Internet Assigned Numbers Authority (IANA) Registration of Instant Messaging and Presence DNS SRV RRs for the Session Initiation Protocol (SIP)
draft-loreto-simple-im-srv-label-02

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Abstract

This document registers with IANA two new DNS SRV Protocol Labels for resolving Instant Messaging and Presence services with SIP.
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1. Introduction

The Service Record (SRV) [RFC2782] identifies the host(s) that will support particular services. The DNS is queried for SRV RR in the general form:

_Service._Proto.Name

Service: the symbolic name of the desired service.
Proto: the protocol of the desired service
Name: the domain name for which this record is valid.

Address Resolution for Instant Messaging and Presence [RFC3861] provides guidance for locating the services associated with URIs that employ two Uniform Resource Identifier (URI) [RFC3986]: ‘im’ for INSTANT INBOXes [RFC3860] and ‘pres’ for PRESENTITIES [RFC3859].

In order to ensure that the association between "_im" and "_pres" and their respective underlying services are deterministic, the IANA has created two independent registries: the Instant Messaging SRV Protocol Label registry and the Presence SRV Protocol Label registry.

This document defines and registers the "_sip" protocol label in both registries so that computer programs can resolve ‘im:’ and ‘pres:’ URIs down to SIP addresses.

Moreover this document explains how the SIP/SIMPLE protocol uses SRV.

2. Terminology

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 RFC 2119 [RFC2119].

3. DNS SRV usage of SIP with ‘im’ and ‘pres’ URIs

Altough there are standard procedures for resolving im and pres URI (section 3 of [RFC3861]), the labels for SIP are not registered.

Section 5 of [RFC3428] states that if a UA is presented with an IM URI (e.g."im:fred@example.com") as the address for an instant message, it SHOULD resolve it to a SIP URI, and place the resulting URI in the Request-URI of the MESSAGE request before sending".

Following the procedures defined in [RFC3861], in order to resolve the IM URI the UA performs a SRV lookup for:
_im._sip.example.com

Assuming that the example.com domain offers a SIP service for instant messaging at simple.example.com, this will result in a resolution of _im._sip.example.com to simple.example.com. Thus the instant messaging URI im:fred@example.com would resolve to a SIP URI of sip:fred@simple.example.com.

Section 5 of [RFC3856] states that procedures defined in [RFC3861] are also used to resolve the protocol-independent PRES URI for a presentity (e.g. "pres:fred@example.com") into a SIP URI.

Following the procedures defined in [RFC3861], in order to resolve the PRES URI the UA performs a SRV lookup for:

_pres._sip.example.com

Assuming that the example.com domain offers a SIP presence service at simple.example.com, this will result in a resolution of _pres._sip.example.com to simple.example.com. Thus the protocol independent PRES URI pres:fred@example.com would resolve to a SIP URI of sip:fred@simple.example.com.

4. Security Considerations

This document merely serves for the registration of DNS SRV labels in the appropriate IANA registry. The document does not specify a protocol, therefore, there are no security issues associated with it.

5. IANA Considerations

This specification registers a new SRV Protocol Label in each of the Instant Messaging SRV Protocol Label registry and the Presence SRV Protocol Label registry, respectively.

5.1. Instant Messaging SRV Protocol Label Registration

Address Resolution for Instant Messaging and Presence[RFC3861] defines an Instant Messaging SRV Protocol Label registry for protocols that can provide services that conform to the "_im" SRV Service label. Because SIP is one such protocol, IANA registers the "_sip" protocol label in the "Instant Messaging SRV Protocol Label Registry", as follows:
Protocol label: _sip
Specification: RFCXXXX
Description: Instant messaging protocol label for the SIP/SIMPLE protocol as defined by [RFC3428].
Registrant Contact: Salvatore Loreto <salvatore.loreto@ericsson.com>

5.2. Presence SRV Protocol Label Registration

Address Resolution for Instant Messaging and Presence [RFC3861] defines a Presence SRV Protocol Label registry for protocols that can provide services that conform to the "_pres" SRV Service label. Because SIP/SIMPLE is one such protocol, the IANA registers the "_sip" protocol label in the "Presence SRV Protocol Label Registry", as follows:

Protocol label: _sip
Specification: RFCXXXX
Description: Presence protocol label for the SIP/SIMPLE protocol as defined by [RFC3856].
Registrant Contact: Salvatore Loreto <salvatore.loreto@ericsson.com>

Note to RFC editor: Please replace RFCXXXX with the RFC number assigned to this document.

6. Acknowledgments

The need for this registration was discussed with Jon Peterson and Peter Saint-Andre.

Miguel Garcia reviewed this document on behalf of the Real-time Applications and Infrastructure (RAI) Area Review Team (ART).

7. Normative References


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