CTI Guide for Cloud Interoperability Week
16-20 September 2013

Additional Test Descriptions for Cloud Interoperability (OVF, CAMP, CIMI)

Reference
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Contents

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee CLOUD (CLOUD).

1 Scope

The present document complements TC CLOUD's Test Descriptions for Cloud Interoperability [i.5] and provides additional test guideance for the Cloud Interoperability Week.

TC CLOUD's Test Descriptions for Cloud Interoperability [i.5] provides Test Descriptionsfor OCCI and CDMI standards. The present document provides Test Descriptions (TDs) for CAMP, OVF and CIMI standards, and more specifically:

1) CAMP interoperability testing, to prove that end-to-end functionality is as required by the standard.
2) OVF interoperability testing, to prove that end-to-end functionality is as required by the standard.
3) CIMI interoperability testing, to prove that end-to-end functionality is as required by the standard.
4) Some examples of CAMP and OVF interworking testing
5) Some examples of CIMI and OVF interworking testing

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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

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 necessary for the application of the present document.

[1] OGF GFD.183: "Open Cloud Computing Interface - Core".

[2] OGF GFD.184: "Open Cloud Computing Interface - Infrastructure".

[3] OGF GFD.185: "Open Cloud Computing Interface - RESTful HTTP Rendering".

[4] ISO/IEC 17826: "Information technology -- Cloud Data Management Interface (CDMI)".

[5] OASIS "Cloud Application Management for Platforms Version 1.1", Committee specification Draft 02

[6] DMTF DSP0263: "Cloud Infrastructure Management Interface 5 (CIMI) Model and RESTful HTTP-based Protocol 6 An Interface for Managing Cloud Infrastructure", Version 1.0.1

[7] DMTF DSP0243-2.0.0: "Open Virtualization Format (OVF)"

2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1] IETF RFC 2046: "Multipurpose Internet Mail Extensions (MIME) Part Two: Media Types".

[i.2] IETF RFC 2616: "Hypertext Transfer Protocol -- HTTP/1.1".

[i.3] IETF RFC 4627: "The application/json Media Type for JavaScript Object Notation (JSON)", July 2006. http://www.ietf.org/rfc/rfc4627.txt

[i.4] ETSI CSC Use Cases. http://csc.etsi.org/Application/documentapp/documentlist/

[i.5] ETSI TS 103.142: "CLOUD; Test Descriptions for Cloud Interoperability", V1.1.1, April 2013

3 Abbreviations

For the purposes of the present document, the abbreviations given in GFD.183 [1], GFD.184 [2], GFD.185 [3], ISO/IEC 17826 [4] and the following apply:

CAMP	Cloud Application Management Protocol
CDMI	Cloud Data Management Interface
CIMI	Cloud Infrastructure Managements Interface
EUT	Equipment Under Test
IOP	Interoperability
OCCI	Open Cloud Computing Interface
OVF	Open Virtualisation Format
SUT	System Under Test

4 Conventions

4.1 Interoperability test process

4.1.1 Introduction

The goal of interoperability testing is to check that services implemented according to protocol specifications are able to interwork and to provide at least the mandatory features specified in the protocol specification. In addition, optional features may be checked when all services involved in a test support them.

Detailed protocol conformance checks may be performed during the interoperability test sessions but are not the focus of the interoperability test event.

The test session will be mainly executed between two systems from different vendors. For some test descriptions, it may be necessary to have more than two systems involved. The information about the test configuration like the number of systems or the roles required are indicated in the test description tables 2 to 10.

4.1.2 Test description proforma

The test descriptions are provided in proforma tables. The test description header specifies a unique test identifier, the test objective, the test configuration to be used and references to the protocol specification(s). The pre-condition row defines conditions that need to apply before starting the test.

The following different types of test operator actions are considered during the test execution:

- A **stimulus** corresponds to an event that enforces an SUT to proceed with a specific protocol action, like sending a message.
- A **verify** consists of verifying that the SUT behaves according to the expected behaviour (for instance the SUT behaviour shows that it receives the expected message).
- A **configure** corresponds to an action to modify the SUT configuration.
- A **check** ensures the receipt of protocol messages on reference points, with valid content. This "check" event type corresponds to the interoperability testing with conformance check method.

For the execution of the interoperability test sessions, the following conventions apply:

- Every 'Check' step of a test description should be performed by verifying a trace created with a monitoring tool (see clause 'Tooling' below) and may be skipped due to time restrictions.

4.2 Tooling

- Participant will use their own tools (e.g. tcpdump, wireshark, ngrep) for logging and analyzing messages for the "check" purposes.
- Participants will be given the opportunity to upload their log files to a central server for later offline conformance review.
- Except for the "check" events, the verification of the message conformity is not part of the Interoperability test process.

4.3 Test Description naming convention

Table 1: TD naming convention

TD/<root>/<gr1>/<gr2>/<nnn>		
<root> = root	CAMP OVF CIMI INTER	Cloud Application Management for Platforms Open Virtualization Format Cloud Infrastructure Management Interface Multi-specification interworking
<gr1> = outer group	APPLICATION RESOURCE SYSTEM MACHINE VOLUMES NETWORK VAPP CAMP+OVF CIMI+OVF	CAMP Application CAMP Resource CIMI Systems CIMI Machines CIMI Volumes CIMI Network OVF Virtual Appliance CAMP+OVF Interworking CIMI+OVF Interworking
<gr2> = inner group	DISCOVERY CREATE READ UPDATE DELETE MISC	Resource discovery Resource creation Resource reading Resource update Resource deletion Miscellaneous functions
<nnn> = sequential number		001 to 999

4.4 Test Summary - Mandatory Tests

4.4.1 CAMP Mandatory Tests

Table 2: CAMP Application Mandatory Tests

1	TD/CAMP/APPLICATION/CREATE/001	Register a Platform Deployment Package (PDP)
2	TD/CAMP/APPLICATION/CREATE/002	Instantiating an Application
3	TD/CAMP/APPLICATION/UPATE/001	Suspending an Application
4	TD/CAMP/APPLICATION/UPDATE/002	Resuming an Application
5	TD/CAMP/APPLICATION/DELETE/001	Deleting an Application Instance
6	TD/CAMP/APPLICATION/DELETE/002	Deleting a Deployed Application

4.4.2 OVF Mandatory Tests

Table 3: OVF Mandatory Tests

1	TD/OVF/VAPP/CREATE/001	Export a single virtual system into an OVF package
2	TD/OVF/VAPP/READ/001	Import a single virtual system from an OVF package
3	TD/OVF/VAPP/READ/003	OVF Consumer rejects an imported OVF package if a disk image is corrupted
4	TD/OVF/VAPP/READ/004	OVF Consumer rejects an imported OVF package if signature is not valid
1	TD/OVF/VAPP/CREATE/001	Export a single virtual system into an OVF package

4.4.3 CIMI Mandatory Tests

Table 4: CIMI System Mandatory Tests

1	TD/CIMI/SYSTEM/READ/001	Retrieve the description of an existing System Template resource
2	TD/CIMI/SYSTEM/READ/002	Retrieve the description of an existing System resource

Table 5: CIMI Machine Mandatory Tests

1	TD/CIMI/MACHINE/CREATE/001	Create a machine template resource
2	TD/CIMI/MACHINE/CREATE/002	Create a machine resource
3	TD/CIMI/MACHINE/CREATE/003	Starting a machine
4	TD/CIMI/MACHINE/CREATE/004	Create a machine image
5	TD/CIMI/MACHINE/READ/001	Retrieving a representation of an instantiated compute resource (machine) (JSON)
6	TD/CIMI/MACHINE/READ/002	Retrieving a information about a disk collection (JSON)
7	TD/CIMI/MACHINE/READ/003	Retrieving a information about a MachineVolume collection (JSON)
8	TD/CIMI/MACHINE/READ/004	Retrieving a information about a MachineNetworkInterface collection (JSON)
9	TD/CIMI/MACHINE/READ/005	Retrieving a information about a MachineNetworkInterfaceAddress collection (JSON)
10	TD/CIMI/MACHINE/UPDATE/005	Stopping an instantiated machine
11	TD/CIMI/MACHINE/DELETE/001	Deleting a machine template resource
12	TD/CIMI/MACHINE/CREATE/002	Deleting a machine resource

Table 6: CIMI Volume Mandatory Tests

1	TD/CIMI/VOLUME/CREATE/001	Create a volume template resource
2	TD/CIMI/VOLUME/CREATE/002	Create a volume resource
3	TD/CIMI/VOLUME/CREATE/003	Create a volume configuration resource
4	TD/CIMI/VOLUME/READ/001	Retrieving information of volume resource
5	TD/CIMI/VOLUME/UPDATE/001	Updating a volume resource
6	TD/CIMI/VOLUME/DELETE/001	Deleting a volume resource
7	TD/CIMI/VOLUME/DELETE/002	Deleting a volume template resource
8	TD/CIMI/VOLUME/DELETE/003	Deleting a volume configuration resource

Table 7: CIMI Network Mandatory Tests

1	TD/CIMI/NETWORK/READ/001	Retrieve the description of an existing NetworkTemplate resource instance
2	TD/CIMI/NETWORK/READ/002	Retrieve the description of an existing Network resource
3	TD/CIMI/NETWORK/READ/003	Retrieve the description of an existing Network Configuration
4	TD/CIMI/NETWORK/READ/004	Retrieve the description of an existing Address
5	TD/CIMI/NETWORK/READ/005	Retrieve the description of an existing Network Port

4.5 Test Summary - Optional Tests

4.5.1 CAMP Optional Tests

Table 8: CAMP Resource Optional Tests

1	TD/CAMP/RESOURCE/READ/001	Read Information about a Platform Resource
2	TD/CAMP/RESOURCE/READ/002	Read Information about an AssemblyTemplate Resource
3	TD/CAMP/RESOURCE/READ/003	Read Information about an ApplicationComponentTemplate Resource
4	TD/CAMP/RESOURCE/READ/004	Read Information about an ApplicationComponentRequirement Resource
5	TD/CAMP/RESOURCE/READ/005	Read Information about an ApplicationComponentCapability Resource
6	TD/CAMP/RESOURCE/READ/006	Read Information about a PlatformComponentTemplate Resource
7	TD/CAMP/RESOURCE/READ/007	Read Information about a PlatformComponentRequirement Resource
8	TD/CAMP/RESOURCE/READ/008	Read Information about a PlatformComponentCapability Resource
9	TD/CAMP/RESOURCE/READ/009	Read Information about a Assembly Resource
10	TD/CAMP/RESOURCE/READ/010	Read Information about a ApplicationComponent Resource
11	TD/CAMP/RESOURCE/READ/011	Read Information about a PlatformComponent Resource
12	TD/CAMP/RESOURCE/READ/012	Read Information about a Format Resource
13	TD/CAMP/RESOURCE/READ/013	Read Information about a Formats Resource
14	TD/CAMP/RESOURCE/READ/014	Read Information about a TypeDefinitions Resource
15	TD/CAMP/RESOURCE/READ/015	Read Information about a TypeDefinition Resource
16	TD/CAMP/RESOURCE/READ/016	Read Information about a AttributeDefinition Resource

4.5.2 OVF Optional Tests

Table 9: OVF Optional Tests

1	TD/OVF/VAPP/CREATE/002	Export a single virtual system into a single file package
2	TD/OVF/VAPP/CREATE/003	Provides information about installed operating system
3	TD/OVF/VAPP/READ/002	Import a single virtual system as a single file package
4	TD/OVF/VAPP/READ/005	Virtual hardware configuration is transferred
5	TD/OVF/VAPP/READ/006	Support for virtual disks shared between multiple virtual systems
6	TD/OVF/VAPP/READ/007	Support for virtual network to interconnect multiple virtual systems
7	TD/OVF/VAPP/READ/008	Support for virtual systems startup ordering
8	TD/OVF/VAPP/READ/009	An initial boot process can be set to install and/or configure the guest software
9	TD/OVF/VAPP/READ/010	Support runtime customization with environment files
10	TD/OVF/VAPP/READ/011	Support for license verification
11	TD/OVF/VAPP/READ/012	Support for license verification

4.5.3 CIMI Optional Tests

Table 10: CIMI System Optional Tests

1	TD/CIMI/SYSTEM/CREATE/001	Create a System template which defines a system comprise of one machine one volume.
2	TD/CIMI/SYSTEM/CREATE/002	Create a System Template resource by utilizing an OVF package which defines a System which comprise of one machine with one volume
3	TD/CIMI/SYSTEM/CREATE/003	Create a System which comprise of one machine with one volume by specifying system attributes
4	TD/CIMI/SYSTEM/CREATE/004	Create a System which comprise of one machine with one volume by referencing a System Template
5	TD/CIMI/SYSTEM/READ/002	Export an existing System as an OVF package
6	TD/CIMI/SYSTEM/UPDATE/001	Update an existing System Template resource
7	TD/CIMI/SYSTEM/UPDATE/002	Partially update an existing System Template resource
8	TD/CIMI/SYSTEM/UPDATE/003	Update an existing System resource
9	TD/CIMI/SYSTEM/UPDATE/004	Partially update an existing System resource
10	TD/CIMI/SYSTEM/UPDATE/005	Start an instantiated System
11	TD/CIMI/SYSTEM/UPDATE/006	Stop a running System
12	TD/CIMI/SYSTEM/UPDATE/007	Re-start a stopped System
14	TD/CIMI/SYSTEM/UPDATE/008	Pause a running System
15	TD/CIMI/SYSTEM/UPDATE/009	Suspend a running System
5	TD/CIMI/SYSTEM/DELETE/001	Delete an existing System Template
16	TD/CIMI/SYSTEM/DELETE/002	Delete an existing System resource

Table 11: CIMI Machine Optional Tests

1	TD/CIMI/MACHINE/CREATE/005	Capturing a machine
2	TD/CIMI/MACHINE/CREATE/006	Snapshotting an instantiated machine
3	TD/CIMI/MACHINE/READ/006	Retrieving a information about a MachineSnapshot collection (JSON)
4	TD/CIMI/MACHINE/READ/007	Retrieving a information about a MachineMeter collection (JSON)
5	TD/CIMI/MACHINE/UPDATE/001	Updating a machine template resource
6	TD/CIMI/MACHINE/UPDATE/002	Partial update of a machine template resource
7	TD/CIMI/MACHINE/UPDATE/003	Updating a machine resource
8	TD/CIMI/MACHINE/UPDATE/004	Partial update of a machine resource
9	TD/CIMI/MACHINE/UPDATE/006	Restarting an instantiated machine
10	TD/CIMI/MACHINE/UPDATE/007	Pausing an instantiated machine
11	TD/CIMI/MACHINE/UPDATE/008	Suspending an instantiated machine
12	TD/CIMI/MACHINE/UPDATE/009	Starting a suspended machine
13	TD/CIMI/MACHINE/UPDATE/010	Restoring a machine

Table 12: CIMI Volume Optional Tests

1	TD/CIMI/VOLUME/CREATE/004	Create a volume image
2	TD/CIMI/VOLUME/READ/002	Retrieving information about a volume collection
3	TD/CIMI/VOLUME/READ/003	Retrieving information of a volume template resource
4	TD/CIMI/VOLUME/READ/004	Retrieving information about a volume template collection
5	TD/CIMI/VOLUME/READ/005	Retrieving information of a volume configuration resource
6	TD/CIMI/VOLUME/READ/006	Retrieving information about a volume configuration collection
7	TD/CIMI/VOLUME/READ/007	Retrieving information of a volume image resource
8	TD/CIMI/VOLUME/READ/008	Retrieving information about a volume image collection
9	TD/CIMI/VOLUME/UPDATE/002	Updating a volume collection resource
10	TD/CIMI/VOLUME/UPDATE/003	Updating a volume template resource
11	TD/CIMI/VOLUME/UPDATE/004	Updating a volume template collection resource
12	TD/CIMI/VOLUME/UPDATE/005	Updating a volume configuration resource
13	TD/CIMI/VOLUME/UPDATE/006	Updating a volume configuration collection resource
14	TD/CIMI/VOLUME/UPDATE/007	Updating a volume image resource
14	TD/CIMI/VOLUME/UPDATE/008	Updating a volume image collection resource
15	TD/CIMI/VOLUME/DELETE/004	Deleting a volume image resource

Table 13: CIMI Network Optional Tests

1	TD/CIMI/NETWORK/CREATE/001	Create a Network Template resource
2	TD/CIMI/NETWORK/CREATE/002	Create a Network resource
3	TD/CIMI/NETWORK/CREATE/003	Create a Network Configuration
4	TD/CIMI/NETWORK/CREATE/004	Create an Address
5	TD/CIMI/NETWORK/READ/001	Retrieve the description of an existing NetworkTemplate resource instance.
6	TD/CIMI/NETWORK/READ/002	Retrieve the description of an existing Network resource
7	TD/CIMI/NETWORK/READ/003	Retrieve the description of an existing Network Configuration
8	TD/CIMI/NETWORK/READ/004	Retrieve the description of an existing Address
9	TD/CIMI/NETWORK/READ/005	Retrieve the description of an existing Network Port
10	TD/CIMI/NETWORK/UPDATE/001	Update an existing Network Template resource
11	TD/CIMI/NETWORK/UPDATE/002	Partially update an existing Network Template resource
12	TD/CIMI/NETWORK/UPDATE/003	Start an instantiated Network resource
13	TD/CIMI/NETWORK/UPDATE/004	Stopping of an instantiated Network resource
14	TD/CIMI/NETWORK/UPDATE/005	Update an existing Network Configuration
15	TD/CIMI/NETWORK/UPDATE/006	Partially update an existing Network Configuration
16	TD/CIMI/NETWORK/UPDATE/007	Update an existing Address
17	TD/CIMI/NETWORK/UPDATE/008	Partially update an existing Address
18	TD/CIMI/NETWORK/UPDATE/009	Start an instantiated Network Port
19	TD/CIMI/NETWORK/UPDATE/010	Stopping of an instantiated Network Port
20	TD/CIMI/NETWORK/UPDATE/011	Update an existing Network Port
21	TD/CIMI/NETWORK/UPDATE/012	Partially update an existing Network Port
22	TD/CIMI/NETWORK/DELETE/001	Delete an existing Network Template resource
23	TD/CIMI/NETWORK/DELETE/002	Delete an existing Network
24	TD/CIMI/NETWORK/DELETE/003	Delete an existing Network Configuration
25	TD/CIMI/NETWORK/DELETE/004	Delete an existing Address
26	TD/CIMI/NETWORK/DELETE/005	Delete an existing Network Port

4.6 Test Summary - Interworking Tests

4.6.1 CAMP + OVF Tests

Table 14: CAMP+OVF Interworking Tests

1	TD/INTER/CAMP+OVF/CREATE/001	Create a CAMP Platform Deployment Package (PDP)
2	TD/INTER/CAMP+OVF/CREATE/001	Deploy a CAMP Platform Deployment Package (PDP)

4.6.2 CIMI + OVF Tests

Table 15: CIMI+OVF Interworking Tests

1	TD/INTER/CIMI+OVF/CREATE/001	Create a System Template resource by utilizing an OVF package which defines a System which is comprised of one machine with one volume
2	TD/INTER/CIMI+OVF/READ/001	Export an existing System as an OVF package

5 Test Configurations

This section defines roles and the different test configurations.

