Enabler Test Report Client Provisioning v1.1
OMA TestFest (October 2004)
Version 29-Oct-2004

Open Mobile Alliance
OMA-Enabler_Test_Report-CP-11-20041029

Contents

1. Scope

This report describes the results from the testing carried out at OMA TestFest (October 2004) concerning the Client Provisioning enabler version 1.1.

2. References

2.1   Normative References

[OMAIOPPROC]   OMA Interoperability Policy and Process, http://www.openmobilealliance.org/

[CP11EICS]   Client Enabler Implementation Conformance Statement
                                       OMA Client Provisioning 1.1 Enabler Release
                                       Approved Version, 11-Feb-2004
                                        http://www.openmobilealliance.org/

[ERELD]   "Enabler Release Definition for Client Provisioning Version 1.1" Open Mobile Alliance™.
                                       OMA-ERELD-ClientProvisioning-V1_1. URL:http://www.openmobilealliance.org/

[PROVBOOT]   "Provisioning Bootstrap 1.1", Open Mobile Alliance™, OMA-WAP-PROVBOOT-V1_1, URL:
                                       http://www.openmobilealliance.org/

[PROVCONT]   "Provisioning Content 1.1", Open Mobile Alliance ™, OMA-WAP-PROVCONT-v1_1, URL:
                                       http://www.openmobilealliance.org

[PROVUAB]   "Provisioning User Agent Behaviour 1.1", Open Mobile Alliance™, OMA-WAP-PROVUAB-
                                       V1_1, URL: http://www.openmobilealliance.org/

[PROVSC]   "Smart Card Provisioning 1.1", Open Mobile Alliance ™, OMA-WAP-PROVSC-v1_1, URL:
                                       http://www.openmobilealliance.org

[EPTR]   Enabler Product Test Report

[ETP]   Enabler Test Report

[ETS]   Enabler Test Specification for Client Provisioning v1.1
                                       Approved Version 14-April 2005
                                       http://www.openmobilealliance.org/

2.2   Informative References

3. Terminology and Conventions

3.1 Conventions

This is an informative document, i.e. the document does not intend to contain normative statements.

3.2 Definitions

Application Access Information
Information provisioned into the phone that relate to identity and applications rather than to plain connectivity.
Bootstrap Document
A connectivity or application access document with information of relevance to the bootstrap process only.
Bootstrap process (bootstrapping)
The process by which the unconfigured ME is taken from the initial state to or through the TPS Access State. This process can be system specific.
Bootstrap Server
Bootstrap Server is the sender of the bootstrap message. It may physically be co-located with a TPS but that is irrelevant from an architecture point of view. The address of the Bootstrap Server is not relevant.
Configuration Context
A Configuration Context is a set of connectivity and application configurations typically associated with a single TPS. However, the Configuration Context can also be independent of any TPS. A TPS can be associated with several Configuration Contexts, but a TPS cannot provision a device outside the scope of the Configuration Contexts associated with that particular TPS. In fact, all transactions related to provisioning are restricted to the Configuration Contexts associated with the TPS.
Connectivity Information
This connectivity information relates to the parameters and means needed to access WAP infrastructure. This includes network bearers, protocols, access point addresses as well as proxy, DNS, and application access addresses and Trusted Provisioning Server URLs.
Continuous provisioning
The process by which the ME is provisioned with further infrastructure information at or after the TPS Access state. The information received during the bootstrap may be modified. This process is generic and optional. Continuous implies that the process can be repeated multiple times, but not that it is an ongoing activity.
Logical Proxy
A logical proxy is a set of physical proxies that may share the same WSP and WTLS context (shared session id value space). This implies that physical proxies within a logical proxy share the same WSP and WTLS session cache. For example, the device does not have to create a new WTLS session when switching from CSD to SMS if the target is the same logical proxy.
MMS Proxy-Relay
A server that provides access to various messaging systems. It may operate as a WAP origin server in which case it may be able to utilize features of the WAP system.
Network Access Point
A physical access point is an interface point between the wireless network and the fixed network. It is often a Remote Access Server, an SMSC, a USSDC, or something similar. It has an address (often a telephone number) and an access bearer.
Origin Server
The server on which a given resource resides or is to be created. Often referred to as a web server or an HTTP server.
Physical Proxy
A physical proxy is a specific address with proxy functionality. It can be the IP address plus port for an IP accessible proxy, or the SME-address plus port for an SMS accessible proxy.
Privileged Configuration Context
A privileged configuration context is a special context in which it is possible to define the number of additional configuration contexts allowed. Not all WAP service providers are, however, allowed to bootstrap the privileged context.
Provisioned state

The state in which the ME has obtained connectivity information extending its access capabilities for content, applications or continuous provisioning. This state is reached when the bootstrap process has provided access to generic proxies, or the continuous provisioning process has been performed.

