations 11
5. Acknowledgements 11
6. References 11
6.1 Normative References 11
Author's Address 11
Intellectual Property and Copyright Statements 11

1. Introduction

The US Defense Information Systems Agency (DISA) is rolling out their Session Initiation Protocol (SIP) based architecture at this time. This network will require more Resource-Priority namespaces than were defined, and IANA registered, in RFC 4412 [RFC4412]. The purpose of this document is to define these additional namespaces. Each will be preemption in nature, as defined in RFC 4412, and will have the same 9 priority-values.

DISA has a requirement to be able to assign different Resource-Priority namespaces to different units of differing sizes throughout their networks. Examples of this may be

- as large as each branch of service (army, navy, air force, marines, coast guard)

- some departments within the government (Homeland Security, Commerce, Treasury)

- plus have temporary assignments to individual units of varying sizes (from battle groups to patrol groups or platoons)

These temporary assignments might be combinations of smaller units involving several branches of service operating as one unit (say, one task force, which is separate than the branch of service), or a single commando unit requiring special treatment for a short period of time, making it appear separate from the branch of service they are from.

Providing DISA with a pool of namespaces for fine grained assignment(s) allows them the flexibility they need for their mission requirements. One can imagine due to their sheer size and separation of purpose, they can easily utilize a significant number

of namespaces within their networks. This is the reason for the assignment of so many new namespaces, which seems to deviate from

guidance in RFC 4412 to have a few namespaces as possible.

This document makes no changes to SIP, just adds IANA registered namespaces for its use.

1.1 Conventions used in this document

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC2119].

2. New SIP Resource-Priority Namespaces Created

The following 50 SIP namespaces are created by this document:

dsn-000000	drsn-000010	rts-000020	crts-000000
dsn-000001	drsn-000011	rts-000021	crts-000001
dsn-000002	drsn-000012	rts-000022	crts-000002
dsn-000003	drsn-000013	rts-000023	crts-000003
dsn-000004	drsn-000014	rts-000024	crts-000004
dsn-000005	drsn-000015	rts-000025	crts-000005
dsn-000006	drsn-000016	rts-000026	crts-000006
dsn-000007	drsn-000017	rts-000027	crts-000007
dsn-000008	drsn-000018	rts-000028	crts-000008
dsn-000009	drsn-000019	rts-000029	crts-000009

Each namespace listed above is wholly different. However, according to the rules of section 8 within RFC 4412, one or more sets can be treated as if the same when configured as an aggregated grouping of namespaces.

These aggregates of two or more namespaces, that are to be considered equivalent during treatment, can be a set of any IANA registered namespaces, not just adjacent namespaces.

Each namespace listed above will have the same 9 priority-levels:

.0 (lowest priority)
.1
.2
.3
.4
.5
.6
.7
.8
.9 (highest priority)

According to the rules established in RFC 4412 [RFC4412],

priority-values have a relative order for preferential treatment, unless one or more consecutive groups of priority-values are to be considered equivalent (i.e., first-received, first treated).

Thus, a message (or a call) with the following Resource-Priority header value:

dsn-000001.8

for example, MUST NOT ever receive preferential treatment over a message, for example, with this Resource-Priority header value:

dsn-000010.0

because they are two difference namespaces, unless the namespaces

dsn-000001 and dsn-000010

are configured as equivalent namespaces (according to section 8 of RFC 4412).

The dash '-' character is just like any other character, and is not to be considered a delimiter in any official way within any namespace here. Other namespace definitions in the future could change this.

As stated in Section 9 of RFC 4412 [RFC4412], an IANA registered namespace SHOULD NOT change the number, and MUST NOT change the relative priority order, of its assigned priority-values.

3. IANA Considerations

Abiding by the rules established within RFC 4412 [RFC4412], this is a Standards-Track document registering new namespaces, their associated priority-values and intended algorithms.

3.1 IANA Resource-Priority Namespace Registration

Within the "Resource-Priority Namespaces" registry in the sip-parameters section of IANA, the following table lists the new namespaces registered by this document (NOTE: 'RFCXXXX' is to be replaced by this document's RFC number if this document is published by the RFC-Editor):