5.1 Roles

Equipment under test can take one of the following roles:

- CAMP Client
- CAMP Server
- OVF Producer
- OVF Consumer
- CIMI Provider
- CIMI Consumer

5.1 Test Configuration 1 (CAMP_CFG_01)

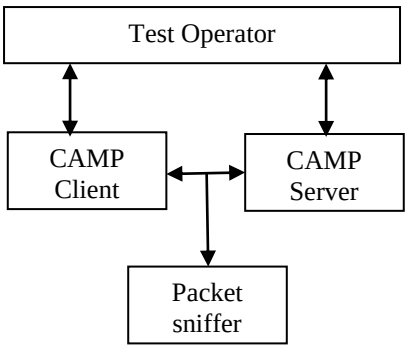

Figure 1: Basic Face 2 Face CAMP Configuration

5.2 Test Configuration 2 (OVF_CFG_01)

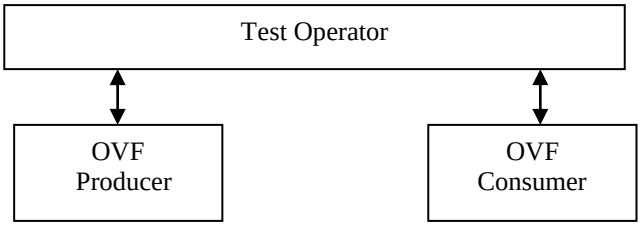

Figure 2: Basic OVF Configuration

5.3 Test Configuration 3 (CIMI_CFG_01)

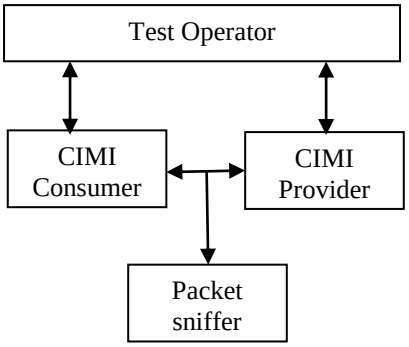

Figure 3: Basic Face 2 Face CIMI Configuration

5.4 Test Configuration 4 (CAMP_OVF_CFG_01)

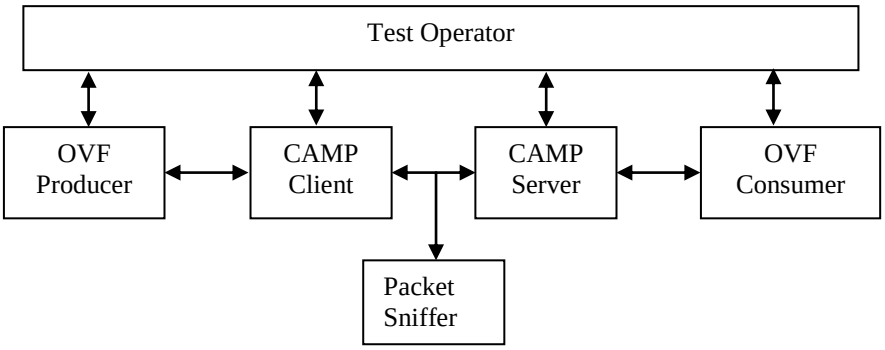

Figure 4: CAMP+OVF Configuration

5.5 Test Configuration 5 (CIMI_OVF_CFG_01)

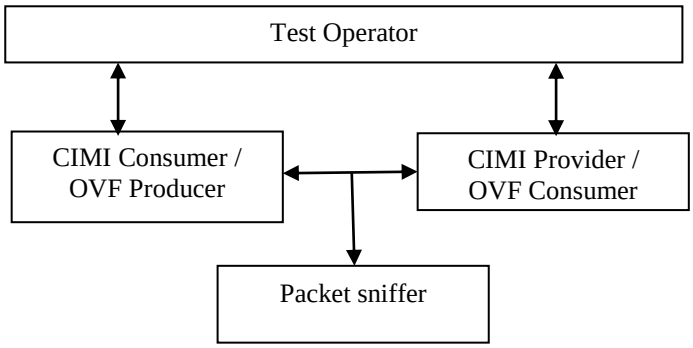

Figure 5: CIMI+OVF Configuration

6 Feature List

In order to ease test setup and execution, participants are requested to fill in the following feature tables. Information in the tables will be used for selection/de-selection of tests related to optional features. It is highly recommended that **Bold** features are supported to enable a minimum set of interoperability among implementations.

6.1 CAMP Client

Table 16: Features supported by CAMP Client

Feature	Support [Yes/No]	Dependent test descriptions
Register a Platform Deployment Package (PDP)		TD/CAMP/APPLICATION/CREATE/001
Instantiating an Application		TD/CAMP/APPLICATION/CREATE/002
Suspending and Resuming an Application		TD/CAMP/APPLICATION/UPATE/001 TD/CAMP/APPLICATION/UPDATE/002
Deleting an application		TD/CAMP/APPLICATION/DELETE/001 TD/CAMP/APPLICATION/DELETE/002
CAMP Platform resources		TD/CAMP/RESOURCE/READ/001 TD/CAMP/RESOURCE/READ/006 TD/CAMP/RESOURCE/READ/007 TD/CAMP/RESOURCE/READ/008 TD/CAMP/RESOURCE/READ/011
CAMP Application resources		TD/CAMP/RESOURCE/READ/003 TD/CAMP/RESOURCE/READ/004 TD/CAMP/RESOURCE/READ/005 TD/CAMP/RESOURCE/READ/010
CAMP Assembly resources		TD/CAMP/RESOURCE/READ/002 TD/CAMP/RESOURCE/READ/009
Format Resources		TD/CAMP/RESOURCE/READ/012 TD/CAMP/RESOURCE/READ/013
Definitions Resources		TD/CAMP/RESOURCE/READ/014 TD/CAMP/RESOURCE/READ/015 TD/CAMP/RESOURCE/READ/016
Support for creating a PDP referencing and using OVF		TD/INTER/CAMP+OVF/CREATE/001 TD/INTER/CAMP+OVF/CREATE/002

6.2 CAMP Server

Table 17: Features supported by CAMP Server

Feature	Support [Yes/No]	Dependent test descriptions
Register a Platform Deployment Package (PDP)		TD/CAMP/APPLICATION/CREATE/001
Instantiating an Application		TD/CAMP/APPLICATION/CREATE/002
Suspending and Resuming an Application		TD/CAMP/APPLICATION/UPATE/001 TD/CAMP/APPLICATION/UPDATE/002
Deleting an application		TD/CAMP/APPLICATION/DELETE/001 TD/CAMP/APPLICATION/DELETE/002
CAMP Platform resources		TD/CAMP/RESOURCE/READ/001 TD/CAMP/RESOURCE/READ/006 TD/CAMP/RESOURCE/READ/007 TD/CAMP/RESOURCE/READ/008 TD/CAMP/RESOURCE/READ/011
CAMP Application resources		TD/CAMP/RESOURCE/READ/003 TD/CAMP/RESOURCE/READ/004 TD/CAMP/RESOURCE/READ/005 TD/CAMP/RESOURCE/READ/010
CAMP Assembly resources		TD/CAMP/RESOURCE/READ/002 TD/CAMP/RESOURCE/READ/009
Format Resources		TD/CAMP/RESOURCE/READ/012 TD/CAMP/RESOURCE/READ/013
Definitions Resources		TD/CAMP/RESOURCE/READ/014 TD/CAMP/RESOURCE/READ/015 TD/CAMP/RESOURCE/READ/016
Support for deploying a PDP referencing and using OVF		TD/INTER/CAMP+OVF/CREATE/002

6.3 OVF Producer

Table 18: Features supported by OVF Producer

Feature	Support [Yes/No]	Dependent test descriptions
Export a single virtual system into an OVF package		TD/OVF/VAPP/CREATE/001
Export a single virtual system into a single file package		TD/OVF/VAPP/CREATE/002
Provides information about installed operating system		TD/OVF/VAPP/CREATE/003

6.4 OVF Consumer

Table 19: Features supported by OVF Consumer

Feature	Support [Yes/No]	Dependent test descriptions
Import a single virtual system from an OVF package		TD/OVF/VAPP/READ/001 TD/OVF/VAPP/READ/003 TD/OVF/VAPP/READ/004
Import a single virtual system from a single file OVF package		TD/OVF/VAPP/READ/002
Virtual hardware configuration is transferred		TD/OVF/VAPP/READ/005
Support for virtual disks shared between multiple virtual systems		TD/OVF/VAPP/READ/006
Support for virtual network to interconnect multiple virtual systems		TD/OVF/VAPP/READ/007
Support for virtual systems startup ordering		TD/OVF/VAPP/READ/008
An initial boot process can be set to install and/or configure the guest software		TD/OVF/VAPP/READ/009
Support runtime customization with environment files		TD/OVF/VAPP/READ/010
Support for license verification		TD/OVF/VAPP/READ/011 TD/OVF/VAPP/READ/012

6.5 CIMI Provider

Table 20: CIMI System features supported by CIMI Provider

Feature	Support [Yes/No]	Dependent test descriptions
Create a System Resources		TD/CIMI/SYSTEM/CREATE/001 TD/CIMI/SYSTEM/CREATE/002 TD/CIMI/SYSTEM/CREATE/003
Retrieval of System Resource information		TD/CIMI/SYSTEM/READ/001 TD/CIMI/SYSTEM/READ/002
Update a System Resource		TD/CIMI/SYSTEM/UPDATE/001 TD/CIMI/SYSTEM/UPDATE/003
Partially update a System Resource		TD/CIMI/SYSTEM/UPDATE/002 TD/CIMI/SYSTEM/UPDATE/004
Change the state of a System		TD/CIMI/SYSTEM/UPDATE/005 TD/CIMI/SYSTEM/UPDATE/006 TD/CIMI/SYSTEM/UPDATE/007 TD/CIMI/SYSTEM/UPDATE/008 TD/CIMI/SYSTEM/UPDATE/009
Delete a System Resource		TD/CIMI/SYSTEM/DELETE/001 TD/CIMI/SYSTEM/DELETE/002
Create and export a system based on OVF		TD/INTER/CIMI+OVF/CREATE/001 TD/INTER/CIMI+OVF/READ/001

Table 21: CIMI Machine features supported by CIMI Provider

Feature	Support [Yes/No]	Dependent test descriptions
Create a machine resource		TD/CIMI/MACHINE/CREATE/001 TD/CIMI/MACHINE/CREATE/002 TD/CIMI/MACHINE/CREATE/004 TD/CIMI/MACHINE/CREATE/005 TD/CIMI/MACHINE/CREATE/006
Change state of a machine		TD/CIMI/MACHINE/CREATE/003 TD/CIMI/MACHINE/UPDATE/005 TD/CIMI/MACHINE/UPDATE/006 TD/CIMI/MACHINE/UPDATE/007 TD/CIMI/MACHINE/UPDATE/008 TD/CIMI/MACHINE/UPDATE/009
Machine resource information retrieval		TD/CIMI/MACHINE/READ/001 TD/CIMI/MACHINE/READ/002 TD/CIMI/MACHINE/READ/003 TD/CIMI/MACHINE/READ/004 TD/CIMI/MACHINE/READ/005 TD/CIMI/MACHINE/READ/006 TD/CIMI/MACHINE/READ/007
Update a machine resource		TD/CIMI/MACHINE/UPDATE/001 TD/CIMI/MACHINE/UPDATE/002 D/CIMI/MACHINE/UPDATE/003 TD/CIMI/MACHINE/UPDATE/004 TD/CIMI/MACHINE/UPDATE/010
Delete a machine resource		TD/CIMI/MACHINE/DELETE/001 TD/CIMI/MACHINE/CREATE/002

Table 22: CIMI Volume features supported by CIMI Provider

Feature	**Support [Yes/No]**	**Dependent test descriptions**
Create a volume resource		TD/CIMI/VOLUME/CREATE/001 TD/CIMI/VOLUME/CREATE/002 TD/CIMI/VOLUME/CREATE/003 TD/CIMI/VOLUME/CREATE/004
Volume resource information retrieval		TD/CIMI/VOLUME/READ/001 TD/CIMI/VOLUME/READ/002 TD/CIMI/VOLUME/READ/003 TD/CIMI/VOLUME/READ/004 TD/CIMI/VOLUME/READ/005 TD/CIMI/VOLUME/READ/006 TD/CIMI/VOLUME/READ/007 TD/CIMI/VOLUME/READ/008
Update a volume resource		TD/CIMI/VOLUME/UPDATE/001 TD/CIMI/VOLUME/UPDATE/002 TD/CIMI/VOLUME/UPDATE/003 TD/CIMI/VOLUME/UPDATE/004 TD/CIMI/VOLUME/UPDATE/005 TD/CIMI/VOLUME/UPDATE/006 TD/CIMI/VOLUME/UPDATE/007 TD/CIMI/VOLUME/UPDATE/008
Delete a volume resource		TD/CIMI/VOLUME/DELETE/001 TD/CIMI/VOLUME/DELETE/002 TD/CIMI/VOLUME/DELETE/003 TD/CIMI/VOLUME/DELETE/004

Table 23: CIMI Network features supported by CIMI Provider

Feature	Support [Yes/No]	Dependent test descriptions
Create a network resource		TD/CIMI/NETWORK/CREATE/001 TD/CIMI/NETWORK/CREATE/002 TD/CIMI/NETWORK/CREATE/003 TD/CIMI/NETWORK/CREATE/004 TD/CIMI/NETWORK/CREATE/005
Retrieve network resource information		TD/CIMI/NETWORK/READ/001 TD/CIMI/NETWORK/READ/002
Update a network resource		TD/CIMI/NETWORK/UPDATE/001 TD/CIMI/NETWORK/UPDATE/005 TD/CIMI/NETWORK/UPDATE/007 TD/CIMI/NETWORK/UPDATE/011
Partially update a network resource		TD/CIMI/NETWORK/UPDATE/002 TD/CIMI/NETWORK/UPDATE/006 TD/CIMI/NETWORK/UPDATE/008 TD/CIMI/NETWORK/UPDATE/012
Change the state of a network resources		TD/CIMI/NETWORK/UPDATE/003 TD/CIMI/NETWORK/UPDATE/004 TD/CIMI/NETWORK/UPDATE/009 TD/CIMI/NETWORK/UPDATE/010
Delete a network resource		TD/CIMI/NETWORK/DELETE/001 TD/CIMI/NETWORK/DELETE/002 TD/CIMI/NETWORK/DELETE/003 TD/CIMI/NETWORK/DELETE/004 TD/CIMI/NETWORK/DELETE/005

6.6 CIMI Consumer

Table 24: CIMI System features supported by CIMI Consumer

Feature	Support [Yes/No]	Dependent test descriptions
Create a system resource		TD/CIMI/SYSTEM/CREATE/001 TD/CIMI/SYSTEM/CREATE/002
Retrieve the system resource information		TD/CIMI/SYSTEM/READ/001 TD/CIMI/SYSTEM/READ/002
Update a system resource		TD/CIMI/SYSTEM/UPDATE/001 TD/CIMI/SYSTEM/UPDATE/002 TD/CIMI/SYSTEM/UPDATE/003 TD/CIMI/SYSTEM/UPDATE/004
Change the state of a system		TD/CIMI/SYSTEM/UPDATE/005 TD/CIMI/SYSTEM/UPDATE/006 TD/CIMI/SYSTEM/UPDATE/007 TD/CIMI/SYSTEM/UPDATE/008 TD/CIMI/SYSTEM/UPDATE/009
Delete a system resource		TD/CIMI/SYSTEM/DELETE/001 TD/CIMI/SYSTEM/DELETE/002
Create and export a system based on OVF		TD/INTER/CIMI+OVF/CREATE/001 TD/INTER/CIMI+OVF/READ/001

Table 25: CIMI Machine features supported by CIMI Consumer

Feature	Support [Yes/No]	Dependent test descriptions
Create a machine resource		TD/CIMI/MACHINE/CREATE/001 TD/CIMI/MACHINE/CREATE/002 TD/CIMI/MACHINE/CREATE/004 TD/CIMI/MACHINE/CREATE/005 TD/CIMI/MACHINE/CREATE/006
Change state of a machine		TD/CIMI/MACHINE/CREATE/003 TD/CIMI/MACHINE/UPDATE/005 TD/CIMI/MACHINE/UPDATE/006 TD/CIMI/MACHINE/UPDATE/007 TD/CIMI/MACHINE/UPDATE/008 TD/CIMI/MACHINE/UPDATE/009
Machine resource information retrieval		TD/CIMI/MACHINE/READ/001 TD/CIMI/MACHINE/READ/002 TD/CIMI/MACHINE/READ/003 TD/CIMI/MACHINE/READ/004 TD/CIMI/MACHINE/READ/005 TD/CIMI/MACHINE/READ/006 TD/CIMI/MACHINE/READ/007
Update a machine resource		TD/CIMI/MACHINE/UPDATE/001 TD/CIMI/MACHINE/UPDATE/002 D/CIMI/MACHINE/UPDATE/003 TD/CIMI/MACHINE/UPDATE/004 TD/CIMI/MACHINE/UPDATE/010
Delete a machine resource		TD/CIMI/MACHINE/DELETE/001 TD/CIMI/MACHINE/ DELETE/002