Provisioning document
A particular instance of an XML document encoded according to the provisioning content specification [PROVCONT].

Proxy Navigation
An in-band mechanism to provision the device in real time as defined in [E2ESEC].

Push Proxy
A WAP Push Proxy is a gateway intended to provide push connectivity between wired and wireless networks.

Trusted Provisioning Server
A Trusted Provisioning Server, is a source of provisioning information that can be trusted by a Configuration Context. They are the only entities that are allowed to provision the device with static configurations. In some cases, however, a single TPS is the only server allowed to configure the phone. Provisioning related to a specific TPS is restricted to Configuration Contexts that are associated with this TPS.

Trusted Provisioning Server Access State
The state in which the ME has obtained a minimum set of infrastructure components that enable the ME to establish the first communication channel(s) to WAP infrastructure, i.e. a trusted WAP proxy. This allows continuous provisioning, but may also provide sufficient information to the ME to access any other WAP content or application.

Trusted Proxy
The trusted (provisioning) proxy has a special position as it acts as a front-end to a trusted provisioning server. The trusted proxy is responsible to protect the end user from malicious configuration information.

3.3   Abbreviations

DNS	Domain Name System
IP	Internet Protocol
ME	Mobile Equipment
MMS	Multimedia Messaging Service
MSC	Mobile Switching Centre
NAP	Network Access Point
OTA	Over The Air
PX	Proxy
SIM	Subscriber Identification Module
SIM ATK	SIM Application Toolkit
SMSC	Short Message Service Centre
TPS	Trusted Provisioning Server
URL	Uniform Resource Locator
USSDC	Unstructured Supplementary Service Data Centre
WAP	Wireless Application Protocol
WIM	WAP Identification Module
WSP	WAP Session Protocol
WTA	Wireless Telephony Application
WTLS	Wireless Transport Layer Security
WWW	World Wide Web

4. Summary

This report gives details of the testing carried out during the OMA TestFest (October 2004) for enabler Client Provisioning v1.1.

The report is compiled on behalf of OMA by NCC Group.

The work and reporting has followed the OMA IOP processes and policies [OMAIOPPROC].

5. Test Details

5.1 Documentation

This chapter lists the details of the enabler and any documentation, tools or test suites used to prove the enabler.

Date:	October 2004
Location:	Beijing, China
Enabler:	Client Provisioning v1.1
Process:	OMA Interoperability Policy and Process [OMAIOPPROC]
Type of Testing	Interoperability Testing
Products tested:	Client-to-Server
Test Plan:	Client Provisioning v1.1 Enabler Test Plan [ETP]
Test Specification:	Client Provisioning v1.1 Enabler Test Specification [ETS]
Test Tool:	None
Test Code:	None
Type of Test event:	TestFest
Participants:	Intellisync, Mformation Technologies Inc, Nokia, Samsung Electronics Co Ltd, Siemens AG, Sony Ericsson Mobile Communications
Number of Client Products:	4
Participating Technology Providers for clients:	Nokia, Samsung Electronics Co Ltd, Siemens AG, Sony Ericsson Mobile Communications
Number of Server Products:	2
Participating Technology Providers for servers:	Intellisync, Mformation Technologies Inc,
Number of test sessions completed:	8 of 8

5.2 Test Case Statistics

5.2.1 Test Case Summary

This chapter gives an overview of the result for all test cases included in [ETS].

The following status is used in the tables below:

- **Total number of TCs**: Used in the summary to indicate how many test cases there are in total.

- **Number of passed:** Used in the summary to indicate how many of the total test cases successfully passed.

- **Number of failed:** Used in the summary to indicate how many of the total test cases failed.

- **Number of N/A:** Used in the summary to indicate how many of the total test cases have not been run due to one of the implementations not supporting the functionality required to run this test case.

- **Number of OT:** Used in the summary to indicate how many of the total test cases have not been run due to no time to run the test case.

- **Number of INC:** Used in the summary to indicate how many of the total test cases have not been run due to functionality not being tested due to an error in the implementation or other functionality that is required to run this test case.

Data Types:	Total number of TCs:	Number of test session:	Number of Passed:	Number of Failed:	Number of N/A:	Number of OT:	Number of INC:
Client to Server TCs	7	8	30	1	25	0	0
Total	**7**	**8**	**30**	**1**	**25**	**0**	**0**

5.2.2 Test Case List

This chapter lists the statistics for all test cases included in [ETS].

The following status is used in the tables below:

- **No. of runs(R):** Used to indicate how many times the test cases have been run in total.

- **No. of passed(P):** Used to indicate how many times the test case has been run with successful result.

