SIPPING Working Group   M. Garcia-Martin
Internet-Draft   M. Matuszewski
Intended status: Standards Track   Nokia
Expires: June 23, 2007   December 20, 2006

Resource Descriptions Extension to the Presence Information Data Format (PIDF)

draft-garcia-sipping-resource-desc-pidf-00

Status of this Memo

Copyright Notice

Abstract

The Presence Information Data Format (PIDF) defines a basic format for representing presence information for a presentity. This format defines a textual note, an indication of availability (open or closed) and a Uniform Resource Identifier (URI) for communication.

Presentities who supply presence information often are willing to provide a description of a collection of resources (such as files,

printers, etc.), that are at watchers' disposal. This document extends the PIDF to provide the syntax and format for the description of such resources within the PIDF.

Table of Contents

1. Introduction

Presence is defined as the willingness and ability of a user to communicate with other users on the network. Historically, presence has been limited to "on-line" and "off-line" indicators, although the current trend allows to model a number of events in the presence information.

The Presence Information Data Format (PIDF) [RFC3863] defines a common presence data format for Common Profiles for Instant Messaging (CPIM) [RFC3860] and Presence (CPP) [RFC3859].

The PIDF has been extended and adapted to work with SIP. The Data Model for Presence [RFC4479] defines the underlying presence data model used by Session Initiation Protocol (SIP) [RFC3261] for Instant Messaging and Presence Leveraging Extensions (SIMPLE) presence agents. The PIDF structures the presence information in three components: the person, the service, and the device.

On the other hand, there are scenarios where a SIP endpoint has a number of available resources that can be offered for public disposal, for example, sharing files. One of these cases is, for example, when Alice takes some pictures with her camera phone and she wants to share them within a community.

This document extends the PIDF, to be precise, it extends the device component of the presence data model, to allow the inclusion of a description of available resources such as, but not limited to, files. A presentity who publishes presence information can include a description of one or more resources that are at watcher's disposal for its consumption. By disposal we comprise downloading a file, sending a file to a printer, or joining a chat room, depending on whether the resource is a file, printer, or chat room, respectively.

The extension provided here is fully compatible (in fact, it is exactly the same) with the 'resource' event package [I-D.garcia-sipping-resource-event-package].

2. Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" are to be interpreted as described in BCP 14, RFC 2119 [RFC2119] and indicate requirement levels for compliant implementations.

3. Resource descriptions in PIDF

The 'resource' event package [I-D.garcia-sipping-resource-event-package] defines a 'resource' document that is and XML document compliant with the 'resource' XML schema. We include a 'resource' XML document in the 'device' component of the presence data model, since resources are highly coupled with the actual devices that the user is using. Unfortunately XML schema does not provide the means to normatively indicate that 'resource' documents can be included in the 'device' component of the presence data model that is part of a PIDF document. However, we provide the following example:

```
<?xml version="1.0" encoding="UTF-8"?>
<presence xmlns="urn:ietf:params:xml:ns:pidf"
 xmlns:dm="urn:ietf:params:xml:ns:pidf:data-model"
 xmlns:r="urn:ietf:params:xml:ns:resource"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <tuple id="sg89ae">
  <status>
   <basic>open</basic>
  </status>
  <dm:deviceID>mac:8asd7d7d70</dm:deviceID>
  <contact>sip:someone@example.com</contact>
 </tuple>
 <dm:person id="p1">
 </dm:person>
 <dm:device id="pc122">
  <dm:deviceID>mac:8asd7d7d70</dm:deviceID>

   <r:resource-set version="123">
    <r:resource id="id38sh12jd">
     <r:identity id="id9d8c9" isfile="true">
      <r:mime-type>image/jpeg</r:mime-type>
      <r:size>230432</r:size>
      <r:sha1>72245FE8653DDAF371362F86D471913EE4A2CE2E</r:sha1>
     <r:identity>
     <r:instance id="idc989c00">
      <r:name>coolpic.jpg</r:name>
      <r:description>
          This is my latest cool picture from my summer vacation
      </r:description>
      <r:user-gruu>
        sip:miguel.an.garcia@example.com;
            gr=urn:uuid:f81d4fae-7dec-11d0-a765-00a0c91e6bf6
      </r:user-gruu>
      <r:user-aor>sip:miguel.an.garcia@example.com</r:user-aor>
      <r:creation-date>2006-05-09T09:30:47+03:00</r:creation-date>
```

```
            <r:modification-date>
                2006-05-09T10:24:34+03:00
            </r:modification-date>
            <r:read-date>2006-05-10T14:24:32+03:00</r:read-date>
            <r:icon-ptr>
                http://www.example.com/coolpic-icon.jpg
            </r:icon-ptr>
            <r:keywords>
              <r:keyword>summer</r:keyword>
              <r:keyword>vacation</r:keyword>
            </r:keywords>
          </r:instance>
        </r:resource>
      </r:resource-set>

    </dm:device>
  </presence>
```

Figure 1: Example of resource descriptions in PIDF

4. Security Considerations

TBD

5. IANA Considerations

There are no IANA considerations associated to this memo.

6. References

6.1. Normative References

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.

[I-D.garcia-sipping-resource-event-package] Garcia-Martin, M. and M. Matuszewski, "A Session Initiation Protocol (SIP) Event Package and Data Format for Publication and Searching Generic Resources", draft-garcia-sipping-resource-event-package-01 (work in progress), December 2006.

[RFC3261] Rosenberg, J., Schulzrinne, H., Camarillo, G., Johnston, A., Peterson, J., Sparks, R., Handley, M., and E.

Schooler, "SIP: Session Initiation Protocol", RFC 3261, June 2002.

[RFC3863] Sugano, H., Fujimoto, S., Klyne, G., Bateman, A., Carr, W., and J. Peterson, "Presence Information Data Format (PIDF)", RFC 3863, August 2004.

[RFC4479] Rosenberg, J., "A Data Model for Presence", RFC 4479, July 2006.

6.2. Informative References

[RFC3859] Peterson, J., "Common Profile for Presence (CPP)", RFC 3859, August 2004.

[RFC3860] Peterson, J., "Common Profile for Instant Messaging (CPIM)", RFC 3860, August 2004.

Authors' Addresses

Miguel A. Garcia-Martin
Nokia
P.O.Box 407
NOKIA GROUP, FIN 00045
Finland

Email: miguel.an.garcia@nokia.com

Marcin Matuszewski
Nokia
P.O.Box 407
NOKIA GROUP, FIN 00045
Finland

Email: marcin.matuszewski@nokia.com

Full Copyright Statement

Intellectual Property

Acknowledgment

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