

Open Service Access (OSA); Parlay X Web Services; Part 11: Audio Call



Reference

DES/TISPAN-01007-11-OSA

Keywords

API, OSA, service

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Foreword

This ETSI Standard (ES) has been produced by ETSI Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN).

The present document is part 11 of a multi-part deliverable covering Open Service Access (OSA); Parlay X Web Services, as identified below:

- Part 1: "Common";
- Part 2: "Third Party Call";
- Part 3: "Call Notification";
- Part 4: "Short Messaging";
- Part 5: "Multimedia Messaging";
- Part 6: "Payment";
- Part 7: "Account Management";
- Part 8: "Terminal Status";
- Part 9: "Terminal Location";
- Part 10: "Call Handling";
- Part 11: "Audio Call";**
- Part 12: "Multimedia Conference";
- Part 13: "Address List Management";
- Part 14: "Presence".

The present document has been defined jointly between ETSI, The Parlay Group (<http://www.parlay.org>) and the 3GPP.

The present document is equivalent to 3GPP TS 29.199-11 V6.0.0 (Release 6).

1 Scope

The present document is part 11 of the Stage 3 Parlay X Web Services specification for Open Service Access (OSA).

The OSA specifications define an architecture that enables application developers to make use of network functionality through an open standardized interface, i.e. the OSA APIs.

The present document specifies the Call Handling Web Service. The following are defined here:

- Name spaces.
- Sequence diagrams.
- Data definitions.
- Interface specification plus detailed method descriptions.
- Fault definitions.
- Service Policies.
- WSDL Description of the interfaces.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

[1] W3C Recommendation (2 May 2001): "XML Schema Part 2: Datatypes".

NOTE: Available at <http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/>.

[2] ETSI ES 202 391-1: "Open Service Access (OSA); Parlay X Web Services; Part 1: Common".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in ES 202 391-1 [2] apply.

3.2 Abbreviations

For the purposes of the present document, the abbreviations defined in ES 202 391-1 [2] apply.

4 Detailed service description

The Audio Call service provides a flexible way to provide vocal message delivery. The interface is very simple, not requiring the developer to manage the creation of the call nor the interactions with the call to deliver the voice message.

There are three mechanisms which may be utilized for the vocal message content:

- Text, to be rendered using a Text-To-Speech (TTS) engine.
- Audio content (such as .WAV content), to be rendered by an audio player.
- VoiceXML, to be rendered using a VoiceXML browser.

The service may provide one, two or all three mechanisms, with the service policies providing the mechanism for determining which are available.

5 Namespaces

The AudioCall interface uses the namespace:

`www.csapi.org/wsd/parlayx/audio_call/v2_0`

The data types are defined in the namespace:

`www.csapi.org/schema/parlayx/audio_call/v2_0`

The 'xsd' namespace is used in the present document to refer to the XML Schema data types defined in XML Schema [1]. The use of the name 'xsd' is not semantically significant.

6 Sequence diagrams

6.1 Play audio and check status

Pattern: Request / response.

This example shows an audio message being played, and the different responses to status requests that occur at different phases. Note that the last response, a service exception, reflects the transient nature of results, and that these results will expire.