- **No. of failed(F):** Used to indicate how many times the test case has been run with failed result

- **No. of OT(O):** Used to indicate how many times the test case has not been run due to no time available.

- **No. of INC(I):** Used to indicate how many times the test case has not been run due to errors being found in other functionality required for running this test case.

- **PR:** Used to indicate if any PRs (Problem Reports) have been issued during testing.

- **Note:** Used to indicate the cause of Inconclusive or Fail verdicts.

Test Case:	Test Case Description:	R	P	F	O	I	PR:	Note:
ClientProvisioning-1.1-int-001	Purpose of this verification is to ensure that a server and a client are able to communicate the mandatory initial connectivity information: basic transport connectivity information that includes parameters for network access points and the proxies that are to be used.	8	8	0	0	0		Observation 003
ClientProvisioning-1.1-int-002	Purpose of this verification is to ensure that a server and a client are able to communicate application settings (e.g. MMS).	8	8	0	0	0		
ClientProvisioning-1.1-int-003	Purpose of this verification is to ensure that a server and a client are able to communicate multiple (2+) application settings (e.g. MMS, Email, DM, DS, WV) inside one configuration context.	6	6	0	0	0		
ClientProvisioning-1.1-int-004	Purpose of this verification is to ensure that a server and a client are able to communicate multiple configuration contexts.	6	6	0	0	0		
ClientProvisioning-1.1-int-005	Purpose of this verification is to ensure that a client is able to support privileged configuration context.	3	2	1	0	0		

ClientProvisi oning-1.1-int- 006	Purpose of this verification is to ensure that the client can use of the connectivity and application information that is pre-stored within smart card.	0	0	0	0	0		
ClientProvisio ning-1.1-int- 007	Purpose of this verification is to ensure that the client can modify connectivity and the application information that is pre-stored within smart card in Config1 and Config2 files.	0	0	0	0	0		

5.2.3   Observations

The following issues were captured by the Trusted Zone during the OMA TestFest.

5.2.3.1   EICS issues

This section details issues with the Client Provisioning V1.1 Enabler Implementation Conformance Statement (EICS) [CP11EICS].

Observation: 001	
Document:	Client EICS – OMA Client Provisioning 1.1 Enabler Release Approved Version, 11-Feb-2004
SCR Item	ProvUAB-UGSM-C-001 (Page 12/28) ProvUAB-UGSM-C-002, (Page 12/28) ProvUAB-UGSM-C-003, (Page 12/28) ProvUAB-UGSM-C-004 (Page 12/28)
Comment:	It was commented that the rules for ProvUAB-UGSM-C-001 stating ProvUAB-UGSM-C-002 AND ProvUAB-UGSM-C-003 AND ProvUAB-UGSM-C-004 are contradictory. If a client supports bootstrap but does not support provisioning via Cell broadcast or USSD thus we can't state that WIM/SIM has higher priority than CB or that CB has higher priority than SMS/USSD.
Recommendation:	Re-review EICS.

Observation: 002	
Document:	Client EICS – OMA Client Provisioning 1.1 Enabler Release Approved Version, 11-Feb-2004
SCR Item	ProvCont-CPL-C-004 (Page 14/28) ProvCont-MPL-C-006 (Page 23/28)
Comment:	ProvCont-CPL-C-004 is Mandatory and has a requirement ProvCont-MLP-C-006 which is optional. This second item is effectively mandatory due to this relationship.
Recommendation:	Re-review EICS.

5.2.3.2   Enabler Test Suite (ETS) issues

This section details issues with the Enabler Test Specification for OMA Client Provisioning v1.1[CP11ETS].

Observation: 003	
Document:	Enabler Test Specification for Client Provisioning v1.1 Approved Version 16-December-2003
Test Case	ClientProvisioning-1.1-int-001
Comment:	It was commented that this test case is too generic with regards to covering the

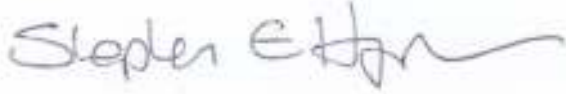|	different network level authentication methods (e.g. USERPINMAC, USERNETWPIN, NETWORKPIN). In the case where one method is successful and another inconclusive, it is not easy to assign a test verdict. It was suggested that there be separate test cases for each individual authentication method .
Recommendation:	Re-review test case.

5.2.3.3   CP 11 Specification issues

None.

5.2.3.4   CP 11 General Feedback

Observation: 004	
Comment:	There needs to be a Server capabilities statement to allow server to declare which test cases they support to facilitate the creation of the test schedule by the Trusted Zone.
Recommendation:	-

6. Confirmation

This signature states that the included information is true and valid.

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Stephen Higgins –Trusted Zone

Appendix A.   Change History   (Informative)

Type of Change	Date	Section	Description