Table 26: CIMI Volume features supported by CIMI Consumer

Feature	Support [Yes/No]	Dependent test descriptions
Create a volume resource		TD/CIMI/VOLUME/CREATE/001 TD/CIMI/VOLUME/CREATE/002 TD/CIMI/VOLUME/CREATE/003 TD/CIMI/VOLUME/CREATE/004
Volume resource information retrieval		TD/CIMI/VOLUME/READ/001 TD/CIMI/VOLUME/READ/002 TD/CIMI/VOLUME/READ/003 TD/CIMI/VOLUME/READ/004 TD/CIMI/VOLUME/READ/005 TD/CIMI/VOLUME/READ/006 TD/CIMI/VOLUME/READ/007 TD/CIMI/VOLUME/READ/008
Update a volume resource		TD/CIMI/VOLUME/UPDATE/001 TD/CIMI/VOLUME/UPDATE/002 TD/CIMI/VOLUME/UPDATE/003 TD/CIMI/VOLUME/UPDATE/004 TD/CIMI/VOLUME/UPDATE/005 TD/CIMI/VOLUME/UPDATE/006 TD/CIMI/VOLUME/UPDATE/007 TD/CIMI/VOLUME/UPDATE/008
Delete a volume resource		TD/CIMI/VOLUME/DELETE/001 TD/CIMI/VOLUME/DELETE/002 TD/CIMI/VOLUME/DELETE/003 TD/CIMI/VOLUME/DELETE/004

Table 27: CIMI Network features supported by CIMI Consumer

Feature	Support [Yes/No]	Dependent test descriptions
Create a network resource		TD/CIMI/NETWORK/CREATE/001 TD/CIMI/NETWORK/CREATE/002 TD/CIMI/NETWORK/CREATE/003 TD/CIMI/NETWORK/CREATE/004 TD/CIMI/NETWORK/CREATE/005
Retrieve network resource information		TD/CIMI/NETWORK/READ/001 TD/CIMI/NETWORK/READ/002
Update a network resource		TD/CIMI/NETWORK/UPDATE/001 TD/CIMI/NETWORK/UPDATE/002 TD/CIMI/NETWORK/UPDATE/005 TD/CIMI/NETWORK/UPDATE/006 TD/CIMI/NETWORK/UPDATE/007 TD/CIMI/NETWORK/UPDATE/008 TD/CIMI/NETWORK/UPDATE/011 TD/CIMI/NETWORK/UPDATE/012
Change the state of a network resource		TD/CIMI/NETWORK/UPDATE/003 TD/CIMI/NETWORK/UPDATE/004 TD/CIMI/NETWORK/UPDATE/009 TD/CIMI/NETWORK/UPDATE/010
Delete a network resource		TD/CIMI/NETWORK/DELETE/001 TD/CIMI/NETWORK/DELETE/002 TD/CIMI/NETWORK/DELETE/003 TD/CIMI/NETWORK/DELETE/004 TD/CIMI/NETWORK/DELETE/005

7 CAMP

7.1 Application

7.1.1 Create

7.1.1.1 TD/CAMP/APPLICATION/CREATE/001

Interoperability Test Description			
Identifier:	**TD/CAMP/APPLICATION/CREATE/001**		
Objective:	Register a Platform Deployment Package (PDP)		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 6.11		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests a CAMP Server to register a PDP**
	2	check	CAMP Client sends a HTTP POST request • Request-URI is the location of the CAMP Server (Platform URL) • HTTP Content-Type header is the following MIME type: • application/json • HTTP Body contains the URI that identifies the PDP that is being registered (pdp_uri) in JSON [i.3] format
	3	**verify**	**CAMP Server creates an AssemblyTemplate resource**
	4	**verify**	**CAMP Server updates the assemblyTemplate attribute of the Platform resource to include a reference to the newly created assembly template**
	5	check	CAMP Server sends a HTTP 201 (CREATED) response • HTTP Location header contains URL of the newly created AssemblyTemplate resource
	6	**verify**	**CAMP Client reports success of registering the PDP (Application is in the state deployed)**

7.1.1.2 TD/CAMP/APPLICATION/CREATE/002

Interoperability Test Description			
Identifier:	**TD/CAMP/APPLICATION/CREATE/002**		
Objective:	Instantiating an Application		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 6.12		
Pre-test conditions:	- Application needs to be in the deployed state on the CAMP Server		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests an instantiation of an application on a CAMP Server**
	2	check	CAMP Client sends a HTTP POST request • Request-URI is the location of the CAMP Server (AssemblyTemplate URL)
	3	**verify**	**CAMP Server creates an Assembly resource**
	4	**verify**	**CAMP Server updates the AssemblyInstances attribute of the Platform resource to include a reference to the newly created assembly**
	5	check	CAMP Server sends a HTTP 201 (CREATED) response • HTTP Location header contains URL of the newly created Assembly resource
	6	**verify**	**CAMP Client reports success of instantiating the application (Application is in the state instantiated)**

7.1.2 Update

7.1.2.1 TD/CAMP/APPLICATION/UPDATE/001

Interoperability Test Description			
Identifier:	**TD/CAMP/APPLICATION/UPATE/001**		
Objective:	Suspending an Application		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 6.13		
Pre-test conditions:	- Application needs to be in the instantiated state on the CAMP Server		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests a suspension of an instantiated application on a CAMP Server**
	2	check	CAMP Client sends a HTTP POST request • Request-URI is the location of the CAMP Server (assembly resource URL) • HTTP Body contains JSON [i.3] serialization as follows: ("new_state": "suspend")
	3	**verify**	**CAMP Server suspends instantiated application (Application is in the state suspended**
	4	check	CAMP Server sends a HTTP 200 (OK) response
	5	**Verify**	**CAMP Client reports success of suspending the application**

7.1.2.2 TD/CAMP/APPLICATION/UPDATE/002

Interoperability Test Description			
Identifier:	**TD/CAMP/APPLICATION/UPDATE/002**		
Objective:	Resuming an Application		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 6.13		
Pre-test conditions:	- Application needs to be in the suspended state on the CAMP Server		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests resuming an suspended application on a CAMP Server**
	2	check	CAMP Client sends a HTTP POST request • Request-URI is the location of the CAMP Server (assembly resource URL) • HTTP Body contains JSON serialization as follows: ("new_state": "resume")
	3	**verify**	**CAMP Server resumes application (Application is in the state instantiated)**
	4	check	CAMP Server sends a HTTP 200 (OK) response
	5	**Verify**	**CAMP Client reports success of resuming the application**

7.1.3 Delete

7.1.3.1 TD/CAMP/APPLICATION/DELETE/001

Interoperability Test Description			
Identifier:	**TD/CAMP/APPLICATION/DELETE/001**		
Objective:	Deleting an Application Instance		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 6.14		
Pre-test conditions:	- Application needs to be in the instantiated or suspended state on the CAMP Server		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests deletion of an application instance on a CAMP Server**
	2	check	CAMP Client sends a HTTP DELETE request • Request-URI is the location of the CAMP Server (assembly resource URL)
	3	**verify**	**CAMP Server deletes application instance**
	4	**Verify**	**CAMP Client reports success of deleting the application instance**

7.1.3.2 TD/CAMP/APPLICATION/DELETE/002

Interoperability Test Description			
Identifier:	**TD/CAMP/APPLICATION/DELETE/002**		
Objective:	Deleting a Deployed Application		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 6.14		
Pre-test conditions:	- Application needs to be in the deployed state on the CAMP Server		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests deletion of a deployed application on a CAMP Server**
	2	check	CAMP Client sends a HTTP DELETE request • Request-URI is the location of the CAMP Server (assembly template URL.)
	3	**verify**	**CAMP Server deletes the deployed application**
	4	**Verify**	**CAMP Client reports success of deleting the deployed application**

7.2 Ressource

7.2.1 Read

7.2.1.1 TD/CAMP/RESOURCE/READ/001

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/001**		
Objective:	Read Information about a Platform Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.5		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about a platform resource (CAMP Server)**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the platform resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the platform resource containing • "uri": URI expressing the URI of the Platform resource • "name": String expressing the Name of the Platform resource • "created": Timestamp expressing the creation time of the Platform resource • "type": String expressing the CAMP resource type (Platform resource) - The entry for type is as follows "type" : "platform" • "extensionsUri": URI • "typeDefinitionsURI": URI • "specificationVersion": String[]
	4	**Verify**	**CAMP Client reports information of the platform resource (CAMP Server)**

7.2.1.2 TD/CAMP/RESOURCE/READ/002

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/002**		
Objective:	Read Information about an AssemblyTemplate Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.6		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about an AssemblyTemplate Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the AssemblyTemplate Resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the AssemblyTemplate Resource containing • "uri": URI expressing the URI of the AssemblyTemplate resource • "name": String expressing the Name of the AssemblyTemplate resource • "created": Timestamp expressing the creation time of the AssemblyTemplate resource • "type": String expressing the CAMP resource type (AssemblyTemplate resource) - The entry for type is as follows "type" : "AssemblyTemplate"
	4	**Verify**	**CAMP Client reports information of the AssemblyTemplate Resource**

7.2.1.3 TD/CAMP/RESOURCE/READ/003

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/003**		
Objective:	Read Information about an ApplicationComponentTemplate Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.7		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about an ApplicationComponentTemplate Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the ApplicationComponentTemplate resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the ApplicationComponentTemplate resource containing • "uri": URI expressing the URI of the ApplicationComponentTemplate resource • "name": String expressing the Name of the ApplicationComponentTemplate resource • "created": Timestamp expressing the creation time of the ApplicationComponentTemplate resource • "type": String expressing the CAMP resource type (ApplicationComponentTemplate resource) - The entry for type is as follows "type" : "ApplicationComponentTemplate" • "assemblyTemplate": Link
	4	**Verify**	**CAMP Client reports information of the ApplicationComponentTemplate resource**

7.2.1.4 TD/CAMP/RESOURCE/READ/004

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/004**		
Objective:	Read Information about an ApplicationComponentRequirement Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.8		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about an ApplicationComponentRequirement Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the ApplicationComponentRequirement resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the ApplicationComponentRequirement resource containing • "uri": URI expressing the URI of the ApplicationComponentRequirement resource • "name": String expressing the Name of the ApplicationComponentRequirement resource • "created": Timestamp expressing the creation time of the ApplicationComponentRequirement resource • "type": String expressing the CAMP resource type (ApplicationComponentRequirement resource) - The entry for type is as follows "type" : "ApplicationComponentRequirement"
	4	**Verify**	**CAMP Client reports information of the ApplicationComponentRequirement resource**

7.2.1.5 TD/CAMP/RESOURCE/READ/005

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/005**		
Objective:	Read Information about an ApplicationComponentCapability Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.9		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about an ApplicationComponentCapability Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the ApplicationComponentCapability resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the ApplicationComponentCapabilityResource resource containing • "uri": URI expressing the URI of the ApplicationComponentCapability resource • "name": String expressing the Name of the ApplicationComponentCapability resource • "created": Timestamp expressing the creation time of the ApplicationComponentCapability resource • "type": String expressing the CAMP resource type (ApplicationComponentCapability resource) - The entry for type is as follows "type" : "ApplicationComponentCapability"
	4	**Verify**	**CAMP Client reports information of the ApplicationComponentCapability resource**

7.2.1.6 TD/CAMP/RESOURCE/READ/006

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/006**		
Objective:	Read Information about a PlatformComponentTemplate Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.10		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about a PlatformComponentTemplate Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the PlatformComponentTemplate resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the PlatformComponentTemplate resource containing • "uri": URI expressing the URI of the PlatformComponentTemplate resource • "name": String expressing the Name of the PlatformComponentTemplate resource • "created": Timestamp expressing the creation time of the PlatformComponentTemplate resource • "type": String expressing the CAMP resource type (PlatformComponentTemplate resource) - The entry for type is as follows "type" : "PlatformComponentTemplate"
	4	**Verify**	**CAMP Client reports information of the PlatformComponentTemplate resource**

7.2.1.7 TD/CAMP/RESOURCE/READ/007

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/007**		
Objective:	Read Information about a PlatformComponentRequirement Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.11		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about a PlatformComponentRequirement Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the PlatformComponentRequirement resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the PlatformComponentRequirement resource containing • "uri": URI expressing the URI of the PlatformComponentRequirement resource • "name": String expressing the Name of the PlatformComponentRequirement resource • "created": Timestamp expressing the creation time of the PlatformComponentRequirement resource • "type": String expressing the CAMP resource type (PlatformComponentRequirement resource) - The entry for type is as follows "type" : "PlatformComponentRequirement"
	4	**Verify**	**CAMP Client reports information of the PlatformComponentRequirement resource**

7.2.1.8 TD/CAMP/RESOURCE/READ/008

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/008**		
Objective:	Read Information about a PlatformComponentCapability Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.12		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about a PlatformComponentCapability Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the PlatformComponentCapability resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the PlatformComponentCapability resource containing • "uri": URI expressing the URI of the PlatformComponentCapability resource • "name": String expressing the Name of the PlatformComponentCapability resource • "created": Timestamp expressing the creation time of the PlatformComponentCapability resource • "type": String expressing the CAMP resource type (PlatformComponentCapability resource) - The entry for type is as follows "type" : "PlatformComponentCapability"
	4	**Verify**	**CAMP Client reports information of the PlatformComponentCapability resource**

7.2.1.9 TD/CAMP/RESOURCE/READ/009

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/009**		
Objective:	Read Information about a Assembly Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.13		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about a Assembly Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the Assembly resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the Assembly resource containing • "uri": URI expressing the URI of the Assembly resource • "name": String expressing the Name of the Assembly resource • "created": Timestamp expressing the creation time of the Assembly resource • "type": String expressing the CAMP resource type (Assembly resource) - The entry for type is as follows "type" : "Assembly" • "applicationComponents": Link[] expressing an array of Links to the ApplicationComponent resources that are part of this Assembly • "assemblyTemplate": Link expressing a Link to the AssemblyTemplate resource from which this Assembly was created • "resourceState": ResourceState expressing the state of the resource within the lifecycle
	4	**Verify**	**CAMP Client reports information of the Assembly resource**

7.2.1.10 TD/CAMP/RESOURCE/READ/010

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/010**		
Objective:	Read Information about a ApplicationComponent Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.14		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about a ApplicationComponent Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the ApplicationComponent resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the ApplicationComponent resource containing • "uri": URI expressing the URI of the ApplicationComponent resource • "name": String expressing the Name of the ApplicationComponent resource • "created": Timestamp expressing the creation time of the ApplicationComponent resource • "type": String expressing the CAMP resource type (ApplicationComponent resource) - The entry for type is as follows "type" : "ApplicationComponent" • "assembly": Link expressing a Link to the Assembly resource of which this ApplicationComponent is a member
	4	**Verify**	**CAMP Client reports information of the ApplicationComponent resource**

7.2.1.11 TD/CAMP/RESOURCE/READ/011

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/011**		
Objective:	Read Information about a PlatformComponent Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.15		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about a PlatformComponent Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the PlatformComponent resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the PlatformComponent resource containing • "uri": URI expressing the URI of the PlatformComponent resource • "name": String expressing the Name of the PlatformComponent resource • "created": Timestamp expressing the creation time of the PlatformComponent resource • "type": String expressing the CAMP resource type (PlatformComponent resource) - The entry for type is as follows "type" : "PlatformComponent"
	4	**Verify**	**CAMP Client reports information of the PlatformComponent resource**

7.2.1.12 TD/CAMP/RESOURCE/READ/012

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/012**		
Objective:	Read Information about a Format Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.16		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about a Format Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the Format resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the Format resource containing • "uri": URI expressing the URI of the Format resource • "name": String expressing the common name of the serialization format. For example: "JSON" • "mimeType": String expressing the mime-type to be used by the Platform in HTTP2616 compliant content negotiation for this Format. For example: "application/json" • "type": String expressing the CAMP resource type (Format resource) - The entry for type is as follows "type" : "Format" • "created": Timestamp expressing the creation time of the Format resource • "documentation": URI
	4	**Verify**	**CAMP Client reports information of the Format resource**

7.2.1.13 TD/CAMP/RESOURCE/READ/013

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/013**		
Objective:	Read Information about a Formats Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.17		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about a Formats Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the Formats resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the Formats resource containing • "uri": URI expressing the URI of the Formats resource • "name": String expressing the Name of the Formats resource • "formatLinks": Link[] expressing Links to Format resources" • "type": String expressing the CAMP resource type (Formats resource) - The entry for type is as follows "type" : "Formats" • "created": Timestamp expressing the creation time of the Formats resource
	4	**Verify**	**CAMP Client reports information of the Formats resource**

7.2.1.14 TD/CAMP/RESOURCE/READ/014

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/014**		
Objective:	Read Information about a TypeDefinitions Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.18		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about a TypeDefinitions Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the TypeDefinitions resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the TypeDefinitions resource containing • "uri": URI expressing the URI of the TypeDefinitions resource • "name": String expressing the Name of the TypeDefinitions resource • "typeDefinitionLinks": Link[] expressing Links to TypeDefinition resources • "type": String expressing the CAMP resource type (TypeDefinitions resource) - The entry for type is as follows "type" : "TypeDefinitions" • "created": Timestamp expressing the creation time of the TypeDefinitions resource
	4	**Verify**	**CAMP Client reports information of the TypeDefinitions resource**

7.2.1.15 TD/CAMP/RESOURCE/READ/015

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/015**		
Objective:	Read Information about a TypeDefinition Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.19		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about a TypeDefinition Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the TypeDefinition resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the TypeDefinition resource containing • "uri": URI expressing the URI of the TypeDefinition resource • "name": String expressing the Name of the TypeDefinition resource • "documentation": URI expressing a URI that points to the documentation for the resource type • "type": String expressing the CAMP resource type (TypeDefinition resource) - The entry for type is as follows "type" : "TypeDefinition" • "created": Timestamp expressing the creation time of the TypeDefinition resource • "attributeDefinitionLinks": Link[] expressing an array of Links. Each Link in this array points to an AttributeDefinition resource.
	4	**Verify**	**CAMP Client reports information of the TypeDefinition resource**

7.2.1.16 TD/CAMP/RESOURCE/READ/016

Interoperability Test Description			
Identifier:	**TD/CAMP/RESOURCE/READ/016**		
Objective:	Read Information about a AttributeDefinition Resource		
Configuration:	CAMP_CFG_01		
References:	CAMP [5], clause 5.20		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CAMP Client requests information about a AttributeDefinition Resource**
	2	check	CAMP Client sends a HTTP GET request containing the URL of the TypeDefinition resource (GET <resource URL>)
	3	check	CAMP Server sends a HTTP 200 (OK) response containing a JSON representation of the AttributeDefinition resource containing • "uri": URI expressing the URI of the AttributeDefinition resource • "name": String expressing the Name of the AttributeDefinition resource • "documentation": URI expressing URI that points to the documentation for the attribute that this resource represents • "type": String expressing the CAMP resource type (AttributeDefinition resource) - The entry for type is as follows "type" : "AttributeDefinition" • "created": Timestamp expressing the creation time of the AttributeDefinition resource • "attributeType": String expressing the type of the attribute that this resource represents • "required": Boolean expressing if the attribute that this resource represents is required • "mutable": Boolean expressing the mutability of the attribute that this resource represents • "consumerMutable": Boolean expressing if the attribute this resource represents is writable by a CAMP client
	4	**Verify**	**CAMP Client reports information of the AttributeDefinition resource**

8 OVF

This section provides the test descriptions for the different OVF features.

