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TOC

Applications and Media Information (AMI) Extension to the Presence Information Data Format
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Status of this Memo

Abstract

The Presence Information Data Format (PIDF) defines a basic format for representing presence information for a presentity. The Application and Media Information (AMI) format described here is an extension that adds optional elements to the Presence Information Data Format (PIDF), describing what music a presentity is listening to, what video it is watching, or what game it is playing.

Table of Contents

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1. Introduction

TOC

The Presence Information Data Format (PIDF) [1] (Sugano, H., Fujimoto, S., Klyne, G., Bateman, A., Carr, W., and J. Peterson, “Presence Information Data Format (PIDF),” August 2004.)defines a basic format for representing presence information for a presentity. The Application and Media Information (AMI) format described here is an extension that conveys additional information about the audio that a presentity is listening to, the video that it is watching, the web site it is visiting and the game that it is playing. The information format is closely modeled on the similar XMPP extensions XEP-0118, XEP-0197, XEP-0195, and XEP-0196, respectively. Such information may be considered an extension of rich presence (Schulzrinne, H., Gurbani, V., Kyzivat, P., and J. Rosenberg, “RPID: Rich Presence Extensions to the Presence Information Data Format (PIDF),” July 2006.) [3] and may be integrated into media players or games.
The elements defined in this document may appear in the <device> or <person> data elements of the presence data model (Rosenberg, J., “A Data Model for Presence,” July 2006.) [4].

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2. Terminology

TOC

In this document, the key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" are to be interpreted as described in RFC 2119 [2] (Bradner,

S., “Key words for use in RFCs to Indicate Requirement Levels,” March 1997.).

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3. Music

TOC

The <tune> element describes the current piece of music that the presentity is listening to. The elements below are a superset of those described in XMPP extension XEP-0118, adding the composer, genre, start_time, and user_comment elements. All elements are OPTIONAL.

> **artist:** The performer of the song or piece.
>
> **composer:** The composer of the song or piece.
>
> **genre:** The musical genre or category.
>
> **length:** The duration of the song or piece in seconds.
>
> **source:** The collection (e.g., album) or other source (e.g., a band website that hosts streams or audio files).
>
> **start_time:** The time the presentity has started listening to the piece..
>
> **title:** The title of the song or piece.
>
> **track:** A unique identifier for the tune; e.g., the track number within a collection or the specific URI for the object (e.g., a stream or audio file).
>
> **uri:** A URI or URL pointing to information about the song, collection, or artist.
>
> **user_comment:** A user's free-form comments about the piece.

Element	Example	Datatype
artist	Chicago Symphony	xs:string
composer	Carl Orff	xs:string
genre	classical	xs:string
length	3658	xs:unsignedShort
source	Orff Carmina Burana	xs:string
start_time	2007-11-12T08:30Z	xs:dateTime

title	Omnia Sol temperat	xs:string
track	4	xs:string
user_comment	Stirring	xs:string
uri	http://example.com/CB	xs:anyURI

Table 1

4. Video

TOC

The video element describes a video program that the presentity is watching, e.g., on a DVD, VCR or DVR, from a web site, or a broadcast service such as over-the-air television, satellite TV or CATV. The elements are copied from XMPP XEP-0197. All elements are OPTIONAL.

author: The author or producer of the program.

cast: The cast members of the program.

channel_id: A globally unique channel identifier (URN).

channel_name: The name of the TV or satellite channel showing the program.

description: A description of the program.

duration: The duration of the program (in seconds).

end_time: The end time of the program. The end time is a prediction and does not take pausing and other VCR operations into account.

episode: The episode number of the program.

program_name: The name of the program (for television series) or movie title.

program_type: The type of the program, such as comedy, drama, sports or news.

start_time: The start time of the program. For time-shifted viewing, the start_time describes the time that the presentity

has started watching the video, not the original broadcast time, is shown.

subprogram_type: The type of the sub-program (e.g., outtakes on an extended DVD).

uri: A URI for the video or relevant service.

user_comment: A user's free-form comments about the program.

user_rating: The user's personal rating of the program (on a scale of 1 to 10, with 10 being highest).