Namespace	Levels	Intended Algorithm	New warn-code	New resp. code	Reference
dsn-000000	10	preemption	no	no	[RFCXXXX]
dsn-000001	10	preemption	no	no	[RFCXXXX]
dsn-000002	10	preemption	no	no	[RFCXXXX]
dsn-000003	10	preemption	no	no	[RFCXXXX]
dsn-000004	10	preemption	no	no	[RFCXXXX]
dsn-000005	10	preemption	no	no	[RFCXXXX]
dsn-000006	10	preemption	no	no	[RFCXXXX]
dsn-000007	10	preemption	no	no	[RFCXXXX]
dsn-000008	10	preemption	no	no	[RFCXXXX]
dsn-000009	10	preemption	no	no	[RFCXXXX]
drsn-000000	10	preemption	no	no	[RFCXXXX]
drsn-000001	10	preemption	no	no	[RFCXXXX]
drsn-000002	10	preemption	no	no	[RFCXXXX]
drsn-000003	10	preemption	no	no	[RFCXXXX]
drsn-000004	10	preemption	no	no	[RFCXXXX]
drsn-000005	10	preemption	no	no	[RFCXXXX]
drsn-000006	10	preemption	no	no	[RFCXXXX]
drsn-000007	10	preemption	no	no	[RFCXXXX]
drsn-000008	10	preemption	no	no	[RFCXXXX]
drsn-000009	10	preemption	no	no	[RFCXXXX]
rts-000000	10	preemption	no	no	[RFCXXXX]
rts-000001	10	preemption	no	no	[RFCXXXX]
rts-000002	10	preemption	no	no	[RFCXXXX]
rts-000003	10	preemption	no	no	[RFCXXXX]
rts-000004	10	preemption	no	no	[RFCXXXX]
rts-000005	10	preemption	no	no	[RFCXXXX]
rts-000006	10	preemption	no	no	[RFCXXXX]
rts-000007	10	preemption	no	no	[RFCXXXX]
rts-000008	10	preemption	no	no	[RFCXXXX]
rts-000009	10	preemption	no	no	[RFCXXXX]
crts-000000	10	preemption	no	no	[RFCXXXX]
crts-000001	10	preemption	no	no	[RFCXXXX]
crts-000002	10	preemption	no	no	[RFCXXXX]
crts-000003	10	preemption	no	no	[RFCXXXX]
crts-000004	10	preemption	no	no	[RFCXXXX]
crts-000005	10	preemption	no	no	[RFCXXXX]
crts-000006	10	preemption	no	no	[RFCXXXX]
crts-000007	10	preemption	no	no	[RFCXXXX]
crts-000008	10	preemption	no	no	[RFCXXXX]
crts-000009	10	preemption	no	no	[RFCXXXX]

3.2 IANA Priority-Value Registrations

Within the "Resource-Priority Priority-values" registry in the sip-parameters section of IANA, the list of priority-values for each

of the 40 newly created namespaces from section 3.1 of this document, prioritized least to greatest, is registered by the following (to be replicated similar to the following format):

Namespace: dsn-000000
Reference: RFCXXXX (this document)
Priority-Values (least to greatest): "0", "1", "2", "3", "4", "5", "6", "7", "8", "9"

4. Security Considerations

This document has the same Security Considerations as RFC 4412.

5. Acknowledgements

To Jeff Hewett for his helpful guidance in this effort. Thanks to Janet Gunn, John Rosenberg, Joel Halpern, Michael Giniger, Henning Schulzrinne and Keith Drage for their comments.

6. References

6.1 Normative References

[RFC4412] Schulzrinne, H., Polk, J., "Communications Resource Priority for the Session Initiation Protocol (SIP)", RFC 4411, Feb 2006

[RFC2119] S. Bradner, "Key words for use in RFCs to Indicate Requirement Levels", RFC 2119, March 1997

Author's Address

James Polk
3913 Treemont Circle
Colleyville, Texas 76034
USA

Phone: +1-817-271-3552
Fax: none
Email: jmpolk@cisco.com

Full Copyright Statement

Copyright (C) The IETF Trust (2008).

This document is subject to the rights, licenses and restrictions contained in BCP 78, and except as set forth therein, the authors retain all their rights.

This document and the information contained herein are provided on an "AS IS" basis and THE CONTRIBUTOR, THE ORGANIZATION HE/SHE REPRESENTS OR IS SPONSORED BY (IF ANY), THE INTERNET SOCIETY, THE IETF TRUST AND THE INTERNET ENGINEERING TASK FORCE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Intellectual Property

The IETF takes no position regarding the validity or scope of any Intellectual Property Rights or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; nor does it represent that it has made any independent effort to identify any such rights. Information on the procedures with respect to rights in RFC documents can be found in BCP 78 and BCP 79.

Copies of IPR disclosures made to the IETF Secretariat and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this specification can be obtained from the IETF on-line IPR repository at http://www.ietf.org/ipr.

The IETF invites any interested party to bring to its attention any copyrights, patents or patent applications, or other proprietary rights that may cover technology that may be required to implement this standard. Please address the information to the IETF at ietf-ipr@ietf.org.

Acknowledgment

Funding for the RFC Editor function is provided by the IETF Administrative Support Activity (IASA).