8.1 Virtual Appliance

8.1.1 Create

8.1.1.1 TD/OVF/VAPP/CREATE/001

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/CREATE/001**		
Objective:	Export a single virtual system into an OVF package		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 5.4		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer, setup one virtual system**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	Check	- Exported package contains a valid .ovf file - Disk image is referenced from the .ovf file
	4	**verify**	**OVF Producer says exportation was successful**

8.1.1.2 TD/OVF/VAPP/CREATE/002

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/CREATE/002**		
Objective:	Export a single virtual system into a single file package		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 5.3		
Pre-test conditions:	TD/OVF/VAPP/CREATE/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer, setup one virtual system**
	2	**stimulus**	**Export the virtual system OVF Producer into an OVA package (Single file OVF package)**
	3	check	Exported .ova file is a TAR archive
	4	**verify**	**OVF Producer says exportation was successful**

8.1.1.2 TD/OVF/VAPP/CREATE/003

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/CREATE/003**		
Objective:	Provides information about installed operating system		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 9.9		
Pre-test conditions:	TD/OVF/VAPP/CREATE/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer, setup a virtual system with a specified operating system**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	check	In OVF descriptor, an OperatingSystemSection specifies the operating system installed on the virtual machine
	4	**verify**	**OVF Producer says exportation was successful**
	5	**stimulus**	**Import this OVF package into the OVF Consumer**
	6	check	Virtual system is deployed on the OVF Consumer
	7	**verify**	**OVF Consumer says importation was successful**

8.1.2 Read

8.1.2.1 TD/OVF/VAPP/READ/001

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/READ/001**		
Objective:	Import a single virtual system from an OVF package		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 5.4		
Pre-test conditions:	TD/OVF/VAPP/CREATE/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer setup one virtual system with defined CPU, memory and storage**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	check	- Exported package contains a valid .ovf file - Disk image is referenced from the .ovf file
	4	**verify**	**OVF Producer says exportation was successful**
	5	**stimulus**	**Import this OVF package into the OVF Consumer**
	6	Check	- Single virtual system is deployed on the OVF Consumer - Hardware characteristic (CPU, memory and storage) of the system are preserved
	7	**verify**	**OVF Consumer says importation was successful**

8.1.2.2 TD/OVF/VAPP/READ/002

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/READ/002**		
Objective:	Import a single virtual system as a single file package		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 5.3		
Pre-test conditions:	TD/OVF/VAPP/CREATE/002		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer setup one virtual system with defined CPU, memory and storage**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVA package (Single file OVF package)**
	3	check	Exported .ova file is a TAR archive
	4	**verify**	**OVF Producer says exportation was successful**
	5	**stimulus**	**Import this OVF package into OVF Consumer**
	6	check	- Single virtual system is deployed on the OVF Consumer - Hardware characteristic (CPU, memory and storage) of the system are preserved
	7	**verify**	**OVF Consumer says import was successful**

8.1.2.3 TD/OVF/VAPP/READ/003

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/READ/003**		
Objective:	OVF Consumer rejects an imported OVF package if a disk image is corrupted		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 5.1		
Pre-test conditions:	TD/OVF/VAPP/CREATE/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer, setup one virtual system**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	Check	- Package contains a .mf file - Each disk image file is referred from the .mf file with its checksum
	4	**verify**	**OVF Producer says exportation was successful**
	5	**configure**	**Modify a disk image file inside the OVF package (so it will be corrupted)**
	6	**stimulus**	**Import this OVF package into the OVF Consumer**
	7	check	Nothing is deployed on OVF Consumer
	8	**verify**	**OVF Consumer says importation was unsuccessful**

8.1.2.4 TD/OVF/VAPP/READ/004

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/READ/004**		
Objective:	OVF Consumer rejects an imported OVF package if signature is not valid		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 5.1		
Pre-test conditions:	TD/OVF/VAPP/READ/003		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On Producer, setup one virtual system**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	check	Package contains a .cert file
	4	**verify**	**OVF Producer says exportation was successful**
	5	**configure**	**Modify .mf file inside the OVF package (so signature will not be valid anymore)**
	6	**stimulus**	**Import this OVF package into the OVF Consumer**
	7	check	Nothing is deployed on OVF Consumer
	8	**verify**	**OVF Consumer says importation was unsuccessful**

8.1.2.5 TD/OVF/VAPP/READ/005

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/READ/005**		
Objective:	Virtual hardware configuration is transferred		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 8.1		
Pre-test conditions:	TD/OVF/VAPP/CREATE/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer, setup one virtual system**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	check	OVF descriptor file (.ovf file) contains a VirtualHardwareSection whose values are corresponding to the original virtual system
	4	**verify**	**OVF Producer says exportation was successful**
	5	**stimulus**	**Import this OVF package into the OVF Consumer**
	6	Check	- Single virtual system is deployed on the OVF Consumer - System has similar virtual hardware specifications from the original virtual system
	7	**verify**	**OVF Consumer says importation was successful**

8.1.2.6 TD/OVF/VAPP/READ/006

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/READ/006**		
Objective:	Support for virtual disks shared between multiple virtual systems		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 9.1		
Pre-test conditions:	TD/OVF/VAPP/CREATE/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer** - **setup a virtual system** - **create and attach a virtual disk**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	Check	- OVF descriptor file (.ovf file) contains a DiskSection corresponding to the virtual disk - Package contains the disk image corresponding to the virtual disk
	4	**verify**	**OVF Producer says exportation was successful**
	5	**stimulus**	**Import this OVF package into the OVF Consumer**
	6	Check	- virtual system is deployed - virtual disk is attached
	7	**verify**	**OVF Consumer says importation was successful**

8.1.2.7 TD/OVF/VAPP/READ/007

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/READ/007**		
Objective:	Support for virtual network to interconnect multiple virtual systems		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], section 9.2		
Pre-test conditions:	TD/OVF/VAPP/READ/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer** - **setup two virtual systems** - **setup a virtual network** - **connect both virtual systems to the virtual network**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	check	In OVF descriptor : - a NetworkSection is corresponding to the virtual network - each VirtualHardwareSection has a Connection element which refers to the NetworkSection
	4	**verify**	**OVF Producer says exportation was successful**
	5	**stimulus**	**Import this OVF package into the OVF Consumer**
	6	check	Virtual systems are deployed and attached to the specified common virtual network
	7	**verify**	**OVF Consumer says importation was successful**

8.1.2.8 TD/OVF/VAPP/READ/008

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/READ/008**		
Objective:	Support for virtual systems startup ordering		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 9.8		
Pre-test conditions:	TD/OVF/VAPP/READ/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer:** - **setup two virtual systems, 1 and 2** - **specifies that 1 should start before 2 (startup ordering rule)**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	check	In OVF descriptor, a StartupSection describes the specified startup ordering rule
	4	**verify**	**OVF Producer says exportation was successful**
	5	**stimulus**	**Import this OVF package into the OVF Consumer**
	6	check	Virtual system 1 is started before 2
	7	**verify**	**OVF Consumer says importation was successful**

8.1.2.9 TD/OVF/VAPP/READ/009

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/READ/009**		
Objective:	An initial boot process can be set to install and/or configure the guest software		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 9.10		
Pre-test conditions:	TD/OVF/VAPP/READ/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer :** - **setup a virtual system** - **configure an installation boot process and power off after 300 seconds**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	check	In OVF descriptor, an InstallSection contains an 'initialBootStopDelay' attribute set to '300'
	4	**verify**	**OVF Producer says exportation was successful**
	5	**stimulus**	**Import this OVF package into the OVF Consumer**
	6	Check	Virtual system is deployed and shut down after 300 seconds
	7	**verify**	**OVF Consumer says importation was successful**

8.1.2.10 TD/OVF/VAPP/READ/010

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/READ/010**		
Objective:	Support runtime customization with environment files		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 9.11		
Pre-test conditions:	TD/OVF/VAPP/READ/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer :** - **setup a virtual system** - **add files to the virtual system for runtime customization**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	check	In OVF descriptor - an EnvironmentFilesSection list all customization files - package contains the customization files
	4	**verify**	**OVF Producer says exportation was successful**
	5	**stimulus**	**Import this OVF package into the OVF Consumer**
	6	check	- Virtual systems are deployed - Customization file are accessible
	7	**verify**	**OVF Consumer says importation was successful**

8.1.2.11 TD/OVF/VAPP/READ/011

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/READ/011**		
Objective:	Support for license verification		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 9.6		
Pre-test conditions:	TD/OVF/VAPP/READ/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer, setup a licensed virtual system**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	check	In OVF descriptor, an EulaSection describes the license
	4	**verify**	**OVF Producer says exportation was successful**
	5	**stimulus**	**Import this OVF package into the OVF Consumer**
	6	**verify**	**OVF Consumer asks for license acceptation**
	7	**stimulus**	**Accept license**
	8	check	Virtual system is deployed on the OVF Consumer
	9	**verify**	**OVF Consumer says importation was successful**

8.1.2.11 TD/OVF/VAPP/READ/012

Interoperability Test Description			
Identifier:	**TD/OVF/VAPP/READ/012**		
Objective:	Support for license verification		
Configuration:	OVF_CFG_01		
References:	DMTF DSP0243-2.0.0 [7], Section 9.6		
Pre-test conditions:	TD/OVF/VAPP/READ/011		
Test Sequence:	**Step**	**Type**	**Description**
	1	**configure**	**On OVF Producer, setup a licensed virtual system**
	2	**stimulus**	**Export the virtual system from OVF Producer into an OVF package**
	3	check	In OVF descriptor, an EulaSection describes the license
	4	**verify**	**OVF Producer says exportation was successful**
	5	**stimulus**	**Import this OVF package into the OVF Consumer**
	6	**verify**	**OVF Consumer asks for license acceptation**
	7	**stimulus**	**Refuse license**
	8	check	Virtual system is not deployed on the OVF Consumer
	9	**verify**	**OVF Consumer says importation was unsuccessful**

9 CIMI

9.1 System Resources

9.1.1 Create

9.1.1.1 TD/CIMI/SYSTEM/CREATE/001

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/CREATE/001**		
Objective:	Create a System template which defines a system comprise of one machine one volume.		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.5.12.1, 5.16.3, 5.13.4		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to create a new System Template resource.
	2	check	CIMI Consumer sends a HTTP POST request of the following form (clause 4.2.1.1): • POST <addURI> HTTP/1.1 <addURI> is referenced by the “add” operation of System Template Collection resource (5.13.4, 5.5.12.1) • Host: <hostname> • Accept: application/(json|xml) • Content-Type: application/(json|xml) • Content-Length: <length> HTTP Body contains the serialization of target System Template resource (5.16.3). The serialized System Template defines a system which comprise of one machine with one volume.
	3	verify	CIMI Provider adds target System Template resource to the System Template Collection
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.1): • HTTP/1.1 201 Created • Location: <location> <location> is the reference URI to the new created System Template resource
	5	verify	CIMI Consumer reports successful creation of new System Template

9.1.1.2 TD/CIMI/SYSTEM/CREATE/002

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/CREATE/002**		
Objective:	Create a System which comprise of one machine with one volume by specifying system attributes		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.5.12.1, 5.13.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to create a new System which is comprised of one machine with one volume
	2	check	Client sends a HTTP POST request of the following form (clause 4.2.1.1): • POST <addURI> HTTP/1.1 <addURI> is referenced by the “add” operation of System Collection resource (5.13.2, 5.5.12.1) • Host: <hostname> • Accept: application/(json|xml) • Content-Type: application/(json|xml) • Content-Length: <length> • HTTP Body contains individual System Template attributes which defines the target system. (5.13.2.1. 5.13.3)
	3	verify	CIMI Provider instantiates the target System and adds it to System Collection
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.1): • HTTP/1.1 201 Created • Location: <location> <location> is the referece URI to the new created System resource
	5	verify	CIMI Consumer reports successful creation of new System

9.1.1.3 TD/CIMI/SYSTEM/CREATE/003

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/CREATE/003**		
Objective:	Create a System which is comprised of one machine with one volume by referencing a System Template		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.5.12.1, 5.13.2		
Pre-test conditions:	• Reference URI of System Template created by TD/CIMI/SYSTEM/CREATE/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to create a new System which comprise of one machine with one volume
	2	check	Client sends a HTTP POST request of the following form (clause 4.2.1.1): • POST <addURI> HTTP/1.1 <addURI> is referenced by the “add” operation of System Collection resource (5.13.2, 5.5.12.1) • Host: <hostname> • Accept: application/(json|xml) • Content-Type: application/(json|xml) • Content-Length: <length> • HTTP Body contains a reference to the target System Template. (5.13.2.1, 4.2.1.1)
	3	verify	CIMI Provider instantiates the target System and adds it to System Collection
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.1): • HTTP/1.1 201 Created • Location: <location> <location> is the reference URI to the new created System resource
	5	verify	CIMI Consumer reports successful creation of new System

9.1.2 Read

9.1.2.1 TD/CIMI/SYSTEM/READ/001

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/READ/001**		
Objective:	Retrieve the description of an existing System Template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.2, 5.13.3		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to obtain the description of an existing System Template
	2	check	CIMI Consumer sends a HTTP GET request of following form (clause 4.2.1.2): - GET <ResourceURI> HTTP/1.1 - Host: <hostname> - Accept: application/(json|xml)
	3	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.2): - HTTP/1.1 200 Ok - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains the serialization of target the System Template (5.13.3)
	4	verify	CIMI Consumer shows the information of the target System Template

9.1.2.2 TD/CIMI/SYSTEM/READ/002

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/READ/002**		
Objective:	Retrieve the description of an existing System resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.2, 5.13.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to obtain the description of an existing System
	2	check	CIMI Consumer sends a HTTP GET request of following form (clause 4.2.1.2): - GET <ResourceURI> HTTP/1.1 - Host: <hostname> - Accept: application/(json|xml)
	3	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.2): - HTTP/1.1 200 Ok - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains the serialization of target the System (5.13.1)
	4	verify	CIMI Consumer shows the information of the target System Template

9.1.3 Update

9.1.3.1 TD/CIMI/SYSTEM/UPDATE/001

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/UPDATE/001**		
Objective:	Update an existing System Template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.13.3		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to update an existing System Template
	2	check	CIMI Consumer sends a HTTP PUT request of following form (4.2.1.3): ▲ POST <editURI> HTTP/1.1 <editURI> is referenced by the "edit" operation of Network Template resource (5.13.3) ▲ Host: <hostname> ▲ Accept: application/(json|xml) ▲ Content-Type: application/(json|xml) ▲ Content-Length: <length> ▲ HTTP Body contains the serialization of complete, updated System Template resource (5.13.3)
	3	verify	CIMI Provider updates the target System Template to the same presentation of request body
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.3): ▲ HTTP/1.1 200 OK ▲ Content-Type: application/(json/xml)
	5	verify	CIMI Consumer reports successful updation of the target System Template

9.1.3.2 TD/CIMI/SYSTEM/UPDATE/002

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/UPDATE/002**		
Objective:	Partially update an existing System Template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3/1, 5.16.3		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to update only some top level attributes of an existing System Template resource
	2	check	CIMI Consumer sends a HTTP PUT request of following form (4.2.1.3.1): ▲ POST <editURI?select=attribute1,attribute2,...> HTTP/1.1 – "editURI" is referenced by the "edit" operation of the target System Template (5.16.3) – attribute1,attribute2,... are the top-level attributes which only requires to be directly updated ▲ Host: <hostname> ▲ Accept: application/(json|xml) ▲ Content-Type: application/(json|xml) ▲ Content-Length: <length> ▲ HTTP Body contains the serialization of updated attribute values for the target System Template
	3	verify	CIMI Provider updates the specified top-level attributes of the target System Template to those that are specified in request body
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.3): ▲ HTTP/1.1 200 OK ▲ Content-Type: application/(json/xml)
	5	verify	CIMI Consumer reports successful updation of the target System Template

9.1.3.3 TD/CIMI/SYSTEM/UPDATE/003

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/UPDATE/003**		
Objective:	Update an existing System resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.13.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to update an existing System Template
	2	check	CIMI Consumer sends a HTTP PUT request of following form (4.2.1.3): • POST <editURI> HTTP/1.1 <editURI> is referenced by the "edit" operation of the target System (5.13.1) • Host: <hostname> • Accept: application/(json|xml) • Content-Type: application/(json|xml) • Content-Length: <length> • HTTP Body contains the serialization of complete, updated System (5.13.1)
	3	verify	CIMI Provider updates the target System to the same presentation of request body
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.3): • HTTP/1.1 200 OK • Content-Type: application/(json/xml)
	5	verify	CIMI Consumer reports successful updation of the target System

9.1.3.4 TD/CIMI/SYSTEM/UPDATE/004

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/UPDATE/004**		
Objective:	Partially update an existing System resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3/1, 5.13.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to update only some top level attributes of an existing System
	2	check	CIMI Consumer sends a HTTP PUT request of following form (4.2.1.3.1): • POST <editURI?select=attribute1,attribute2,...> HTTP/1.1 – "editURI" is referenced by the "edit" operation of the target System (5.13.1) – attribute1,attribute2,... are the top-level attributes which only requires to be directly updated • Host: <hostname> • Accept: application/(json|xml) • Content-Type: application/(json|xml) • Content-Length: <length> • HTTP Body contains the serialization of updated attribute values for the target System
	3	verify	CIMI Provider updates the specified top-level attributes of the target System to those that are specified in request body
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.3): • HTTP/1.1 200 OK • Content-Type: application/(json/xml)
	5	verify	CIMI Consumer reports successful updation of the target System

