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ETSI Standard

Open Service Access (OSA);
Parlay X Web Services;
Part 18: Device Capabilities and Configuration (Parlay X 3)

Reference

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Keywords

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Contents

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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), and is now submitted for the ETSI standards Membership Approval Procedure.

The present document is part 18 of a multi-part deliverable covering Open Service Access (OSA); Parlay X 3 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";

Part 15: "Message Broadcast";

Part 16: "Geocoding";

Part 17: "Application-driven Quality of Service (QoS)";

Part 18: "Device Capabilities and Configuration";

Part 19: "Multimedia Streaming Control";

Part 20: "Multimedia Multicast Session Management".

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

The present document forms part of the Parlay X 3.0 set of specifications.

The present document is equivalent to 3GPP TS 29.199-18 V7.0.0 (Release 7).

1 Scope

The present document is part 18 of the Stage 3 Parlay X 3 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 Device Capabilities and Configuration 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

References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

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  - for informative references.

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NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

2.1 Normative references

The following referenced documents are indispensable for the application of the present document. For dated references, only the edition cited applies. For non-specific references, the latest edition of the referenced document (including any amendments) applies.

[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 202 504-1: "Open Service Access (OSA); Parlay X Web Services; Part 1: Common (Parlay X 3)".

[3] OMA Client Provisioning.

NOTE: Available at http://www.wapforum.org/DTD/prov.dtd.

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in ES 202 504-1 [2] apply.

3.2 Abbreviations

For the purposes of the present document, the abbreviations defined in ES 202 504-1 [2] apply.

4 Detailed service description

The Parlay X Device Capabilities and Configuration Web Service will allow applications to get information about device capabilities and push device configuration to a device.

4.1 Device capabilities

An application retrieves the device capabilities of a user's device by providing their phone number. The device capabilities are described by a user profile XML file, which URL is stored in the DeviceCapability structure returned when the capabilities are requested. In addition there is an operation to get the equipment identifier of the device. (The operation to get the device identifier is in a separate call, in case there is a wish to restrict this information more than the device capabilities.)

In addition it is possible to set up notification for device identifier changes and receive the notifications when the device identifier changes.

4.2 Device configuration

The application pushes the device configuration to a user's device by providing their phone number and the configuration (chosen from a list of available configurations.) The application can get the list of available configurations for a given device and the history of the configurations previously pushed to the user's device.

4.3 Application scenarios

The Parlay X Device Capabilities and Configuration web service relies on the Parlay/OSA Terminal Capabilities SCF and one of the Parlay/OSA or Parlay X Messaging interfaces. In addition storage for configuration files is provided. These files should respect the OMA Client Provisioning standard [3]. Usually sent to the subscriber device by SMS messages these files may configure settings such as WAP, MMS, Emails, etc. The following figure gives two examples of applications that can utilize the Device Capabilities and Configuration web service. One is a Customer Relationship Management Application used by an operator, the other is a Self Care Application used by the subscribers.

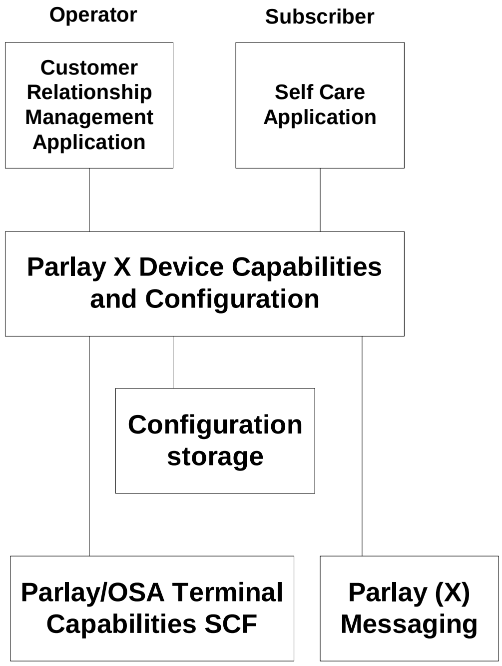

Figure 1

5 Namespaces

The DeviceCapabilities interface uses the namespace:

http://www.csapi.org/wsdl/parlayx/device_capabilities/v3_0

The DeviceCapabilitiesNotificationManager interface uses the namespace:

http://www.csapi.org/wsdl/parlayx/device_capabilities/notification_manager/v3_0

The DeviceCapabilitiesNotification interface uses the namespace:

http://www.csapi.org/wsdl/parlayx/device_capabilities/notification/v3_0

The DeviceConfiguration interface uses the namespace:

http://www.csapi.org/wsdl/parlayx/device_capabilities/device_configuration/v3_0

The data types are defined in the namespace:

http://www.csapi.org/schema/parlayx/device_capabilities/v3_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 Device capability

The application gets the device capabilities of a device. With the device capabilities the application can chose the right version of another service to make available for the user (not shown in the diagram).

