

OpenXT: Managing Testing

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Aim:

Evaluate the OpenXT project as a new developer.
Understand the onboarding experience.

Approach:

Look for the stable release to download and get familiar with.

We don't have a stable release available, so what is involved in producing one?

- * **Define** the acceptance criteria
- * **Build** the software
- * **Test** the software
- * Develop any necessary **fixes** for defects found
- * **Repeat** the above as necessary
 - > redefine acceptance criteria if necessary
- * **Document** the behaviour
 - > Docs
 - > Release notes
- * **Stakeholder's sign off** on release deliverables:
 - > binaries, source, docs.
- * Tag source code and **archive** the bits.

So: Testing

Input material: 882 test cases in a XML dump.

Still to process: OpenXT Confluence wiki content.

Aim: **Enable methodical testing.**

Approach:

- * Collect all test cases into an accessible location.
- * Track which test cases are executed on:
 - * which software
 - * and which hardware
 - * by whom
 - * when
 - * what the results are
 - * and link to related defect reports (in JIRA)
- * Enable metrics and progress reporting.

TCMS: **T**est **C**ase **M**anagement **S**ystem

Software tool to manage testing data and activities.

Within the (apparent) OpenXT infrastructure budget constraints:

Software:

- * Open Source options were evaluated: none are good.
- * **Klaros** is a commercial product that offers a free-of-cost tier for on-premises (rather than cloud) deployments.

<http://www.klaros-testmanagement.com/>

Hosting:

- * RedHat **OpenShift** offers a free-of-cost PAAS tier.
 - * Additional support available for Open Source projects.

Actions:

- * Deployed Klaros to OpenShift
- * Wrote translator for the XML dump of test cases to Klaros import format.
- * Imported all test cases.
- * Created initial Test Suites.



klaros
testmanagement

Username:

Password:

Login

<http://testing-openxtstack.rhcloud.com/klaros-web/>



OpenXT Manager (Test Manager)



- Projects**
- Test Environments
- Systems under Test
- Test Cases
- Test Suites

Projects

New

Save Discard

Filter / Sort 10

ID	Description	Test Cases	Test Suites	Test Runs	Created	Action
P00001	OpenXT Project	883	3	0	6 days ago	[edit] [delete]
ID	Description	Test Cases	Test Suites	Test Runs	Created	Action

New

Save Discard



OpenXT Manager (Test Manager)



- Projects
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Test Environments

New

Save Discard

Filter / Sort 10

ID		Description	Action
ENV00002		Dell Optiplex 9020	[edit] [delete]
ENV00001		Dell Optiplex 980	[edit] [delete]

New

Save Discard



OpenXT Manager (Test Manager)



- Projects
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- Test Suites

Systems under Test

New

Save Discard

Filter / Sort 10

ID		Version	Issues	Action
SUT00005		pre-6.0.0 Development Build	0	
SUT00004		5.0.1 Release	0	
SUT00003		5.0.0 Release	0	
SUT00002		4.0.1 Release	0	
SUT00001		4.0.0 Release	0	
ID		Version		Action

New

Save Discard

Test Cases

New Save Discard

Filter / Sort 10

ID	💡	Revision	Name	Traceability	Priority	State	Execution	Steps	Issues	Action
TC00863		1.0	Delete a disk from a VM			Draft		0	0	✍️ 📄 🗑️
TC00862		1.0	Disable persistent feature before installing th			Draft		0	0	✍️ 📄 🗑️
TC00861		1.0	Boundary conditions for the virtual disk size			Draft		0	0	✍️ 📄 🗑️
TC00860		1.0	Enable AES-128 while creating a VM			Draft		0	0	✍️ 📄 🗑️
TC00859		1.0	Disable encryption while creating a VM			Draft		0	0	✍️ 📄 🗑️
TC00858		1.0	Enable encryption of the disk while creating a			Draft		0	0	✍️ 📄 🗑️
TC00857		1.0	Add a disk			Draft		1	0	✍️ 📄 🗑️
TC00856		1.0	Make a secondary disk into primary			Draft		0	0	✍️ 📄 🗑️
TC00855		1.0	Make a primary disk into secondary			Draft		0	0	✍️ 📄 🗑️
TC00854		1.0	Encrypt the disk added			Draft		0	0	✍️ 📄 🗑️

ID	Revision	Name	Traceability	Priority	State	Execution	Steps	Action
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883 Elements found - Page 3 of 89

⏪ ⏩ 1 2 3 4 5 6 7 8 9 10 ⏪ ⏩ 10

New Save Discard

Test Suites

New Save Discard

Filter / Sort 10

ID	Revision	Name	System under Test	Test Cases	Action
TS00003	1.0	Hardware Validation Suite for SVM-only		82	[Icons]
TS00002	1.0	TXT Test Suite		5	[Icons]
TS00001	1.0	AMT Test Suite		8	[Icons]