9.1.3.5 TD/CIMI/SYSTEM/UPDATE/005

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/UPDATE/005**		
Objective:	Start an instantiated System		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], 5.13.1, 5.13.1.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to start an instantiated System
	2	check	CIMI Consumer sends a HTTP POST request of following form (5.13.1.2): - POST <startURI> HTTP/1.1 <startURI> is referenced by the “http://schemas.dmtf.org/cimi/1/action/start” operation of the target System resource (5.13.1) - HTTP Body contains - “action” : “http://schemas.dmtf.org/cimi/1/action/start”
	3	verify	CIMI Provider recursively preforms the start action on each component of the target System
	4	check	CIMI Provider sends a HTTP response of following form: - HTTP/1.1 204 No Content
	5	verify	CIMI Consumer reports successful start of the target System

9.1.3.6 TD/CIMI/SYSTEM/UPDATE/006

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/UPDATE/006**		
Objective:	Stop a running System		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], 5.13.1, 5.13.1.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to start a running System
	2	check	CIMI Consumer sends a HTTP POST request of following form (5.13.1.2): - POST <stopURI> HTTP/1.1 <stopURI> is referenced by the “http://schemas.dmtf.org/cimi/1/action/stop” operation of the target System resource (5.13.1) - HTTP Body contains - “action” : “http://schemas.dmtf.org/cimi/1/action/stop”
	3	verify	CIMI Provider recursively preforms the stop action on each component of the target System
	4	check	CIMI Provider sends a HTTP response of following form: - HTTP/1.1 204 No Content
	5	verify	CIMI Consumer reports successful stop of the target System

9.1.3.7 TD/CIMI/SYSTEM/UPDATE/007

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/UPDATE/007**		
Objective:	Re-start a stopped System		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], 5.13.1, 5.13.1.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to restart a stopped System
	2	check	CIMI Consumer sends a HTTP POST request of following form (5.13.1.2): - POST <restartURI> HTTP/1.1 <restartURI> is referenced by the “http://schemas.dmtf.org/cimi/1/action/restart” operation of the target System resource (5.13.1) - HTTP Body contains - “action” : “http://schemas.dmtf.org/cimi/1/action/restart”
	3	verify	CIMI Provider recursively preforms the restart action on each component of the target System
	4	check	CIMI Provider sends a HTTP response of following form: - HTTP/1.1 204 No Content
	5	verify	CIMI Consumer reports successful restart of the target System

9.1.3.8 TD/CIMI/SYSTEM/UPDATE/008

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/UPDATE/008**		
Objective:	Pause a running System		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], 5.13.1, 5.13.1.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to pause a running System
	2	check	CIMI Consumer sends a HTTP POST request of following form (5.13.1.2): - POST <pauseURI> HTTP/1.1 <pauseURI> is referenced by the “http://schemas.dmtf.org/cimi/1/action/pause” operation of the target System resource (5.13.1) - HTTP Body contains - “action” : “http://schemas.dmtf.org/cimi/1/action/pause”
	3	verify	CIMI Provider recursively preforms the pause action on each component of the target System
	4	check	CIMI Provider sends a HTTP response of following form: - HTTP/1.1 204 No Content
	5	verify	CIMI Consumer reports successful pause of the target System

9.1.3.9 TD/CIMI/SYSTEM/UPDATE/009

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/UPDATE/009**		
Objective:	Suspend a running System		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], 5.13.1, 5.13.1.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to suspend a running System
	2	check	CIMI Consumer sends a HTTP POST request of following form (5.13.1.2): - POST <suspendURI> HTTP/1.1 <suspendURI> is referenced by the "http://schemas.dmtf.org/cimi/1/action/suspend" operation of the target System resource (5.13.1) - HTTP Body contains - "action" : "http://schemas.dmtf.org/cimi/1/action/suspend"
	3	verify	CIMI Provider recursively preforms the suspend action on each component of the target System
	4	check	CIMI Provider sends a HTTP response of following form: - HTTP/1.1 204 No Content
	5	verify	CIMI Consumer reports successful suspension of the target System

9.1.4 Delete

9.1.4.1 TD/CIMI/SYSTEM/DELETE/001

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/DELETE/001**		
Objective:	Delete an existing System Template		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.4, 5.13.3		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to delete an existing System Template
	2	check	CIMI Consumer sends a HTTP DELETE request of following form (4.2.1.4): - DELETE <deleteURI> HTTP/1.1 <deleteURI> is referenced by the "delete" operation of the target System Template (5.13.3) - HOST: <hostname>
	3	verify	CIMI Provider deletes the target System Template from the System Template Collection.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.4): - HTTP/1.1 200 OK
	5	verify	CIMI Consumer reports successful deletion of the target System Template

9.1.4.2 TD/CIMI/SYSTEM/DELETE/002

Interoperability Test Description			
Identifier:	**TD/CIMI/SYSTEM/DELETE/002**		
Objective:	Delete an existing System resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.4, 5.13.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to delete an existing System
	2	check	CIMI Consumer sends a HTTP DELETE request of following form (4.2.1.4): - DELETE <deleteURI> HTTP/1.1 <deleteURI> is referenced by the "delete" operation of the target System (5.13.1) - HOST: <hostname>
	3	verify	CIMI Provider deletes the target System from the System Collection.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.4): - HTTP/1.1 200 OK
	5	verify	CIMI Consumer reports successful deletion of the target System

9.2 Machine Resources

9.2.1 Create

9.2.1.1 TD/CIMI/MACHINE/CREATE/001

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/CREATE/001**		
Objective:	Create a machine template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.14.3, 5.14.4, 5.5.12		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests adding a machine template resource**
	2	check	CIMI Consumer sends a HTTP POST request containing the following: • POST <addURI> where addURI references the add operation for the machine template collection resource type (to add a machine template) • Host: <hostname> • Accept: application/(json|xml) • Content-Type: application/(json|xml) • Content-Length: <length> • HTTP body contains the following: • Individual attributes of the MachineTemplate
	3	**verify**	**CIMI Provider adds a machine template to the machine template collection**
	4	check	CIMI Provider sends a HTTP 201 (CREATED) response • HTTP Location header contains the id (URI) of the newly created machine template resource
	5	**verify**	**CIMI Consumer reports success of adding the machine template resource**

9.2.1.2 TD/CIMI/MACHINE/CREATE/002

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/CREATE/002**		
Objective:	Create a machine resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.14.2, 5.14.4, 5.5.12		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests adding a machine resource**
	2	check	CIMI Consumer sends a HTTP POST request containing the following: • POST <addURI> where addURI references the add operation for the machine collection resource type (to add a machine resource) • Host: <hostname> • Accept: application/(json|xml) • Content-Type: application/(json|xml) • Content-Length: <length> • HTTP body contains the following: • a reference to a MachineTemplate ("by-reference") or the individual attributes of the MachineTemplate itself ("by-value")
	3	**verify**	**CIMI Provider adds a machine resource to the machine collection**
	4	check	CIMI Provider sends a HTTP 201 (CREATED) response • HTTP Location header contains id of the newly created machine resource
	5	**verify**	**CIMI Consumer reports success of adding the machine resource**

9.2.1.3 TD/CIMI/MACHINE/CREATE/003

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/CREATE/003**		
Objective:	Starting a machine		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 5.14.1.2		
Pre-test conditions:	A machine resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests the start of a machine resource**

	2	check	CIMI Consumer sends a HTTP POST request containing the following:
			• POST <actionURI> where actionURI references the machine resource to be started
			• HTTP body contains the following JSON serialization::
			  • { "resourceURI": http://schemas.dmtf.org/cimi/1/Action
			  "action": http://schemas.dmtf.org/cimi/1/action/start
			  }

	3	**verify**	**CIMI Provider instantiates a machine resources**
	4	check	• CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of instantiating the machine resource**

9.2.1.1 TD/CIMI/MACHINE/CREATE/004

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/CREATE/004**		
Objective:	Create a machine image		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.14.8		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests adding a machine image**
	2	check	CIMI Consumer sends a HTTP POST request containing the following: • POST <addURI> where addURI references the add operation for the machine image collection resource type (to add a machine image) • Host: <hostname> • Accept: application/(json|xml) • Content-Type: application/(json|xml) • Content-Length: <length> • HTTP body contains the following: • Individual attributes of the machine image "imageLocation": string,
	3	**verify**	**CIMI Provider adds a machine image to the machine image collection**
	4	check	CIMI Provider sends a HTTP 201 (CREATED) response • HTTP Location header contains the id (URI) of the newly created machine image
	5	**verify**	**CIMI Consumer reports success of adding the machine image**

9.2.3.10 TD/CIMI/MACHINE/CREATE/005

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/CREATE/005**		
Objective:	Capturing a machine		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 5.14.1.2, 5.14.7.1		
Pre-test conditions:	A machine resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests the capture of a machine resource**
	2	check	CIMI Consumer sends a HTTP POST request containing the following: • POST <actionURI> where actionURI references the machine resource to be captured • HTTP body contains the following JSON serialization:: • { "resourceURI": http://schemas.dmtf.org/cimi/1/Action "action": http://schemas.dmtf.org/cimi/1/action/capture }
	3	**verify**	**CIMI Provider captures a machine resource and creates a new machine image**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of capturing the machine resource**

9.2.3.11 TD/CIMI/MACHINE/CREATE/006

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/CREATE/006**		
Objective:	Snapshotting an instantiated machine		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 5.14.1.2, 5.14.7.1		
Pre-test conditions:	A machine was started (instantiated)		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests a snapshot of an instantiated machine resource**
	2	check	CIMI Consumer sends a HTTP POST request containing the following: • POST <actionURI> where actionURI references the machine resource to be snapshotted • HTTP body contains the following JSON serialization:: • { "resourceURI": http://schemas.dmtf.org/cimi/1/Action "action": http://schemas.dmtf.org/cimi/1/action/snapshot }
	3	**verify**	**CIMI Provider snapshots the instantiated machine resource and creates a new machine image**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of snapshotting the machine resource**

9.2.2 Read

9.2.2.1 TD/CIMI/MACHINE/READ/001

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/READ/001**		
Objective:	Retrieving a representation of an instantiated compute resource (machine) (JSON)		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.14.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a machine resources**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the machine resource • Host: <hostname> • Accept: application/(json|xml)
	3	check	CIMI Provider sends a HTTP 200 (OK) response containing • JSON|XML representation of the machine resource • HTTP/1.1 200 OK • Content-Type: application/(json|xml) • Content-Length: <length> • HTTP Body : contains the serialization of machine resource (JSON): • "id": string • "state": string • "memory": number
	4	**verify**	**CIMI Consumer shows information about the machine resource**

9.2.2.2 TD/CIMI/MACHINE/READ/002

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/READ/002**		
Objective:	Retrieving a information about a disk collection (JSON)		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.14.1.1.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a disk collection**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the disk collection • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the disk collection resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of disk collection resource (JSON):
			  • A list of available disks each entry containing (JSON):
			  • "id": string
			  • capacity": number

	4	**verify**	**CIMI Consumer shows information about the disk collection**

9.2.2.3 TD/CIMI/MACHINE/READ/003

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/READ/003**		
Objective:	Retrieving a information about a MachineVolume collection (JSON)		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.14.1.1.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a MachineVolume collection**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the MachineVolume collection • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the MachineVolume collection resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of MachineVolume collection resource (JSON):
			  • A list of available machineVolumes each entry containing (JSON):
			  • "id": string
			  • "volume" : { "href": *string* }, which is the reference to the Volume that will be connected

	4	**verify**	**CIMI Consumer shows information about the MachineVolume collection**

9.2.2.4 TD/CIMI/MACHINE/READ/004

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/READ/004**		
Objective:	Retrieving a information about a MachineNetworkInterface collection (JSON)		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.14.1.1.3		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a MachineNetworkInterface collection**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the MachineNetworkInterface collection • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the MachineNetworkInterface collection resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of MachineNetworkInterface collection resource (JSON):
			  • A list of available machineNetworkInterfaces each entry containing (JSON):
			  • “id”: string
			  • "addresses": { "href": string },, which is a reference to the list of references to the Addresses for this network interface
			  • "network": { "href": string }, which is a reference to a Network for this network interface
			  • “state”: string, which is the state of an interface configurable to be "Active", "Passive" or "Disabled"

	4	**verify**	**CIMI Consumer shows information about the MachineNetworkInterface collection**

9.2.2.5 TD/CIMI/MACHINE/READ/005

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/READ/005**		
Objective:	Retrieving a information about a MachineNetworkInterfaceAddress collection (JSON)		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.14.1.1.4		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a MachineNetworkInterfaceAddress collection**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the MachineNetworkInterfaceAddress collection • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the MachineNetworkInterfaceAddress collection resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of MachineNetworkInterfaceAddress collection resource (JSON):
			  • A list of available machineNetworkInterfaceAddresses each entry containing (JSON):
			  • “id”: string
			  • "address": { "href": string },, which is a reference to an Address resource

	4	**verify**	**CIMI Consumer shows information about the MachineNetworkInterfaceAddress collection**

9.2.2.6 TD/CIMI/MACHINE/READ/006

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/READ/006**		
Objective:	Retrieving a information about a MachineSnapshot collection (JSON)		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.14.1.1.5		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a MachineSnapshot collection**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the MachineSnapshot collection • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the MachineSnapshot collection resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of MachineSnapshot collection resource (JSON):
			  • A list of available machineSnapshots each entry containing (JSON):
			  • “id”: string
			  • "snapshot": { "href": string },, which is a reference to an Snapshot resource

	4	**verify**	**CIMI Consumer shows information about the MachineSnapshot collection**

9.2.2.7 TD/CIMI/MACHINE/READ/007

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/READ/007**		
Objective:	Retrieving a information about a MachineMeter collection (JSON)		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.14.1.1.6, 5.17.3		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a MachineMeter collection**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the MachineMeter collection • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the MachineMeter collection resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of MachineMeter collection resource (JSON):
			  • A list of available MachineMeters each entry containing (JSON):
			  • “id”: string
			  • "targetResource": { "href": string }, which is a reference to the resource to which the Meter is related
			  • "aspect": string, which is a unique identifier representing the aspect of the resource being metered
			  • "units": string, which is the name of the used units, e.g., kilobits per second, CPU usage percentage, etc.
			  • "sampleInterval": number, which is the time between consecutive samples in seconds
			  • "timeScope": string, which is the time scope to which this meter’s value applies
			  • "intervalDuration": string, which is the interval duration when the timeScope is set to "Interval". Possible values: hourly, daily, weekly, monthly or yearly.
			  • "isContinuous": boolean, which is the value indicates whether or not the Meter value is continuous or scalar. Performance Meters are an example of a linear metric.
			  • "samples": { "href": string }, which is a reference to the list of taken samples
			  • "minValue": string, which is the expected minimal measure value.
			  • "maxValue": string, which is the expected maximum measure value.
			  • "stopTime": string, which is the time from which the meter stops tracking samples
			  • "expiresTime": string, which is time from which the Meter is not monitored anymore. It implies the deletion of the Meter after this time.

	4	**verify**	**CIMI Consumer shows information about the MachineMeter collection**

9.2.3 Update

9.2.3.1 TD/CIMI/MACHINE/UPDATE/001

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/UPDATE/001**		
Objective:	Updating a machine template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.14.3, 5.14.4, 5.5.12		
Pre-test conditions:	MachineTemplate resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests updating a machine template resource**
	2	check	CIMI Consumer sends a HTTP PUT request containing the following: • PUT < editURI> where editURI references the edit operation for the machine template collection resource type (to edit a machine template) • Accept: application/(json|xml) • HTTP body contains the following: • serialization of request to update the MachineTemplate resource
	3	**verify**	**CIMI Provider update a machine template within the machine template collection**
	4	check	CIMI Provider sends a HTTP 200 (OK) response containing • Content-Type: application/(json|xml) • Content-Length: <length> • Serialization of updated resource
	5	**verify**	**CIMI Consumer reports success of updating the machine template resource**

9.2.3.2 TD/CIMI/MACHINE/UPDATE/002

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/UPDATE/002**		
Objective:	Partial update of a machine template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3-1, 5.14.3, 5.14.4, 5.5.12		
Pre-test conditions:	MachineTemplate resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests updating a machine template resource**
	2	check	CIMI Consumer sends a HTTP PUT request containing the following: • PUT <editURI?$select=attribute1 > where editURI references the edit operation for the machine template collection resource type (to edit a machine template) and $select the attribute that is updated • Accept: application/(json|xml) • <MachineTemplate> <attribute1 >New attribute1 value</ attribute1> </MachineTemplate >
	3	**verify**	**CIMI Provider update a machine template within the machine template collection**
	4	check	CIMI Provider sends a HTTP 200 (OK) response containing • Content-Type: application/(json|xml) • Content-Length: <length> • Serialization of updated resource
	5	**verify**	**CIMI Consumer reports success of updating the machine template resource**

9.2.3.3 TD/CIMI/MACHINE/UPDATE/003

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/UPDATE/003**		
Objective:	Updating a machine resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.14.2, 5.14.4, 5.5.12		
Pre-test conditions:	machine resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests updating a machine template resource**
	2	check	CIMI Consumer sends a HTTP PUT request containing the following: • PUT < editURI> where editURI references the edit operation for the machine collection resource type (to edit a machine) • Accept: application/(json|xml) • HTTP body contains the following: • serialization of request to update the machine resource
	3	**verify**	**CIMI Provider update a machine within the machine collection**
	4	check	CIMI Provider sends a HTTP 200 (OK) response containing • Content-Type: application/(json|xml) • Content-Length: <length> • Serialization of updated resource
	5	**verify**	**CIMI Consumer reports success of updating the machine resource**

9.2.3.4 TD/CIMI/MACHINE/UPDATE/004

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/UPDATE/004**		
Objective:	Partial update of a machine resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3.1, 5.14.2, 5.14.4, 5.5.12		
Pre-test conditions:	machine resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests updating a machine template resource**
	2	check	CIMI Consumer sends a HTTP PUT request containing the following: • PUT <editURI?$select=attribute1 > where editURI references the edit operation for the machine collection resource type (to edit a machine) and $select the attribute that is updated • Accept: application/(json|xml) • <Machine> <attribute1 >New attribute1 value</ attribute1> </Machine >
	3	**verify**	**CIMI Provider update a machine within the machine collection**
	4	check	CIMI Provider sends a HTTP 200 (OK) response containing • Content-Type: application/(json|xml) • Content-Length: <length> • Serialization of updated resource
	5	**verify**	**CIMI Consumer reports success of updating the machine resource**

