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UMD VIRTUALISATION QUALITY CRITERIA v3 DRAFT 1

Document identifier:	EGI-VIRTUALISATION-QC-V3-DRAFT1.doc
Date:	19/10/2011
Document Link:	https://documents.egi.eu/document/718

Abstract

This document describes the Generic Quality Criteria that all software of the UMD distribution must meet.



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Document Log

Issue	Date	Comment	Author/Partner
3 DRAFT 1	13/10/2011	First draft of release 3	Enol Fernández



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1 VIRTUAL MACHINE MANAGEMENT

1.1 Virtual Machine Management API

OCCI RESTful HTTP Rendering Support	
ID	VIRT_MGMT_API_1
Description	Virtual Machine Management Appliances should support the OCCI RESTful HTTP rendering.
Mandatory	NO
Applicability	Virtual Machine Management Appliances
Input from Technology Provider	Valid OCCI RESTful HTTP API implementation, any deviations from the API implementation should be documented. Ideally, also provide a complete test suite and results for the API support
Pass/Fail Criteria	Pass if OCCI RESTful HTTP support is provided. If the API is not completely supported, this should be documented.
Related Information	UMD Roadmap [R 1] OCCI API [R 2]
Revision Log	

1.2 Virtual Machine Management Operations

Management of images	
ID	VIRT_MGMT_OPS_1
Description	Virtual Machine Management Appliances must provide support for management of images.
Mandatory	YES
Applicability	Virtual Machine Management Appliances
Input from Technology Provider	Support for managing the images that can be instantiated: <ul style="list-style-type: none"> - Upload new image. - List available images - List/Update metadata of an image. - Create new image from running instance. - Delete image.
Pass/Fail Criteria	Pass if the volume management operations are supported.
Related Information	UMD Roadmap [R 1]
Revision Log	

Management of Virtual Machine Instances	
ID	VIRT_MGMT_OPS_2
Description	Virtual Machine Management Appliances must provide support for starting, stopping and listing instances.
Mandatory	YES
Applicability	Virtual Machine Management Appliances
Input from Technology Provider	<p>Support for Virtual Machine Instance management operations:</p> <ul style="list-style-type: none"> - Start an instance from a given image - Query the status of an instance - Pause and resume a given instance (optional) - List the current existing instances - Stop/Delete an instance. <p>When starting the instance, an optional key may be specified with for ssh access. Support for additional instance metadata should be provided.</p>
Pass/Fail Criteria	Pass if the management operations are supported. Ideally provide support for specifying image metadata.
Related Information	UMD Roadmap [R 1]
Revision Log	

Management of network addresses	
ID	VIRT_MGMT_OPS_3
Description	Virtual Machine Management Appliances must provide support for requesting and assigning network addresses to instances.
Mandatory	YES
Applicability	Virtual Machine Management Appliances
Input from Technology Provider	Support for managing the network addresses of instances: <ul style="list-style-type: none"> - List network addresses for a given instance. - Allocate a new network address for a given instance. - Remove network address for a given instance.
Pass/Fail Criteria	Pass if the network address management operations are supported.
Related Information	UMD Roadmap [R 1]
Revision Log	

Management of volumes	
ID	VIRT_MGMT_OPS_4
Description	Virtual Machine Management Appliances must provide support for creating, attaching, detaching and delete volumes (block level storage)
Mandatory	YES
Applicability	Virtual Machine Management Appliances
Input from Technology Provider	Support for managing the volumes: <ul style="list-style-type: none">- Create new volumes.- Attach/Detach volume to running instance.- Delete existing volume.
Pass/Fail Criteria	Pass if the volume management operations are supported.
Related Information	UMD Roadmap [R 1]
Revision Log	

2 VIRTUAL MACHINE IMAGE FORMAT

OVF Image Format Support	
ID	VIRT_IMG_1
Description	OVF Image Format support.
Mandatory	NO
Applicability	Virtual Machine Image Format Appliances
Input from Technology Provider	Support for the OVF (Open Virtualisation Format) to deploy images on the virtualisation platforms.
Pass/Fail Criteria	Pass if OVF images can be deployed.
Related Information	UMD Roadmap [R 1] OVF [R 3]
Revision Log	



3 IMAGE DISTRIBUTION CAPABILITY



4 REFERENCES

R 1	UMD roadmap: https://documents.egi.eu/public/ShowDocument?docid=100
R 2	Open Cloud Computing Interface WG, OGF, http://www.ggf.org/gf/group_info/view.php?group=occi-wg
R 3	Virtualization Management (VMAN), DMTF http://www.dmtf.org/standards/vman