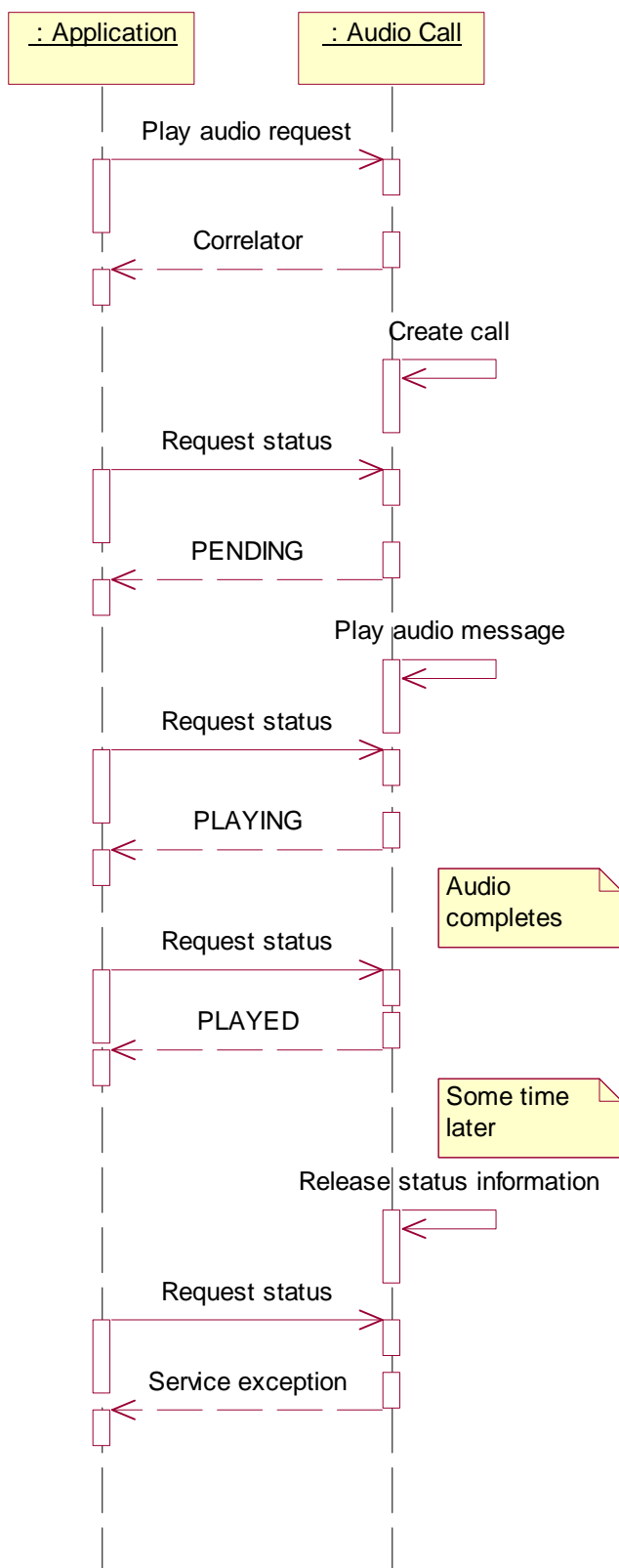


Figure 1

6.2 Play audio and cancel

Pattern: Request / response.

The playing of a message may be ended by the requester, as shown.

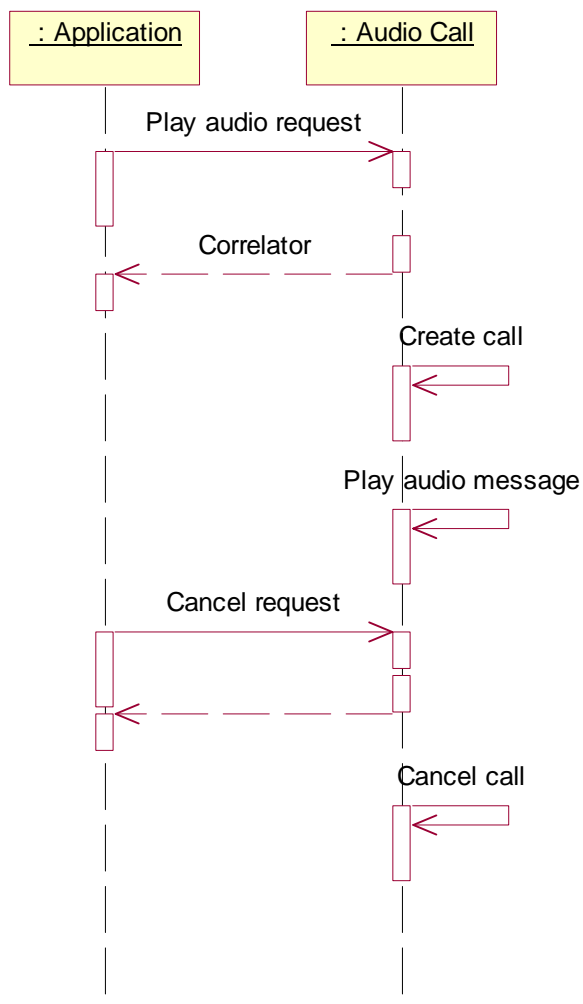


Figure 2

7 XML Schema data type definition

7.1 MessageStatus enumeration

Status of the message after play message operation has been invoked.