9.2.3.5 TD/CIMI/MACHINE/UPDATE/005

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/UPDATE/005**		
Objective:	Stopping an instantiated machine		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 5.14.1.2		
Pre-test conditions:	A machine was started (instantiated)		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests the stop of an instantiated machine resource**
	2	check	CIMI Consumer sends a HTTP POST request containing the following: • POST <actionURI> where actionURI references the machine resource to be stopped • HTTP body contains the following JSON serialization:: • { "resourceURI": http://schemas.dmtf.org/cimi/1/Action "action": http://schemas.dmtf.org/cimi/1/action/stop }
	3	**verify**	**CIMI Provider stops an instantiated machine resources**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of stopping the machine resource**

9.2.3.6 TD/CIMI/MACHINE/UPDATE/006

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/UPDATE/006**		
Objective:	Restarting an instantiated machine		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 5.14.1.2		
Pre-test conditions:	A machine was started (instantiated)		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests the restart of an instantiated machine resource**
	2	check	CIMI Consumer sends a HTTP POST request containing the following: • POST <actionURI> where actionURI references the machine resource to be restarted • HTTP body contains the following JSON serialization:: • { "resourceURI": http://schemas.dmtf.org/cimi/1/Action "action": http://schemas.dmtf.org/cimi/1/action/restart }
	3	**verify**	**CIMI Provider restarts an instantiated machine resources**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of restarting the machine resource**

9.2.3.7 TD/CIMI/MACHINE/UPDATE/007

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/UPDATE/007**		
Objective:	Pausing an instantiated machine		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 5.14.1.2		
Pre-test conditions:	A machine was started (instantiated)		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests the restart of an instantiated machine resource**
	2	check	CIMI Consumer sends a HTTP POST request containing the following: • POST <actionURI> where actionURI references the machine resource to be paused • HTTP body contains the following JSON serialization:: • { "resourceURI": http://schemas.dmtf.org/cimi/1/Action "action": http://schemas.dmtf.org/cimi/1/action/pause }
	3	**verify**	**CIMI Provider pauses an instantiated machine resources**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of pausing the machine resource**

9.2.3.8 TD/CIMI/MACHINE/UPDATE/008

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/UPDATE/008**		
Objective:	Suspending an instantiated machine		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 5.14.1.2		
Pre-test conditions:	A machine was started (instantiated)		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests the suspension of an instantiated machine resource**
	2	check	CIMI Consumer sends a HTTP POST request containing the following: • POST <actionURI> where actionURI references the machine resource to be suspended • HTTP body contains the following JSON serialization:: • { "resourceURI": http://schemas.dmtf.org/cimi/1/Action "action": http://schemas.dmtf.org/cimi/1/action/suspend }
	3	**verify**	**CIMI Provider suspends an instantiated machine resources**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of suspending the machine resource**

9.2.3.9 TD/CIMI/MACHINE/UPDATE/009

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/UPDATE/009**		
Objective:	Starting a suspended machine		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 5.14.1.2		
Pre-test conditions:	A machine was suspended		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests the restart of a suspended machine resource**
	2	check	CIMI Consumer sends a HTTP POST request containing the following: • POST <actionURI> where actionURI references the machine resource to be started • HTTP body contains the following JSON serialization:: • { "resourceURI": http://schemas.dmtf.org/cimi/1/Action "action": http://schemas.dmtf.org/cimi/1/action/restart }
	3	**verify**	**CIMI Provider starts a suspended machine resources**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of starting the machine resource**

9.2.3.12 TD/CIMI/MACHINE/UPDATE/010

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/UPDATE/010**		
Objective:	Restoring a machine		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 5.14.1.2, 5.14.7.1		
Pre-test conditions:	A previously created Machine Image exists		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests the suspension of an instantiated machine resource**
	2	check	CIMI Consumer sends a HTTP POST request containing the following: • POST <actionURI> where actionURI references the machine resource to be suspended • HTTP body contains the following JSON serialization: • { "resourceURI": http://schemas.dmtf.org/cimi/1/Action "action": http://schemas.dmtf.org/cimi/1/action/restore } • "image" : URI, which is areference to the machine image to which is should be restored
	3	**verify**	**CIMI Provider restores the machine resources to the specified machine image**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of restoring the machine resource**

9.2.4 Delete

9.2.4.1 TD/CIMI/MACHINE/DELETE/001

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/DELETE/001**		
Objective:	Deleting a machine template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.4, 5.14.3, 5.14.4, 5.5.12		
Pre-test conditions:	machine template resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests deletion of a machine template resource**
	2	check	CIMI Consumer sends a HTTP DELETE request containing the following: • PUT <deleteURI> where deleteURI references the delete operation for the machine template collection resource type (to delete a machine template) • Host: <hostname> • HTTP body contains the following: • ID of the MachineTemplate
	3	**verify**	**CIMI Provider deletes the machine template of the machine template collection**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of deleting the machine template resource**

11.2.4.2 TD/CIMI/MACHINE/DELETE/002

Interoperability Test Description			
Identifier:	**TD/CIMI/MACHINE/DELETE/002**		
Objective:	Deleting a machine resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.4, 5.14.2, 5.14.4, 5.5.12		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests deleting a machine resource**
	2	check	CIMI Consumer sends a HTTP DELETE request containing the following: • POST <deleteURI> where deleteURI references the delete operation for the machine collection resource type (to delete a machine resource) • Host: <hostname> • HTTP body contains the following: • ID of the machine resource
	3	**verify**	**CIMI Provider deletes the machine resource from the machine collection**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of deleting the machine resource**

9.3 Volume Resources

9.3.1 Create

9.3.1.1 TD/CIMI/VOLUME/CREATE/001

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/CREATE/001**		
Objective:	Create a volume template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.5.12, 5.15.3, 5.15.4		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests adding a volume template resource**

	2	check	CIMI Consumer sends a HTTP POST request containing the following:
			• POST <addURI> where addURI references the add operation for the volume template collection resource type (to add a volume template)
			• Host: <hostname>
			• Accept: application/(json|xml)
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP body contains the following:
			  • Individual attributes of the MachineTemplate:
			  • "volumeTemplates":
			  • Individual attributes of the Volume Template
			  • "volumeConfig": {
			  "href": string | ... VolumeConfiguration attributes }

	3	**verify**	**CIMI Provider adds a volume template to the volume template collection**
	4	check	CIMI Provider sends a HTTP 201 (CREATED) response • HTTP Location header contains the id (URI) of the newly created volume template resource
	5	**verify**	**CIMI Consumer reports success of adding the volume template resource**

9.3.1.2 TD/CIMI/VOLUME/CREATE/002

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/CREATE/002**		
Objective:	Create a volume resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.5.12, 5.15.1, 5.15.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests adding a volume resource**
	2	check	CIMI Consumer sends a HTTP POST request containing the following: • POST <addURI> where addURI references the add operation for the volume collection resource type (to add a volume resource) • Host: <hostname> • Accept: application/(json|xml) • Content-Type: application/(json|xml) • Content-Length: <length> • HTTP body contains the following: • a reference to a VolumeTemplate ("by-reference") or the individual attributes of the VolumeTemplate itself ("by-value")
	3	**verify**	**CIMI Provider adds a volume resource to the volume collection**
	4	check	CIMI Provider sends a HTTP 201 (CREATED) response • HTTP Location header contains id of the newly created volume resource
	5	**verify**	**CIMI Consumer reports success of adding the volume resource**

9.3.1.3 TD/CIMI/VOLUME/CREATE/003

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/CREATE/003**		
Objective:	Create a volume configuration resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.5.12, 5.15.5, 5.15.6		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests adding a volume configuration resource**

	2	check	CIMI Consumer sends a HTTP POST request containing the following:
			• POST <addURI> where addURI references the add operation for the volume configuration collection resource type (to add a volume configuration resource)
			• Host: <hostname>
			• Accept: application/(json|xml)
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP body contains the following:
			  • the individual attributes of the Volume Configuration containing
			  • type: URI that indicates the Volume Configuration Type
			  • format: string that indicates the file system format
			  • capacity: integer that indicates the size of the volume that should be created from this volume configuration

	3	**verify**	**CIMI Provider adds a volume configuration resource**
	4	check	CIMI Provider sends a HTTP 201 (CREATED) response • HTTP Location header contains id of the newly created volume configuration resource
	5	**verify**	**CIMI Consumer reports success of adding the volume configuration resource**

9.3.1.4 TD/CIMI/VOLUME/CREATE/004

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/CREATE/004**		
Objective:	Create a volume image		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.5.12, 5.15.7, 5.15.8		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests adding a volume image**

	2	check	CIMI Consumer sends a HTTP POST request containing the following:
			• POST <addURI> where addURI references the add operation for the volume image collection resource type (to add a volume image)
			• Host: <hostname>
			• Accept: application/(json|xml)
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP body contains the following:
			  • Individual attributes of the volume image
			  "imageLocation": string,
			  “bootable”: boolean

	3	**verify**	**CIMI Provider adds a volume image to the volume image collection**
	4	check	CIMI Provider sends a HTTP 201 (CREATED) response • HTTP Location header contains the id (URI) of the newly created volume image
	5	**verify**	**CIMI Consumer reports success of adding the volume image**

9.3.2 Read

9.3.2.1 TD/CIMI/VOLUME/READ/001

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/READ/001**		
Objective:	Retrieving information of volume resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.15.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a volume resources**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the volume resource • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the volume resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of the at least the following attributes of a volume resource (JSON):
			  • "id": string
			  • "state" : string
			  • "capacity" : integer
			  • ""bootable" : boolean

	4	**verify**	**CIMI Consumer shows information about the volume resource**

9.3.2.2 TD/CIMI/VOLUME/READ/002

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/READ/002**		
Objective:	Retrieving information about a volume collection		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.15.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a volume collection**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the volume collection • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the volume collection resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of volume collection resource (JSON):
			  • A list of available volumes each entry containing (JSON):
			  • "id": string
			  • "state" : string
			  • "capacity" : integer
			  • "bootable" : boolean

	4	**verify**	**CIMI Consumer shows information about the volume collection**

9.3.2.3 TD/CIMI/VOLUME/READ/003

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/READ/003**		
Objective:	Retrieving information of a volume template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.15.3		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a volume template resources**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the volume template resource • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the volume template resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of the at least the following attributes of a volume template resource (JSON):
			  • "id": string
			  • "volumeConfig": ref

	4	**verify**	**CIMI Consumer shows information about the volume template resource**

9.3.2.4 TD/CIMI/VOLUME/READ/004

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/READ/004**		
Objective:	Retrieving information about a volume template collection		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.15.4		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a volume template collection**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the volume template collection • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the volume template collection resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of volume template collection resource (JSON):
			  • A list of available volume templates each entry containing (JSON):
			  • "id": string
			  • "volumeConfig": ref

	4	**verify**	**CIMI Consumer shows information about the volume template collection**

9.3.2.5 TD/CIMI/VOLUME/READ/005

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/READ/005**		
Objective:	Retrieving information of a volume configuration resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.15.5		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a volume configuration resources**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the volume configuration resource • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the volume configuration resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of the at least the following attributes of a volume configuration resource (JSON):
			  • "id": string
			  • "type": URI
			  • "capacity" : integer

	4	**verify**	**CIMI Consumer shows information about the volume configuration resource**

9.3.2.6 TD/CIMI/VOLUME/READ/006

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/READ/006**		
Objective:	Retrieving information about a volume configuration collection		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.15.6		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a volume configuration collection**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the volume configuration collection • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the volume configuration collection resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of the volume configuration collection resource (JSON):
			  • A list of available volume collection resources each entry containing (JSON):
			  • "id": string
			  • "type": URI
			  • "capacity" : integer

	4	**verify**	**CIMI Consumer shows information about the volume configuration collection**

9.3.2.7 TD/CIMI/VOLUME/READ/007

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/READ/007**		
Objective:	Retrieving information of a volume image resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.15.7		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a volume image resources**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the volume image resource • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the volume image resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of the at least the following attributes of a volume image resource (JSON):
			  • "id": string
			  • "state": string
			  • "imageLocation" : ref
			  • "bootable" : boolean

	4	**verify**	**CIMI Consumer shows information about the volume image resource**

9.3.2.8 TD/CIMI/VOLUME/READ/008

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/READ/008**		
Objective:	Retrieving information about a volume image collection		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.2, 5.10.1, 5.15.8		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests information about a volume image collection**
	2	check	CIMI Consumer sends a HTTP GET request containing the following: • GET <ResourceURI> where ResourceURI is the URL of the volume image collection • Host: <hostname> • Accept: application/(json|xml)

	3	check	CIMI Provider sends a HTTP 200 (OK) response containing
			• JSON|XML representation of the volume image collection resource
			• HTTP/1.1 200 OK
			• Content-Type: application/(json|xml)
			• Content-Length: <length>
			• HTTP Body : contains the serialization of volume image collection resource (JSON):
			  • A list of available volume image resources each entry containing (JSON):
			  • "id": string
			  • "state": string
			  • "imageLocation" : ref
			  • "bootable" : boolean

	4	**verify**	**CIMI Consumer shows information about the volume configuration collection**

9.3.3 Update

9.3.3.1 TD/CIMI/VOLUME/UPDATE/001

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/UPDATE/001**		
Objective:	Updating a volume resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.15.1		
Pre-test conditions:	Volume resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests updating a volume resource**
	2	check	CIMI Consumer sends a HTTP PUT request containing the following: • PUT < editURI> where editURI references the edit operation for the volume resource • Accept: application/(json|xml) • HTTP body contains the following: • serialization of request to update the volume resource
	3	**verify**	**CIMI Provider updates the volume resource according to the request**
	4	check	CIMI Provider sends a HTTP 200 (OK) response containing • Content-Type: application/(json|xml) • Content-Length: <length> • Serialization of updated resource
	5	**verify**	**CIMI Consumer reports success of updating the volume resource**

9.3.3.2 TD/CIMI/VOLUME/UPDATE/002

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/UPDATE/002**		
Objective:	Updating a volume collection resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.15.2		
Pre-test conditions:	Volume collection resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests updating a volume collection resource**
	2	check	CIMI Consumer sends a HTTP PUT request containing the following: • PUT < editURI> where editURI references the edit operation for the volume collection resource • Accept: application/(json|xml) • HTTP body contains the following: • serialization of request to update the volume collection resource
	3	**verify**	**CIMI Provider updates the volume collection resource according to the request**
	4	check	CIMI Provider sends a HTTP 200 (OK) response containing • Content-Type: application/(json|xml) • Content-Length: <length> • Serialization of updated resource
	5	**verify**	**CIMI Consumer reports success of updating the volume collection resource**

9.3.3.3 TD/CIMI/VOLUME/UPDATE/003

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/UPDATE/003**		
Objective:	Updating a volume template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.15.3		
Pre-test conditions:	Volume template resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests updating a volume template resource**
	2	check	CIMI Consumer sends a HTTP PUT request containing the following: • PUT < editURI> where editURI references the edit operation for the volume template resource • Accept: application/(json|xml) • HTTP body contains the following: • serialization of request to update the volume template resource
	3	**verify**	**CIMI Provider updates the volume template resource according to the request**
	4	check	CIMI Provider sends a HTTP 200 (OK) response containing • Content-Type: application/(json|xml) • Content-Length: <length> • Serialization of updated resource
	5	**verify**	**CIMI Consumer reports success of updating the volume template resource**

9.3.3.4 TD/CIMI/VOLUME/UPDATE/004

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/UPDATE/004**		
Objective:	Updating a volume template collection resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.15.4		
Pre-test conditions:	Volume template collection resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests updating a volume template collection resource**
	2	check	CIMI Consumer sends a HTTP PUT request containing the following: • PUT < editURI> where editURI references the edit operation for the volume template collection resource • Accept: application/(json|xml) • HTTP body contains the following: • serialization of request to update the volume template collection resource
	3	**verify**	**CIMI Provider updates the volume template collection resource according to the request**
	4	check	CIMI Provider sends a HTTP 200 (OK) response containing • Content-Type: application/(json|xml) • Content-Length: <length> • Serialization of updated resource
	5	**verify**	**CIMI Consumer reports success of updating the volume template collection resource**

9.3.3.5 TD/CIMI/VOLUME/UPDATE/005

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/UPDATE/005**		
Objective:	Updating a volume configuration resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.15.5		
Pre-test conditions:	Volume configuration resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests updating a volume template resource**
	2	check	CIMI Consumer sends a HTTP PUT request containing the following: • PUT < editURI> where editURI references the edit operation for the volume configuration resource • Accept: application/(json|xml) • HTTP body contains the following: • serialization of request to update the volume configuration resource
	3	**verify**	**CIMI Provider updates the volume configuration resource according to the request**
	4	check	CIMI Provider sends a HTTP 200 (OK) response containing • Content-Type: application/(json|xml) • Content-Length: <length> • Serialization of updated resource
	5	**verify**	**CIMI Consumer reports success of updating the volume configuration resource**

9.3.3.6 TD/CIMI/VOLUME/UPDATE/006

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/UPDATE/006**		
Objective:	Updating a volume configuration collection resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.15.6		
Pre-test conditions:	Volume configuration collection resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests updating a volume configuration collection resource**
	2	check	CIMI Consumer sends a HTTP PUT request containing the following: • PUT < editURI> where editURI references the edit operation for the volume configuration collection resource • Accept: application/(json|xml) • HTTP body contains the following: • serialization of request to update the volume configuration collection resource
	3	**verify**	**CIMI Provider updates the volume configuration collection resource according to the request**
	4	check	CIMI Provider sends a HTTP 200 (OK) response containing • Content-Type: application/(json|xml) • Content-Length: <length> • Serialization of updated resource
	5	**verify**	**CIMI Consumer reports success of updating the volume configuration collection resource**

9.3.3.7 TD/CIMI/VOLUME/UPDATE/007

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/UPDATE/007**		
Objective:	Updating a volume image resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.15.7		
Pre-test conditions:	Volume image resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests updating a volume image resource**
	2	check	CIMI Consumer sends a HTTP PUT request containing the following: • PUT < editURI> where editURI references the edit operation for the volume image resource • Accept: application/(json|xml) • HTTP body contains the following: • serialization of request to update the volume image resource
	3	**verify**	**CIMI Provider updates the volume image resource according to the request**
	4	check	CIMI Provider sends a HTTP 200 (OK) response containing • Content-Type: application/(json|xml) • Content-Length: <length> • Serialization of updated resource
	5	**verify**	**CIMI Consumer reports success of updating the volume image resource**