Element	Example	Datatype
author	Frank Capra	xs:string
cast	James Stewart, Donna Reed, Lionel Barrymore	xs:string
channel_id	?	xs:anyURI
channel_name	WFBR	xs:string
description	Holiday movie.	xs:string
duration	7800	xs:positiveInteger
end_time	2007-11-12T05:10Z	xs:dateTime
episode		xs:string
program_name	It's a wonderful life	xs:string
program_type	drama	xs:string
start_time	2007-11-12T03:00Z	xs:dateTime
subprogram_type	feature	xs:string
uri	http://example.com/iawl	xs:anyURI
user_comment	A Christmas classic	xs:string
user_rating	8	xs:unsignedShort

Table 2

TOC

5. Game

Game information can be used to gauge what activity the user is engaged in and can be part of social networking applications. The information is similar to the XMPP extension XEP-0196 and contains the information in the table below. All elements are OPTIONAL.

> **character_name:** The name of the user's character in the game.
>
> **character_profile:** A URI for a profile of the user's character.
>
> **name:** The name of the game
>
> **level:** The user's level in the game.
>
> **server_address:** The hostname or IP address of the server where the user is playing.
>
> **server_name:** The name of the server where the user is playing.
>
> **uri:** A URI for the game or relevant gaming service.

Element	Example	Datatype
character_name	Stentor	xs:string
character_profile	http://example.com/12345	xs:anyURI
name	Worlds of Peace	xs:string
level	66	xs:string
server_address	wop6.example.com	xs:string
server_name	WOP Example	xs:string
uri	http://wp.example.com/	xs:anyURI

Table 3

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6. Web page

TOC

The <page> element describes the web page the presentity is browsing. A presence document MAY contain multiple such elements since a single user may have multiple windows open at the same time. This element is also useful for remote collaboration or joint web browsing. The

elements and their characteristics are derived from XMPP XEP-0195. All elements except uri are OPTIONAL, uri is REQUIRED.

description: The value of the HTML "description" META tag.

keywords: The value of the HTML "keywords" META tag.

title: The value of the HTML <title/> element

uri: The URI of the page.

Element	Example	Datatype
description	RFC 3261	xs:string
keywords	SIP, protocol	xs:string
title	RFC 3261	xs:string
uri	http://example.org/3261	xs:anyURI

Table 4

7. Example

TOC

```
<?xml version="1.0" encoding="UTF-8"?>
<presence xmlns="urn:ietf:params:xml:ns:pidf"
  xmlns:gp="urn:ietf:params:xml:ns:pidf:geopriv10"
  xmlns:gml="urn:opengis:specification:gml:schema-xsd:feature:v3.0"
  entity="pres:geotarget@example.com">
  <tuple id="sg89ae">
    <status>
    </status>
    <timestamp>2003-06-22T20:57:29Z</timestamp>
  </tuple>
</presence>
```

Figure 1: Example AMI extension

8. Security Considerations

TOC

This document defines additional location elements carried by PIDF [1] (Sugano, H., Fujimoto, S., Klyne, G., Bateman, A., Carr, W., and J. Peterson, “Presence Information Data Format (PIDF),” August 2004.), so its security considerations apply. Revealing ones taste in music or video entertainment can be embarrassing; employers and parents may not appreciate the games being played by a presentity, so presentity discretion and privacy policies are strongly advised. In particular, audio and video tools MUST NOT publish such information without explicit consent of the presentity.
The watcher MUST NOT automatically resolves URLs provided in the information elements, as these may lead to malicious or inappropriate material.

9. IANA Considerations

TOC

A future version of this document will provide IANA considerations.

10. Acknowledgements

TOC

The data formats were derived from the XMPP extensions XEP-0118, XEP-0195, XEP-0196 and XEP-0197. Tracking channels was suggested by Erik Huizer and Pascal Decointet.

11. References

TOC

11.1. Normative References

TOC

[1]	Sugano, H., Fujimoto, S., Klyne, G., Bateman, A., Carr, W., and J. Peterson, “Presence Information Data Format (PIDF),” RFC 3863, August 2004 (TXT).
[2]	Bradner, S., “Key words for use in RFCs to Indicate Requirement Levels,” BCP 14, RFC 2119, March 1997 (TXT, HTML, XML).

11.2. Informative References

TOC

[3]	Schulzrinne, H., Gurbani, V., Kyzivat, P., and J. Rosenberg, “RPID: Rich Presence Extensions to the Presence Information Data Format (PIDF),” RFC 4480, July 2006 (TXT).
[4]	Rosenberg, J., “A Data Model for Presence,” RFC 4479, July 2006 (TXT).

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TOC

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TOC

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