Element Name	Description
Played	Message has been played
Playing	Message is currently playing
Pending	Message has not yet started playing
Error	An error has occurred, message will not be played

8 Web Service interface definition

8.1 Interface: PlayAudio

The PlayAudio interface allows the playing of audio messages using different forms of audio content, and operations to monitor or cancel requests.

In all operations, the **Address** is restricted to the use of 'tel:' and 'sip:' URIs as specified in ES 202 391-1 [2], and wildcards are not permitted in these URIs.

8.1.1 Operation: PlayTextMessage

The invocation of **PlayTextMessage** requests to set up a call to the user identified by **Address** and play a text identified by **Text**. The text will be read through a Text-to-Speech engine, according to the specified **Language**. The invocation returns as soon as the request is received by the system, i.e. the actual call is performed asynchronously. The **Correlator**, returned by the invocation, can be used to identify the request, e.g. to get information on the request status.

This operation is intended to play a message to a single terminal. The URI provided is for a single terminal, not a group URI. If a group URI is provided, a PolicyException will be returned to the application.

8.1.1.1 Input message: PlayTextMessageRequest

Part name	Part type	Description
Address	xsd:anyURI	Address to which message is to be played
Text	xsd:string	Text to process with a Text-To-Speech engine
Language	xsd:string	Language of text (ISO string)
Charging	common:ChargingInformation	Charge to apply for the playing of this message. If charging is not supported then a PolicyException (POL0008) will be returned

8.1.1.2 Output message: PlayTextMessageResponse

Part name	Part type	Description
Correlator	xsd:string	Correlator for this message for subsequent interactions

8.1.1.3 Referenced faults

ServiceException from ES 202 391-1 [2]:

- SVC0001: Service error.
- SVC0002: Invalid input value.

PolicyException from ES 202 391-1 [2]:

- POL0001: Policy error.
- POL0002: Privacy error.
- POL0006: Groups not allowed.
- POL0008: Charging not supported.

8.1.2 Operation: PlayAudioMessage

The invocation of **playAudioMessage** requests to set up a call to the user identified by **Address** and play an audio file located at **AudioUrl**. The invocation returns as soon as the request is received by the system, i.e. the actual call is performed asynchronously. The **Correlator**, returned by the invocation, can be used to identify the request, e.g. to get information on the request status.

This operation is intended to play a message to a single terminal. The URI provided is for a single terminal, not a group URI. If a group URI is provided, a PolicyException will be returned to the application.

8.1.2.1 Input message: PlayAudioMessageRequest

Part name	Part type	Description
Address	xsd:anyURI	Address to which message is to be played
AudioUrl	xsd:anyURI	Location of audio content to play
Charging	common:ChargingInformation	Charge to apply for the playing of this message. If charging is not supported then a PolicyException (POL0008) will be returned

8.1.2.2 Output message: PlayAudioMessageResponse

Part name	Part type	Description
Correlator	xsd:string	Correlator for this message for subsequent interactions

8.1.2.3 Referenced faults

ServiceException from ES 202 391-1 [2]:

- SVC0001: Service error.
- SVC0002: Invalid input value.

PolicyException from ES 202 391-1 [2]:

- POL0001: Policy error.
- POL0002: Privacy error.
- POL0006: Groups not allowed.
- POL0008: Charging not supported.