9.3.3.8 TD/CIMI/VOLUME/UPDATE/008

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/UPDATE/008**		
Objective:	Updating a volume image collection resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.3, 5.15.8		
Pre-test conditions:	Volume image collection resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests updating a volume image collection resource**
	2	check	CIMI Consumer sends a HTTP PUT request containing the following: • PUT < editURI> where editURI references the edit operation for the volume image collection resource • Accept: application/(json|xml) • HTTP body contains the following: • serialization of request to update the volume image collection resource
	3	**verify**	**CIMI Provider updates the volume image collection resource according to the request**
	4	check	CIMI Provider sends a HTTP 200 (OK) response containing • Content-Type: application/(json|xml) • Content-Length: <length> • Serialization of updated resource
	5	**verify**	**CIMI Consumer reports success of updating the volume image collection resource**

9.3.4 Delete

9.3.4.1 TD/CIMI/VOLUME/DELETE/001

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/DELETE/001**		
Objective:	Deleting a volume resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.4, 5.15.1		
Pre-test conditions:	A volume resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests deleting a volume resource**
	2	check	CIMI Consumer sends a HTTP DELETE request containing the following: • POST <deleteURI> where deleteURI references the delete operation for the volume resource • Host: <hostname> • HTTP body contains the following: • ID of the volume resource
	3	**verify**	**CIMI Provider deletes the volume resource from the volume collection**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of deleting the volume resource**

9.3.4.2 TD/CIMI/VOLUME/DELETE/002

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/DELETE/002**		
Objective:	Deleting a volume template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.4, 5.15.3		
Pre-test conditions:	A volume template resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests deleting a volume template resource**
	2	check	CIMI Consumer sends a HTTP DELETE request containing the following: • POST <deleteURI> where deleteURI references the delete operation for the volume template resource • Host: <hostname> • HTTP body contains the following: • ID of the volume template resource
	3	**verify**	**CIMI Provider deletes the volume template resource from the volume template collection**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of deleting the volume template resource**

9.3.4.3 TD/CIMI/VOLUME/DELETE/003

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/DELETE/003**		
Objective:	Deleting a volume configuration resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.4, 5.15.5		
Pre-test conditions:	A volume configuration resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests deleting a volume configuration resource**
	2	check	CIMI Consumer sends a HTTP DELETE request containing the following: • POST <deleteURI> where deleteURI references the delete operation for the volume configuration resource • Host: <hostname> • HTTP body contains the following: • ID of the volume configuration resource
	3	**verify**	**CIMI Provider deletes the volume configuration resource from the volume configuration collection**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of deleting the volume configuration resource**

9.3.4.4 TD/CIMI/VOLUME/DELETE/004

Interoperability Test Description			
Identifier:	**TD/CIMI/VOLUME/DELETE/004**		
Objective:	Deleting a volume image resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clauses 4.2.1.4, 5.15.7		
Pre-test conditions:	A volume image resource was created		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**CIMI Consumer requests deleting a volume image resource**
	2	check	CIMI Consumer sends a HTTP DELETE request containing the following: • POST <deleteURI> where deleteURI references the delete operation for the volume image resource • Host: <hostname> • HTTP body contains the following: • ID of the volume image resource
	3	**verify**	**CIMI Provider deletes the volume image resource from the volume image collection**
	4	check	CIMI Provider sends a HTTP 200 (OK) response
	5	**verify**	**CIMI Consumer reports success of deleting the volume image resource**

9.4 Network Resources

9.4.1 Create

9.4.1.1 TD/CIMI/NETWORK/CREATE/001

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/CREATE/001**		
Objective:	Create a Network Template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.16.3, 5.16.4.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests adding a Network Template resource
	2	check	CIMI Consumer sends a HTTP POST request of following form (4.2.1.1): - POST <addURI> HTTP/1.1 <addURI> is referenced by the “add” operation of Network Template Collection resource - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains the serialization of Network Template resource (5.16.3)
	3	verify	CIMI Provider adds the specified Network Template resource to the Network Template Collection resource.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.1): - HTTP/1.1 201 Created - Location: <location> <location> is the reference URL to the newly created Network Template resource
	5	verify	CIMI Consumer reports successful addition of new Network Template resource

9.4.1.2 TD/CIMI/NETWORK/CREATE/002

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/CREATE/002**		
Objective:	Create a Network resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.16.1, 5.16.1.2, 5.16.2.1, 5.16.3		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests adding a new Network resource
	2	check	CIMI Consumer sends a HTTP POST request of following form (4.2.1.1): - POST <addURI> HTTP/1.1 <addURI> is referenced by the “add” operation of NetworkCollection resource (5.16.1.2) - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains a reference to a NetworkTemplate or individual template attributes of the NetworkTemplate itself (5.16.2.1)
	3	verify	CIMI Provider adds the specified Network resource to the NetworkCollection resource.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.1): - HTTP/1.1 201 Created - Location: <location> <location> is the reference URL to the newly created Network resource
	5	verify	CIMI Consumer reports successful addition of new Network resource

9.4.1.3 TD/CIMI/NETWORK/CREATE/003

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/CREATE/003**		
Objective:	Create a Network Configuration		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.16.5		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests adding a new Network Configuration
	2	check	CIMI Consumer sends a HTTP POST request of following form (4.2.1.1): - POST <addURI> HTTP/1.1 <addURI> is referenced by the “add” operation of Network Configuration Collection resource (5.16.5.1) - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains a reference to a Network Configuration Template or individual attributes of Network Configuration Template itself (5.16.2.1)
	3	verify	CIMI Provider adds the specified Network Configuration to Network Configuration Collection.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.1): - HTTP/1.1 201 Created - Location: <location> <location> is the reference URL to the newly created Network Configuration resource
	5	verify	CIMI Consumer reports successful addition of new Network Configuration resource

9.4.1.4 TD/CIMI/NETWORK/CREATE/004

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/CREATE/004**		
Objective:	Create an Address		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.16.13, 5.16.14. 5.15.14.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires a new Address
	2	check	CIMI Consumer sends a HTTP POST request of following form (clause 4.2.1.1): - POST <addURI> HTTP/1.1 <addURI> is referenced by the “add” operation of Address Collection resource (5.16.14) - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains a reference to a Address Template or individual attributes of Address Template itself (5.16.14.1)
	3	verify	CIMI Provider adds target Address to Address Collection.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.1): - HTTP/1.1 201 Created - Location: <location> <location> is the reference URL to the newly created Address resource
	5	verify	CIMI Consumer reports successful addition of target Address

9.4.1.5 TD/CIMI/NETWORK/CREATE/005

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/REATE/005**		
Objective:	Create a Network Port		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.16.8, 5.16.8.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to create a Network Port
	2	check	CIMI Consumer sends a HTTP POST request of following form (clause 4.2.1.1): - POST <addURI> HTTP/1.1 <addURI> is referenced by the “add” operation of Network Port Collection (5.16.8) - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains a reference to a Network Port Template or individual attributes of Network Port Template itself (5.16.8.1)
	3	verify	CIMI Provider adds the target Network Port to Network Port Collection.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.1): - HTTP/1.1 201 Created - Location: <location> <location> is the reference URL to the newly created Network Port resource
	5	verify	CIMI Consumer reports successful addition of the target Network Port

9.4.2 Read

9.4.2.1 TD/CIMI/NETWORK/READ/001

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/READ/001**		
Objective:	Retrieve the description of an existing NetworkTemplate resource instance.		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.2, 5.16.3, 5.16.3.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests the description of an existing NetworkTemplate resource
	2	check	CIMI Consumer sends a HTTP GET request of following form (clause 4.2.1.2): - POST <ResourceURI> HTTP/1.1 - HOST: <hostname> - Accept: application/(json|xml)
	3	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.2): - HTTP/1.1 20o OK - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body : contains the serialization of NetworkTemplate resource (5.16.3).
	4	verify	CIMI Consumer shows information of NetworkTemplate resource

9.4.2.2 TD/CIMI/NETWORK/READ/002

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/READ/002**		
Objective:	Retrieve the description of an existing Network resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.2, 5.16.1, 5.16.3.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests the description of an existing Network resource
	2	check	CIMI Consumer sends a HTTP GET request of following form (clause 4.2.1.2): - POST <ResourceURI> HTTP/1.1 - HOST: <hostname> - Accept: application/(json|xml)
	3	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.2): - HTTP/1.1 200 OK - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body : contains the serialization of Network resource (5.16.1).
	4	verify	CIMI Consumer shows information of Network resource

9.4.2.3 TD/CIMI/NETWORK/READ/003

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/READ/003**		
Objective:	Retrieve the description of an existing Network Configuration		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.2, 5.16.1, 5.16.3.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests the description of an existing Network resource
	2	check	CIMI Consumer sends a HTTP GET request of following form (clause 4.2.1.2): - POST <ResourceURI> HTTP/1.1 - HOST: <hostname> - Accept: application/(json|xml)
	3	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.2): - HTTP/1.1 200 OK - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body : contains the serialization of Network resource (5.16.1).
	4	verify	CIMI Consumer shows information of Network resource

9.4.2.4 TD/CIMI/NETWORK/READ/004

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/READ/004**		
Objective:	Retrieve the description of an existing Address		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.2, 5.16.13		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires information of an existing Address
	2	check	CIMI Consumer sends a HTTP GET request of following form (clause 4.2.1.2): - POST <ResourceURI> HTTP/1.1 - HOST: <hostname> - Accept: application/(json|xml)
	3	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.2): - HTTP/1.1 200 OK - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body : contains the serialization of Address resource (5.16.13).
	4	verify	CIMI Consumer shows information of target Address

9.4.2.5 TD/CIMI/NETWORK/READ/005

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/READ/005**		
Objective:	Retrieve the description of an existing Network Port		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.2, 5.16.7		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires information of an existing Network Port
	2	check	CIMI Consumer sends a HTTP GET request of following form (clause 4.2.1.2): - POST <ResourceURI> HTTP/1.1 - HOST: <hostname> - Accept: application/(json|xml)
	3	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.2): - HTTP/1.1 200 OK - Content-Type: application/(json|xml) - Content-Length: <length> 1. HTTP Body : contains the serialization of Network Port resource (5.16.7).
	4	verify	CIMI Consumer shows information of target Address

9.4.3 Update

9.4.3.1 TD/CIMI/NETWORK/UPDATE/001

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/UPDATE/001**		
Objective:	Update an existing Network Template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.16.3		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests updating an existing Network Template resource
	2	check	CIMI Consumer sends a HTTP PUT request of following form (4.2.1.3): - POST <editURI> HTTP/1.1 <editURI> is referenced by the "edit" operation of Network Template resource (5.16.3) - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains the serialization of complete, updated NetworkTemplate resource (5.16.3)
	3	verify	CIMI Provider updates the specified NetworkTemplate resource to the same presentation of request body
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.3): - HTTP/1.1 200 OK - Content-Type: application/(json/xml)
	5	verify	CIMI Consumer reports successful updation of NetworkTemplate resource

9.4.3.2 TD/CIMI/NETWORK/UPDATE/002

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/UPDATE/002**		
Objective:	Partially update an existing Network Template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3/1, 5.16.3		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests updating only top level attributes of an existing Network Template resource
	2	check	CIMI Consumer sends a HTTP PUT request of following form (4.2.1.3.1): - POST <editURI?select=attribute1,attribute2,...> HTTP/1.1 "editURI" is referenced by the "edit" operation of Network Template resource (5.16.3) attribute1,attribute2,... are the top-level attributes which only requires to be directly updated - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains serialization of updated attributes values
	3	verify	CIMI Provider updates the specified top-level attributes of the NetworkTemplate resource to those that are specified in request body
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.3): - HTTP/1.1 200 OK - Content-Type: application/(json/xml)
	5	verify	CIMI Consumer reports successful update of NetworkTemplate resource

9.4.3.3 TD/CIMI/NETWORK/UPDATE/003

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/UPDATE/003**		
Objective:	Start an instantiated Network resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], 5.16.1, 5.16.1.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests starting an instantiated Network resource

	2	check	CIMI Consumer sends a HTTP POST request of following form (5.16.1.2):
			- POST <startURI> HTTP/1.1
			<startURI> is referenced by the “start” operation of the Network resource (5.6.1)
			- HTTP Body contains
			  - “resourceURI” : “http://schemas.dmtf.org/cimi/1/Action”
			  - “action” : “http://schemas.dmtf.org/cimi/1/action/start”

	3	verify	CIMI Provider starts the specified Network resource. Its states is changed to “STARTED”
	4	check	CIMI Provider sends a HTTP response of following form (5.16.1.2): - HTTP/1.1 204 No Content
	5	verify	CIMI Consumer reports successful start of the Network resource

9.4.3.4 TD/CIMI/NETWORK/UPDATE/004

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/UPDATE/004**		
Objective:	Stopping of an instantiated Network resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], 5.16.1, 5.16.1.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests stopping an instantiated Network resource

	2	check	CIMI Consumer sends a HTTP POST request of following form (5.16.1.2):
			- POST <stopURI> HTTP/1.1
			<stopURI> is referenced by the “stop” operation of the Network resource (5.16.1)
			- HTTP Body contains
			  - “resourceURI” : “http://schemas.dmtf.org/cimi/1/Action”
			  - “action” : “http://schemas.dmtf.org/cimi/1/action/stop”

	3	verify	CIMI Provider stops the specified Network resource. Its state is changed to “STOPPED” state.
	4	check	CIMI Provider sends a HTTP response of following form (5.16.1.2): - HTTP/1.1 204 No Content
	5	verify	CIMI Consumer reports success of stopping of Network resource

9.4.3.5 TD/CIMI/NETWORK/UPDATE/005

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/UPDATE/005**		
Objective:	Update an existing Network Configuration		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.16.5		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests updating an existing Network Template resource
	2	check	CIMI Consumer sends a HTTP PUT request of following form (4.2.1.3): - POST <editURI> HTTP/1.1 <editURI> is referenced by the "edit" operation of Network Template resource (5.16.5) - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains the serialization of complete, updated Network Configuration (5.16.5)
	3	verify	CIMI Provider updates the specified Network Configuration to the same presentation of request body
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.3): - HTTP/1.1 200 OK - Content-Type: application/(json/xml)
	5	verify	CIMI Consumer reports successful update of target Network Configuration

9.4.3.6 TD/CIMI/NETWORK/UPDATE/006

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/UPDATE/006**		
Objective:	Partially update an existing Network Configuration		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3.1, 5.16.5		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests updating some attributes of an existing Network Configuration
	2	check	CIMI Consumer sends a HTTP PUT request of following form (4.2.1.3.1): - POST <editURI?select=attribute1,attribute2,...> HTTP/1.1 "editURI" is referenced by the "edit" operation of Network Configuration (5.16.3) attribute1,attribute2,... are the the attributes which only requires to be directly updated - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains serialization of updated attributes values
	3	verify	CIMI Provider updates the target attributes of the Network Configuration to those that are specified in request body
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.3): - HTTP/1.1 200 OK - Content-Type: application/(json/xml)
	5	verify	CIMI Consumer reports successful update of Network Configuration

9.4.3.7 TD/CIMI/NETWORK/UPDATE/007

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/UPDATE/007**		
Objective:	Update an existing Address		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.16.13		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to update an existing Address
	2	check	CIMI Consumer sends a HTTP PUT request of following form (4.2.1.3): - POST <editURI> HTTP/1.1 <editURI> is referenced by the "edit" operation of target Address (5.16.13) - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains the serialization of complete, updated Address (5.16.13)
	3	verify	CIMI Provider updates the target Address to the same presentation of the request body
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.3): - HTTP/1.1 200 OK - Content-Type: application/(json/xml)
	5	verify	CIMI Consumer reports successful update of the target Address

9.4.3.8 TD/CIMI/NETWORK/UPDATE/008

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/UPDATE/008**		
Objective:	Partially update an existing Address		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3.1, 5.16.13		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to update some of the attributes of an existing Address
	2	check	CIMI Consumer sends a HTTP PUT request of following form (4.2.1.3.1): - POST <editURI?select=attribute1,attribute2,...> HTTP/1.1 "editURI" is referenced by the "edit" operation of the target Address (5.16.13) attribute1,attribute2,... are the the attributes which only requires to be directly updated - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains serialization of updated attributes values
	3	verify	CIMI Provider updates the target attributes of the Address to those that are specified in request body
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.3): - HTTP/1.1 200 OK - Content-Type: application/(json/xml)
	5	verify	CIMI Consumer reports successful update of the target Address

9.4.3.9 TD/CIMI/NETWORK/UPDATE/009

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/UPDATE/009**		
Objective:	Start an instantiated Network Port		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], 5.16.7, 5.16.7.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to start an instantiated Network Port

	2	check	CIMI Consumer sends a HTTP POST request of following form (5.16.7.2):
			- POST <startURI> HTTP/1.1
			<startURI> is referenced by the “start” operation of the Network Port (5.16.7)
			- HTTP Body contains
			  - “resourceURI” : “http://schemas.dmtf.org/cimi/1/Action”
			  - “action” : “http://schemas.dmtf.org/cimi/1/action/start”

	3	verify	CIMI Provider starts the target Network Port. Its states is changed to “STARTED”
	4	check	CIMI Provider sends a HTTP response of following form (5.16.7.2): - HTTP/1.1 204 No Content
	5	verify	CIMI Consumer reports successful start of the target Network Port

9.4.3.10 TD/CIMI/NETWORK/UPDATE/010

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/UPDATE/010**		
Objective:	Stopping of an instantiated Network Port		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], 5.16.17. 5.16.17.2		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to stop an instantiated Network Port

	2	check	CIMI Consumer sends a HTTP POST request of following form (5.16.7.2):
			- POST <stopURI> HTTP/1.1
			<sstopURI> is referenced by the “stop” operation of the Network Port (5.16.7)
			- HTTP Body contains
			  - “resourceURI” : “http://schemas.dmtf.org/cimi/1/Action”
			  - “action” : “http://schemas.dmtf.org/cimi/1/action/stop”

	3	verify	CIMI Provider stops the target Network Port. Its state is changed to “STOPPED” state.
	4	check	CIMI Provider sends a HTTP response of following form (5.16.7.2): - HTTP/1.1 204 No Content
	5	verify	CIMI Consumer reports success of stopping of the target Network Port