New Save Discard

- Projects
- Test Environments
- Systems under Test
- Test Cases
- Test Suites**



[Search bar]

OpenXT Manager (Test Manager)



- Projects
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TS00003 - Hardware Validation Suite for SVM-only

Save Discard Back

Properties Attachments Revisions

Name: Hardware Validation Suite for SVM-only System under Test: [Dropdown]

ID	Revision	Name	Traceability	Execution	Action
TC00030	1.0	Undock			△ ◇ ▽ =
TC00033	1.0	UIVM in Focus			△ ◇ ▽ =
TC00034	1.0	Non HDX VM in focus			△ ◇ ▽ =
TC00115	1.0	Sleep VMs + Host			△ ◇ ▽ =
TC00118	1.0	Hibernate VMs + Host			△ ◇ ▽ =
TC00133	1.0	Resume VMs and host			△ ◇ ▽ =
TC00119	1.0	External keyboard support			△ ◇ ▽ =
TC00120	1.0	External Mouse support			△ ◇ ▽ =
TC00121	1.0	External audio speaker/headset support			△ ◇ ▽ =
TC00122	1.0	Screen mirroring through DVI port			△ ◇ ▽ =

82 Elements found - Page 2 of 9 [Navigation: First, Previous, 1, 2, 3, 4, 5, 6, 7, 8, 9, Next, Last, 10]

Filter / Sort | 10

ID	Revision	Name	Traceability	Execution	Action
TC00883	1.0	Assigning device to VM			+
TC00882	1.0	Presence of devices tab with an icon			+
TC00881	1.0	Upgrade			+
TC00880	1.0	Webcam functionality			+
TC00879	1.0	USB Headset functionality			+
TC00878	1.0	USB Keyboard Assignment			+



🔍

OpenXT Manager (Test Manager)



Run Test Suite

- Run Test Case
- Run Test Suite**
- Continue Test Run
- Import Test Results

Filter / Sort 10

ID	💡	Revision	Description	Test Cases	Results	Action
TS00003		1.0	Hardware Validation Suite for SVM-only	82	0	⚙️
TS00002		1.0	TXT Test Suite	5	0	⚙️
TS00001		1.0	AMT Test Suite	8	0	⚙️

Execute Test Suite

TS00001 - AMT Test Suite

Test Suite Details +

Test Environment: Dell Optiplex 9020 🔍

System under Test: 5.0.1 Release 🔍

 **TS00001 - AMT Test Suite** Test Case: +

 **Test Case Overview** -

Test Case:	TC00003
Name:	Enable AMT Passthrough
Description:	This test verifies AMT devices can be successfully passed through to a guest VM
Revision:	1.0
Precondition:	
Postcondition:	
Steps:	2
System under Test:	5.0.1 Release
Test Environment:	Dell Optiplex 9020

Start

Skip Test Case

Cancel

Tabular View? **TS00001 - AMT Test Suite**

Test Case: 1 of 8

**TC00003 - Enable AMT Passthrough**

Step: 1 of 2



Test Case: TC00003
Name: Enable AMT Passthrough
Description: This test verifies AMT devices can be successfully passed through to a guest VM
Revision: 1.0
Precondition:
Postcondition:
Steps: 2
System under Test: 5.0.1 Release
Test Environment: Dell Optiplex 9020

Action:

1. Enable AMT feature in, UIVM - VM - View Details - Advanced - Intel AMT Passthrough - Edit, and save the option after enabling AMT
2. Note down the MAC address of VM and host.
3. Restart the Device and verify the MAC address of VM and host.
4. Poweron the VM and check in device manager that new devices are found.
5. Download the drivers from respective vendor website and Install the AMT drivers.
6. Restart the VM and notedown the IP address of the VM.
8. Connect to the device using AMT Remote Console with VM's IP address and login credentials.

Expected Result

1. After saving the Enabled Option, a pop up message should appear that This functionality works fine only after restarting the device.
2. Once the device is restarted, the MAC address of the VM should match with the MAC address of the host with the exception of first two bytes.
3. New devices should be found in device manager and the driver installation must be successful.
4. Connection through AMT Remote Console should be successful.





OpenXT Manager (Test Manager)



Continue Test Run

- Run Test Case
- Run Test Suite
- Continue Test Run**
- Import Test Results

Filter / Sort 10

ID		Start	Executor	Iteration	Test Case/Suite	Test Environment	System under Test	Progress	Action
TRU0000001		2/17/16 4:39:24 PM	OpenXT Manager		TS00001	Dell Optiplex 9020	5.0.1 Release	1 / 8	[Action icons]

Conclusions:

- * Klaros looks suitable for what we need.
 - * Can enable methodical distributed testing in the community.
 - * Instances can be deployed both on-premises and in the cloud => public and private deployments ok.
- * OpenShift performance is variable and generally slow.
 - * More resources or alternative hosting are required.