8.1.3 Operation: PlayVoiceXmlMessage

The invocation of **PlayVoiceXmlMessage** requests to set up a call to the user identified by **Address** and process VoiceXML content located at **VoiceXmlUrl**. The invocation returns as soon as the request is received by the system, i.e. the actual call is performed asynchronously. The **Correlator**, returned by the invocation, can be used to identify the request, e.g. to get information on the request status.

This operation is intended to play a message to a single terminal. The URI provided is for a single terminal, not a group URI. If a group URI is provided, a PolicyException will be returned to the application.

8.1.3.1 Input message: PlayVoiceXmlMessageRequest

Part name	Part type	Description
Address	xsd:anyURI	Address to which message is to be played
VoiceXmlUrl	xsd:anyURI	Location of VoiceXML content to process
Charging	common:ChargingInformation	Charge to apply for the playing of this message. If charging is not supported then a PolicyException (POL0008) will be returned

8.1.3.2 Output message: PlayVoiceXMLMessageResponse

Part name	Part type	Description
Correlator	xsd:string	Correlator for this message for subsequent interactions

8.1.3.3 Referenced faults

ServiceException from ES 202 391-1 [2]:

- SVC0001: Service error.
- SVC0002: Invalid input value.

PolicyException from ES 202 391-1 [2]:

- POL0001: Policy error.
- POL0002: Privacy error.
- POL0006: Groups not allowed.
- POL0008: Charging not supported.

8.1.4 Operation: GetMessageStatus

The invocation of **GetMessageStatus** retrieves the current status, **Result**, of a previous request identified by **Correlator**.

8.1.4.1 Input message: GetMessageStatusRequest

Part name	Part type	Description
Correlator	xsd:string	Correlator returned from play operation to check

8.1.4.2 Output message: GetMessageStatusResponse

Part name	Part type	Description
Result	MessageStatus	Current playing status

8.1.4.3 Referenced faults

ServiceException from ES 202 391-1 [2]:

- SVC0001: Service error.
- SVC0002: Invalid input value.

PolicyException from ES 202 391-1 [2]:

- POL0001: Policy error.

8.1.5 Operation: EndMessage

The invocation of **EndMessage** cancels/stops a previous request identified by **Correlator**. It returns a **Result**, with the status of the request at the moment of abort.

8.1.5.1 Input message: EndMessageRequest

Part name	Part type	Description
Correlator	xsd:string	Correlator returned from play operation to cancel

8.1.5.2 Output message: EndMessageResponse

Part name	Part type	Description
Result	MessageStatus	Status at the time the endMessage was acted on

8.1.5.3 Referenced faults

ServiceException from ES 202 391-1 [2]:

- SVC0001: Service error.
- SVC0002: Invalid input value.

PolicyException from ES 202 391-1 [2]:

- POL0001: Policy error.

9 Fault definitions

No new faults defined for this service.

10 Service policies

Service policies for this service.

Name	Type	Description
TextToSpeechAvailable	xsd:boolean	Service accepts text as an input for processing with a Text-To-Speech engine
AudioContentAvailable	xsd:boolean	Service accepts audio content for playing with an audio player
VoiceXMLAvailable	xsd:boolean	Service accepts VoiceXML as an input for processing with a VoiceXML browser
StatusRetainTime	xsd:int	Number of seconds status is retained for after a message is played or an error occurs
AudioFormatsSupported	xsd:string	Comma separated list of audio formats supported (e.g. WAV, MP3, AU)
ChargingSupported	xsd:boolean	Is charging supported for the play operations

Annex A (normative): WSDL for Audio Call

The document/literal WSDL representation of this interface specification is compliant to ES 202 391-1 [2] and is contained in text files (contained in archive es_20239111v010101p0.zip) which accompany the present document.

Annex B (informative): Bibliography

ETSI TR 121 905: "Universal Mobile Telecommunications System (UMTS); Vocabulary for 3GPP Specifications (3GPP TR 21.905)".

History

Document history		
V1.1.1	January 2005	Membership Approval Procedure MV 20050318: 2005-01-18 to 2005-03-18
V1.1.1	March 2005	Publication