9.4.3.11 TD/CIMI/NETWORK/UPDATE/011

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/UPDATE/011**		
Objective:	Update an existing Network Port		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3, 5.16.7		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to update an existing Network Port
	2	check	CIMI Consumer sends a HTTP PUT request of following form (4.2.1.3): - POST <editURI> HTTP/1.1 <editURI> is referenced by the "edit" operation of target Address (5.16.7) - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains the serialization of complete, updated Network Port (5.16.7)
	3	verify	CIMI Provider updates the target Network Port to the same presentation of the request body
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.3): - HTTP/1.1 200 OK - Content-Type: application/(json/xml)
	5	verify	CIMI Consumer reports successful update of the target Network Port

9.4.3.12 TD/CIMI/NETWORK/UPDATE/012

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/UPDATE/012**		
Objective:	Partially update an existing Network Port		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.3.1, 5.16.7		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to update some of the attributes of an existing Network Port
	2	check	CIMI Consumer sends a HTTP PUT request of following form (4.2.1.3.1): - POST <editURI?select=attribute1,attribute2,...> HTTP/1.1 "editURI" is referenced by the "edit" operation of the target Address (5.16.7) attribute1,attribute2,... are the the attributes which only requires to be directly updated - HOST: <hostname> - Accept: application/(json|xml) - Content-Type: application/(json|xml) - Content-Length: <length> - HTTP Body contains serialization of updated attributes values
	3	verify	CIMI Provider updates the target attributes of the Network Port to those that are specified in request body
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.3): - HTTP/1.1 200 OK - Content-Type: application/(json/xml)
	5	verify	CIMI Consumer reports successful update of the target Network Port

9.4.4 Delete

9.4.4.1 TD/CIMI/NETWORK/DELETE/001

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/DELETE/001**		
Objective:	Delete an existing Network Template resource		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.4, 5.16.3		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests to delete an existing Network Template resource
	2	check	CIMI Consumer sends a HTTP DELETE request of following form (4.2.1.4): - DELETE <deleteURI> HTTP/1.1 <deleteURI> is referenced by the “delete” operation of target Network Template resource (5.16.3) - HOST: <hostname>
	3	verify	CIMI Provider deletes the target Network Template resource from the Network Template Collection.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.4): - HTTP/1.1 200 OK
	5	verify	CIMI Consumer reports successful deletion of Network Template resource

9.4.4.2 TD/CIMI/NETWORK/DELETE/002

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/DELETE/002**		
Objective:	Delete an existing Network		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.4, 5.16.1		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to delete an existing Network
	2	check	CIMI Consumer sends a HTTP DELETE request of following form (4.2.1.4): - DELETE <deleteURI> HTTP/1.1 <deleteURI> is referenced by the “delete” operation of target Network Template resource (5.16.1) - HOST: <hostname>
	3	verify	CIMI Provider deletes the target Network from the Network Collection.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.4): - HTTP/1.1 200 OK
	5	verify	CIMI Consumer reports successful deletion of target Network

9.4.4.3 TD/CIMI/NETWORK/DELETE/003

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/DELETE/003**		
Objective:	Delete an existing Network Configuration		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.4, 5.16.5		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requests to delete an existing Network Configuration
	2	check	CIMI Consumer sends a HTTP DELETE request of following form (4.2.1.4): - DELETE <deleteURI> HTTP/1.1 <deleteURI> is referenced by the “delete” operation of target Network Configuration (5.16.5) - HOST: <hostname>
	3	verify	CIMI Provider deletes the target Network Configuration from the Network Configuration Collection.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.4): - HTTP/1.1 200 OK
	5	verify	CIMI Consumer reports successful deletion of Network Configuration resource

9.4.4.4 TD/CIMI/NETWORK/DELETE/004

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/DELETE/004**		
Objective:	Delete an existing Address		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.4, 5.16.16		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to delete an existing Address
	2	check	CIMI Consumer sends a HTTP DELETE request of following form (4.2.1.4): - DELETE <deleteURI> HTTP/1.1 <deleteURI> is referenced by the “delete” operation of target Address (5.16.16) - HOST: <hostname>
	3	verify	CIMI Provider deletes the target Address from the Address Collection.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.4): - HTTP/1.1 200 OK
	5	verify	CIMI Consumer reports successful deletion of Address resource

9.4.4.5 TD/CIMI/NETWORK/DELETE/005

Interoperability Test Description			
Identifier:	**TD/CIMI/NETWORK/DELETE/005**		
Objective:	Delete an existing Network Port		
Configuration:	CIMI_CFG_01		
References:	CIMI [6], clause 4.2.1.4, 5.16.7		
Pre-test conditions:			
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to delete an existing Network Port
	2	check	CIMI Consumer sends a HTTP DELETE request of following form (4.2.1.4): - DELETE <deleteURI> HTTP/1.1 <deleteURI> is referenced by the “delete” operation of target Network Port (5.16.7) - HOST: <hostname>
	3	verify	CIMI Provider deletes the target Address from the Network Port Collection.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.4): - HTTP/1.1 200 OK
	5	verify	CIMI Consumer reports successful deletion of target Network Port

10 Interworking

This section provides the test descriptions for the features addressed jointly with several Cloud specifications.

12.2 CAMP and OVF

The CAMP specification defines a metadata model and a RESTful API to describe and manipulate platforms deployed on Cloud environments. A platform can be described as a collection of coherent components running on a virtual system. These components are known as Platform Components whereas underlying virtual system comprise of guest operating systems running on virtual machines.

The CAMP specification also describes a mechanism for exporting/importing a Cloud platform by bundling metadata and executables into a package called Platform Deployment Package (PDP). These packages are usually generated by tools such as Application Deployment Environments (ADEs).

Such PDPs include OVF descriptors in order specify the underlying infrastructure (i.e. Virtual Machine + Guest OS) on which Platform Components are deployed. The objective of the following tests, are to verify proper use of OVF descriptors in Platform Deployment Packages.

10.1.1 Create

10.1.1.1 TD/INTER/CAMP+OVF/CREATE/001

Interoperability Test Description			
Identifier:	**TD/INTER/CAMP+OVF/CREATE/001**		
Objective:	Create a CAMP Platform Deployment Package (PDP) which includes an OVF package describing a platform element (a simple DBMS setup) deployed on a virtual system comprise of one virtual machine with one storage component attached.		
Configuration:	CAMP_OVF_CFG		
References:	CAMP [5], clause 4 OVF [7], clauses 8, 9		
Pre-test conditions:	• Application Deployment Environment (ADE) is aware of at least one DBMS Platform Component • ADE implements an OVF Producer		
Test Sequence:	**Step**	**Type**	**Description**
	1	configure	Cloud user configures a DMBS Platform Component which will run on a virtual machine using the ADE
	2	**stimulus**	**Cloud user exports this virtual system as a CAMP PDP with OVF.**
	3	**verify**	**ADE creates the CAMP PDP with OVF successfully and notifies the user**
	4	check	PDP contains ● an OVF descriptor which contains ○ VirtualHardwareSection, which describes the target virtual machine ○ DiskSection, which describes the target storage ○ File referencesthe ISO Image for the target Virtual File System Platform Component descriptor, which describes the attributes of the DBMS to be deployed

10.1.1.2 TD/INTER/CAMP+OVF/CREATE/002

Interoperability Test Description			
Identifier:	**TD/INTER/CAMP+OVF/CREATE/002**		
Objective:	Deploy a CAMP Platform Deployment Package (PDP), which describes a platform element (a simple DBMS setup) for a virtual system comprising a virtual machine with one storage component attached.		
Configuration:	CAMP_OVF_CFG		
References:	CAMP [5], clause 6.11 OVF [7], clauses 8, 9		
Pre-test conditions:	Cloud user has access to ● PDP described in TD/CAMP_OVF/PDP/CREATE/001 ● Application Deployment Environment (ADE) which supports deployment of PDP		
Test Sequence:	**Step**	**Type**	**Description**
	1	**stimulus**	**Cloud user deploys the target PDP in the PaaS system using an ADE (CAMP client)**
	2	check	CAMP Client sends a HTTP POST request ● Request-URI is the location of the CAMP Server (Platform URL) ● HTTP Content-Type header is the following MIME type: ● application/json ● HTTP Body contains the URI that identifies the PDP that is being registered (pdp_uri) in JSON [i.3] format
	3	check	OVF Package is valid : ● Package contains a valid OVF descriptor(s) ○ has a VirtualHardwareSection with desirable VM parameters ○ has a DiskSection with desirable Storage parameters has file references for Vitual Disk Image(s), ISO Image(s)
	4	**verify**	**The IaaS resource is instantiated as specified by OVF metadata (VM, OS, Platform element) by the CAMP Server through the OVF Consumer** ● **One VM with one storage component is instantiated. It is compliant with the parameters specified in the VirtualHardwareSection of the OVF descriptor** ● **Attached storage is compliant with parameters specified in the DiskSection of the OVF descriptor** **The OS running on the VM is referenced by the OVF descriptor (as a virtual file system or an ISO image)**
	5	**verify**	**CAMP Server creates an AssemblyTemplate resource**
	6	**verify**	**CAMP Server updates the assemblyTemplate attribute of the Platform resource to include a reference to the newly created assembly template**

10.2 CIMI and OVF

10.2.1 Create

10.2.1.1 TD/INTER/CIMI+OVF/CREATE/001

Interoperability Test Description			
Identifier:	TD/INTER/CIMI+OVF/CREATE/001		
Objective:	Create a System Template resource by utilizing an OVF package which defines a System which is comprised of one machine with one volume		
Configuration:	CIMI_OVF_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.13.1.1; OVF [7], sections 8,9		
Pre-test conditions:	TD/OVF/VAPP/CREATE/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to create a System Template resource by utilizing an OVF package
	2	check	CIMI Consumer sends a HTTP POST request of following form (5.13.1.1): - POST <importURI> HTTP/1.1 <importURI> is referenced by the “http://schemas.dmtf.org/cimi/1/import” operation of the System Collection resource (5.13.2) - HTTP Body contains - “action”: “http://schemas.dmtf.org/cimi/1/action/import” “source”: “The URI from which the target OVF package can be retrieved”
	3	verify	CIMI Provider initiates the System specified in the target OVF package.
	4	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.1): - HTTP/1.1 201 Created - Location: <location> <location> is the reference URI to the new created System Template resource
	5	Verify	CIMI Consumer reports successful importation of OVF package and creation of new System Template

10.2.2 Read

10.2.2.1 TD/INTER/CIMI+OVF/READ/001

Interoperability Test Description			
Identifier:	TD/INTER/CIMI+OVF/READ/001		
Objective:	Export an existing System as an OVF package		
Configuration:	CIMI_OVF_CFG_01		
References:	CIMI [6], clause 4.2.1.1, 5.13.1, 5.13.1.2 OVF [7], section 8		
Pre-test conditions:	TD/OVF/VAPP/CREATE/001		
Test Sequence:	**Step**	**Type**	**Description**
	1	stimulus	CIMI Consumer requires to export an existing System into an OVF package
	2	check	CIMI Consumer sends a HTTP POST request of following form (5.13.1.2): - POST <exportURI> HTTP/1.1 <exportURI> is referenced by the “http://schemas.dmtf.org/cimi/1/action/export” operation of the target System resource (5.13.1) - HTTP Body contains - “action”: “http://schemas.dmtf.org/cimi/1/action/start”
	3	check	CIMI Provider sends a HTTP response of following form (clause 4.2.1.1): - HTTP/1.1 201 Created - Location: <location> <location> is the reference URI from which the OVF package of the System can be located.
	4	check	OVF package includes a OVF descriptor file (.ovf file) that describes a VirtualHardwareSection whise values are corresponding to the original system
	5	verify	CIMI Consumer reports successful exportation of the target System

Annex A: TDs mapping to CSC UCs

This Annex provides some examples of how the test descriptions in this document mapto the use cases specified in [i.4] ETSI CSC Use Cases.

A.1 OCCI

The following CSC Use Cases (extracted from [i.4]) have been studied for the mapping to OCCI examples :

"UC 56 – Deploy Machine Image

The cloud consumer wishes to create a new instance of a "machine" (a logical instance of one or more CPUs connected to local memory and, optionally, local data storage) with software loaded from a machine image.

UC 58 – Create Persistent Storage Volume

The cloud consumer wishes to create a new storage volume image that captures the information stored on an existing volume instance.

UC 63 – Create Network

The cloud consumer wishes to create a new instance of a "network". A network is an abstraction of a layer 2 broadcast domain. Any two nodes (machines, volumes, etc.) attached to the same network can connect to one another. To connect to a node on another network a route must be created between the source network and the destination network. A common reason for creating networks is to isolate machines and volumes into protected sub-domains for security and administration purposes."

Table A1: CSC Use Case mappingto OCCI examples

ID	UC Title	Step	Test descriptions to be executed
56	Deploy Machine Image	1	TD/OCCI/INFRA/CREATE/004
58	Create Persistent Storage Volume	1	TD/OCCI/INFRA/CREATE/002
63	Create Network	1	TD/OCCI/INFRA/CREATE/003

A.2 CDMI

The following CSC Use Cases (extracted from [i.4]) have been studied for the mapping to CDMI examples:

"UC 43 – Notification of Service Condition or Event

A service has been configured and is in operation. Certain conditions or runtime operational events have been identified or detected that are significant enough to demand immediate notification of the condition or event to the service customer. An example is the detection of an intrusion or an unexpected configuration change.

UC 81 – Document release towards an administration

An Electronic Document Storage (EDS) is a secure storage for official documents provided as SaaS. Governmental institutions or other parties such as employers can access the EDS to enter documents (such as official notifications, certificates of salary, rental contracts, insurance policies, etc.) for the owner of the EDS, and access those documents if necessary to perform an administrative procedures. The use case describes how a public administration requests a document from a citizen in the course of an administrative process.

UC 83 – Document Migration

An Electronic Document Storage (EDS) is a secure storage for official documents provided as SaaS. Governmental institutions or other parties such as employers can access the EDS to enter documents (such as official notifications, certificates of salary, rental contracts, insurance policies, etc.) for the owner of the EDS, and access those documents if necessary to perform an administrative procedures. The use case describes how a public administration requests a

document from a citizen in the course of an administrative process. The use case describes the migration process of documents from one EDS (EDS 1) hosted by EDS space provider A into another one (EDS 2) (hosted by provider B).''

Table A2: CSC Use Cases mapping to CDMI examples

ID	UC Title	Step	Test descriptions to be executed
43	Notification of Service Condition or Event	1 2 3 4 5	TD/CDMI/QUEUE/CREATE/001 TD/CDMI/QUEUE/UPDATE/002 TD/CDMI/QUEUE/ENQUEUE/001 TD/CDMI/QUEUE/DEQUEUE/001 TD/CDMI/QUEUE/DELETE/001
81	Document release towards an administration	1 2 3 4 5	TD/CDMI/DATA/READ/001 TD/CDMI/DATA/READ/003 TD/CDMI/DATA/UPDATE/002 TD/CDMI/DATA/UPDATE/003 TD/CDMI/DATA/DELETE/001
83	Document Migration	1 2 3	TD/CDMI/DATA/READ/001 TD/CDMI/DATA/CREATE/003 TD/CDMI/DATA/DELETE/001

A.3 CAMP

The following CSC Use Cases (extracted from [i.4]) have been studied for the mapping to CDMI examples:

''UC 50 – Deploy Application (also Undeploy)

To deploy a package comprising all the required application components to an execution domain.

UC 51 – Start an application

To start executing an application such that end-user may start interacting with the hosted applications."

Table A3: CSC Use Cases mapping to CAMP examples

ID	UC Title	Step	Test descriptions to be executed
50	Deploy Application (also Undeploy)	1 2	TD/CAMP/APPLICATION/CREATE/001 TD/CAMP/APPLICATION/DELETE/002
51	Start an application	1	TD/CAMP/APPLICATION/CREATE/002

A.4 OVF

The following CSC Use Cases (extracted from [i.4]) have been studied for the mapping to OVF examples:

''UC 68 – Capture Aggregate Assembly

The cloud consumer wishes to capture an aggregate assembly consisting of zero or more machine instances, zero or more volume instances, zero or more network instances, and the attachments/connections between these entities. The artifacts generated by this capture operation (the "assembly package") can be used to deploy "a copy" of the assembly onto this or some other cloud.

UC 70 – Deploy Aggregate Assembly

The cloud consumer wishes to deploy an aggregate assembly consisting of zero or more machine instances, zero or more volume instances, zero or more network instances, and the attachments/connections between these entities for the purposes of re-creating the system that was captured in IR01.25 (Capture Aggregate Assembly).

UC 72 – Move three-tier cloud application to another cloud

An organization (customer) moves a three-tier application from one cloud infrastructure provider 1 to another provider 2."

Table A4: CSC Use Cases mapping to OVF

ID	UC Title	Step	Test descriptions to be executed
68	Capture Aggregate Assembly	1	TD/OVF/CORE/EXPORT/001
70	Deploy Aggregate Assembly	1	TD/OVF/CORE/IMPORT/001
72	Move three-tier cloud application to another cloud	1 2	TD/OVF/CORE/EXPORT/001 TD/OVF/CORE/IMPORT/001

A.5 CIMI

The following CSC Use Cases (extracted from [i.4]) have been studied for the mapping to CIMI examples:

"UC 56 – Deploy Machine Image

The cloud consumer wishes to create a new instance of a "machine" (a logical instance of one or more CPUs connected to local memory and, optionally, local data storage) with software loaded from a machine image.

UC 58 – Create Persistent Storage Volume

The cloud consumer wishes to create a new storage volume image that captures the information stored on an existing volume instance.

UC 63 – Create Network

The cloud consumer wishes to create a new instance of a "network". A network is an abstraction of a layer 2 broadcast domain. Any two nodes (machines, volumes, etc.) attached to the same network can connect to one another. To connect to a node on another network a route must be created between the source network and the destination network. A common reason for creating networks is to isolate machines and volumes into protected sub-domains for security and administration purposes."

Table A5: CSC Use Case mappingto CIMI examples

ID	UC Title	Step	Test descriptions to be executed
56	Deploy Machine Image	1 2	TD/CIMI/MACHINE/CREATE/004 TD/CIMI/MACHINE/CREATE/003
58	Create Persistent Storage Volume	1 2	TD/CIMI/VOLUME/CREATE/001 TD/CIMI/VOLUME/CREATE/002
63	Create Network	1 2 3 4	TD/CIMI/NETWORK/CREATE/001 TD/CIMI/NETWORK_CONFIG/CREATE/001 TD/CIMI/ADDRESS/READ/001 TD/CIMI/NETWORK_PORT/CREATE/001

History

Document history		
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