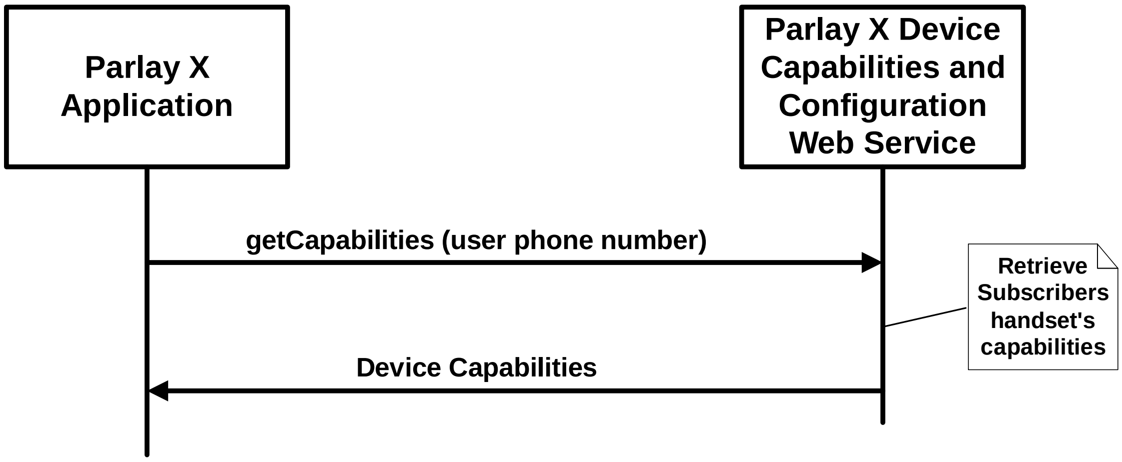

Figure 2

6.2 Device configuration

The first device configuration sequence diagram shows how an application for a customer service operator can utilize the configuration history when a customer calls in with configuration problems. The application first gets the configuration history, and then the customer service operator chooses to push the previous configuration to the device.

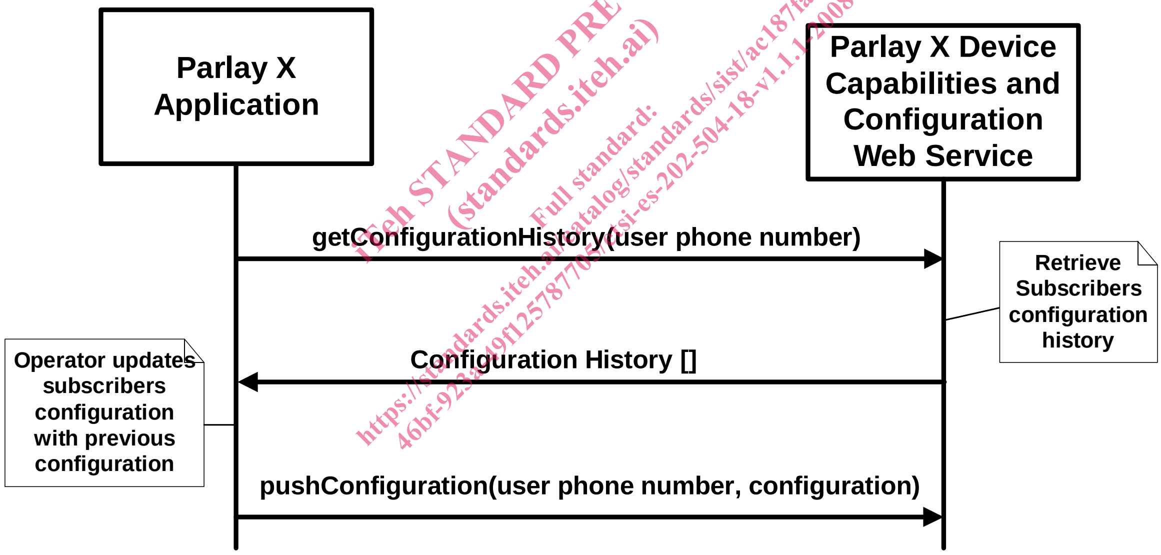

Figure 3

Another possibility is for the customer service operator to check available configurations for the customer's device when the customer calls. Then the operator chooses a configuration to push to the device.