

TelephonyClient:2 Device

For UPnP Version 1.0

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CONTENTS

1	Scope.....	2
2	Normative references	2
3	Terms, definitions and abbreviated terms	3
4	Notations and conventions	4
4.1	Text conventions	4
4.2	Vendor-defined extensions	4
5	Device Definitions	4
5.1	Device Type.....	4
5.2	<u>TelephonyClient</u> Device Architecture.....	4
5.3	Device Model	5
6	XML Device Description.....	5
7	Test	7
	Annex A (informative) Theory of Operation	8
	Annex B (informative) Bibliography	9
	Figure 1 — TelephonyClient Device Architecture.....	4
	Figure A.1 — Interaction Between a Telephony Client and Telephony Control Point.....	8
	Table 1 — Device Requirements	5

1 Scope

This document defines a device type named TelephonyClient, that complies with [1].

The TelephonyClient device is a UPnP device that allows control points to exploit a set of telephony features such as management of media session with a telephony server, messaging, presence etc via UPnP though other UPnP enabled home network devices. This device provides control points with the following functionality:

- Managing media session with a telephony server including setting up and terminating of media session with a telephony server.
- Messaging features including sending and retrieving messages and notifications of incoming messages.
- Enabling user friendly input capability.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

4 Notations and conventions

4.1 Text conventions

- Strings that are to be taken literally are enclosed in “double quotes”.
- Placeholder values that need to be replaced are enclosed in the curly brackets “{” and “}”.
- Words that are emphasized are printed in *italic*.
- Keywords that are defined by the UPnP Working Committee are printed using the *forum* character style.
- Keywords that are defined by the UPnP Device Architecture are printed using the *arch* character style.

4.2 Vendor-defined extensions

Whenever vendors create additional vendor-defined state variables, actions or properties, their assigned names and XML representation shall follow the naming conventions and XML rules as specified in [1], 2.5, “Description: Non-standard vendor extensions”.

5 Device Definitions

5.1 Device Type

The following service type identifies a device that is compliant with this specification:

urn:schemas-upnp-org:device:TelephonyClient:2

TelephonyClient device is used herein to refer to this device type.

5.2 TelephonyClient Device Architecture

This device is hosted by the Telephony Client and is active on the LAN network interface. The device can embed a number of telephony services including Media Management, Messaging, Presence, and InputConfig, etc. The details for each of these services can be found in the Telephony Architecture document.

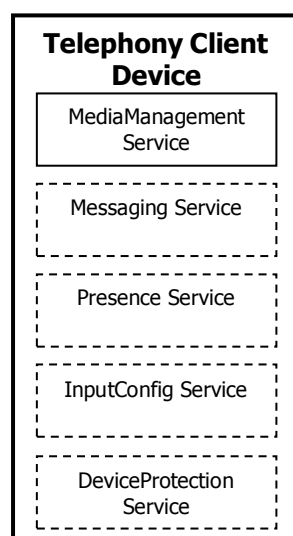


Figure 1 — TelephonyClient Device Architecture

5.3 Device Model

TelephonyClient products shall implement minimum version numbers of all required embedded devices and services specified in the table below. A TelephonyClient device can be either a Root device or can be Embedded in another UPnP device (TelephonyClient or other). A TelephonyClient device (Root or Embedded) can in turn contain other standard or non-standard Embedded UPnP devices.

Table 1 — Device Requirements

DeviceType	Root	R/A ^a	ServiceType	R/A ^a	Service ID ^b
<u>TelephonyClient:2</u>	<u>Root</u> or <u>Embedded</u>	<u>R</u>	<u>MediaManagement:2</u>	<u>R</u>	<u>MediaManagement</u>
			<u>Messaging:2</u>	<u>A</u>	<u>Messaging</u>
			<u>InputConfig:1</u>	<u>A</u>	<u>InputConfig</u>
			<u>DeviceProtection:1</u>	<u>A</u>	<u>DeviceProtection1</u>
			<u>Presence:1</u>	<u>A</u>	<u>Presence</u>
			Non-standard services embedded by a UPnP vendor go here.	<u>X</u>	TBD
<u>Standard devices embedded by a UPnP vendor go here.</u>	<u>Embedded</u>	<u>A</u>	<u>Services as defined by the corresponding standard UPnP Device Definition go here.</u>		
<u>Non-standard devices embedded by a UPnP vendor go here.</u>	<u>Embedded</u>	<u>X</u>	TBD	TBD	TBD

^a R = required, A = allowed, X = Non-standard.

^b Prefixed by urn:upnp-org:serviceId:

6 XML Device Description

```
<?xml version="1.0"?>
<root xmlns="urn:schemas-upnp-org:device-1-0">
  <specVersion>
    <major>1</major>
    <minor>0</minor>
  </specVersion>
  <URLBase>base URL for all relative URLs</URLBase>
  <device>
    <deviceType>
      urn:schemas-upnp-org:device:TelephonyClient:2
    </deviceType>
    <friendlyName>short user-friendly title</friendlyName>
    <manufacturer>manufacturer name</manufacturer>
    <manufacturerURL>URL to manufacturer site</manufacturerURL>
    <modelDescription>long user-friendly title</modelDescription>
    <modelName>model name</modelName>
    <modelNumber>model number</modelNumber>
    <modelURL>URL to model site</modelURL>
    <serialNumber>manufacturer's serial number</serialNumber>
    <UDN>uuid:UUID</UDN>
    <UPC>Universal Product Code</UPC>
    <iconList>
      <icon>
        <mimetype>image/format</mimetype>
        <width>horizontal pixels</width>
        <height>vertical pixels</height>
        <depth>color depth</depth>
        <url>URL to icon</url>
      </icon>
    </iconList>
  </device>
</root>
```

```

</icon>
<!-- XML to declare other icons, if any, go here -->
</iconList>
<serviceList>
  <service>
    <serviceType>
      urn:schemas-upnp-org:service:MediaManagement:2
    </serviceType>
    <serviceId>
      urn:upnp-org:serviceId:MediaManagement
    </serviceId>
    <SCPDURL>URL to service description</SCPDURL>
    <controlURL>URL for control</controlURL>
    <eventSubURL>URL for eventing</eventSubURL>
  </service>
  <service>
    <serviceType>
      urn:schemas-upnp-org:service:Messaging:2
    </serviceType>
    <serviceId>
      urn:upnp-org:serviceId:Messaging
    </serviceId>
    <SCPDURL>URL to service description</SCPDURL>
    <controlURL>URL for control</controlURL>
    <eventSubURL>URL for eventing</eventSubURL>
  </service>
  <service>
    <serviceType>
      urn:schemas-upnp-org:service:Presence:1
    </serviceType>
    <serviceId>
      urn:upnp-org:serviceId:Presence
    </serviceId>
    <SCPDURL>URL to service description</SCPDURL>
    <controlURL>URL for control</controlURL>
    <eventSubURL>URL for eventing</eventSubURL>
  </service>
  <service>
    <serviceType>
      urn:schemas-upnp-org:service:InputConfig:1
    </serviceType>
    <serviceId>
      urn:upnp-org:serviceId:InputConfig
    </serviceId>
    <SCPDURL>URL to service description</SCPDURL>
    <controlURL>URL for control</controlURL>
    <eventSubURL>URL for eventing</eventSubURL>
  </service>
  <service>
    <serviceType>
      urn:schemas-upnp-org:service:DeviceProtection:1
    </serviceType>
    <serviceId>
      urn:upnp-org:serviceId:DeviceProtection1
    </serviceId>
    <SCPDURL>URL to service description</SCPDURL>
    <controlURL>URL for control</controlURL>
    <eventSubURL>URL for eventing</eventSubURL>
  </service>

  <!-- Declarations for standard non-Telephony services defined by
    UPnP (if any)go here. -->

  <!-- Declarations for other services defined by UPnP vendor
    (if any)go here. -->

```

```
</serviceList>

<!-- Declarations for standard non-Telephony devices defined by UPnP
      (if any)go here. -->

<!-- Declarations for other devices defined by UPnP vendor
      (if any)go here. -->

</deviceList>
<presentationURL>URL for presentation</presentationURL>
</device>
</root>
```

7 Test

No semantic tests have been specified for this device.

Annex A (informative)

Theory of Operation

The basic telephony feature a Telephony Client Device provides is the Media Management Service. The Media Management Service provides the feature to set-up media session on a Telephony Client (TC), under the control of a Telephony Control Point (TelCP). The architectural model shown in the diagram below at a very high level explains how media session parameters are gathered/negotiated by a Telephony Control Point (TelCP) to establish a media session between a Telephony Server (TS) and a Telephony Client (TC).

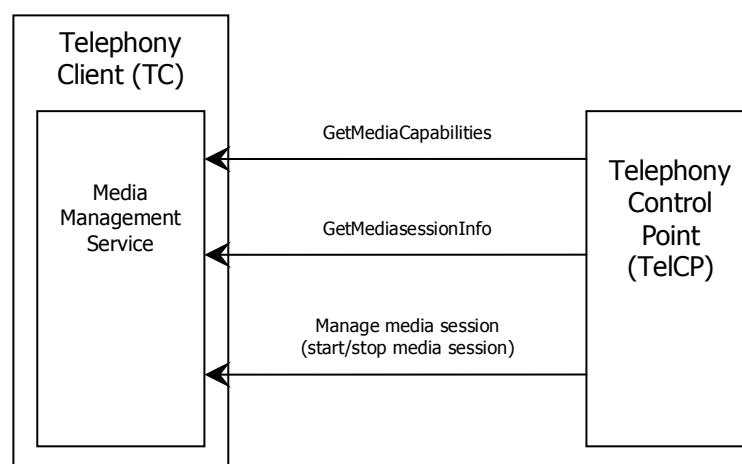


Figure A.1 — Interaction Between a Telephony Client and Telephony Control Point

A Telephony Client Device may can include messaging and presence services as well. However, features of such services are purely optional. Please see [3], clause 6, for more details of the Telephony Client (TC) architecture.

Annex B (informative)

Bibliography

The following documents, in whole or in part, may be useful for understanding this document but they are not essential for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

[3] – *TelephonyArchitecture:2*, UPnP Forum, December 10, 2012. Available at: <http://www.upnp.org/specs/phone/UPnP-phone-TelephonyArchitecture-v2-20121210.pdf>. Latest version available at: <http://www.upnp.org/specs/phone/UPnP-phone-TelephonyArchitecture.pdf>.