Oracle® Enterprise Manager Ops Center

Release Notes

12*c* Release 3 (12.3.3.0.0)

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September 2017

Release Notes

Oracle Enterprise Manager Ops Center is Oracle's comprehensive system management solution for managing the physical and virtual operating systems, servers, and network and storage devices (or assets) in your data center. With Oracle Enterprise Manager Ops Center you can use the discovery and management features to add your data center assets to the list of managed assets. You can provision, update (patch), monitor, and manage the physical and virtually-managed assets in one or more of your data centers from a single console, regardless of where the asset is located.

> ⚠️ **Caution:**
>
> If you are upgrading an existing version of Oracle Enterprise Manager Ops Center, refer to the *Oracle Enterprise Manager Ops Center Upgrade* before attempting to upgrade. *All instructions must be followed as stated in the Upgrade document.*

> ✏️ **Note:**
>
> If you use Ops Center to monitor Oracle SuperCluster, do not upgrade to Oracle Enterprise Manager Ops Center 12c Release 3 (12.3.3.0.0). Oracle SuperCluster is supported only by a subset of Oracle Enterprise Manager Ops Center versions. Refer the *Oracle Enterprise Manager Ops Center Certified Systems Matrix* to verify if Oracle SuperCluster platform is supported by Oracle Enterprise Manager Ops Center version that you use.

This document includes the following information about the Oracle Enterprise Manager Ops Center 12*c* Release 3 (12.3.3.0.0) software:

- Where to Find Documentation
- New Features Included In This Release
- Acquiring the Software

- Prerequisites
- Known Issues

Where to Find Documentation

The following documents are related to installing or upgrading to Oracle Enterprise Manager Ops Center 12*c* Release 3 (12.3.3.0.0).

You can download the documents from the Oracle Enterprise Manager Ops Center Documentation Library at `http://docs.oracle.com/cd/E59957_01/index.htm`

- **Oracle Enterprise Manager Ops Center Release Notes (this document)**: This document provides links to other documentation for installing and uninstalling the software. It also includes a list of known issues related to installation and postinstallation configuration.

- *Oracle Enterprise Manager Ops Center Readme*: This document provides instructions on installing the software.

- *Oracle Enterprise Manager Ops Center Installation for Oracle Solaris Operating System*: This document provides detailed instructions on performing a new installation of Oracle Enterprise Manager Ops Center on Oracle Solaris systems.

- *Oracle Enterprise Manager Ops Center Installation for Linux Operating Systems*: This document provides detailed instructions on performing a new installation of Oracle Enterprise Manager Ops Center on Oracle Linux or Red Hat Enterprise Linux systems.

- *Oracle Enterprise Manager Ops Center Upgrade*: This document provides instructions and prerequisites necessary to upgrade to Oracle Enterprise Manager Ops Center 12*c* Release 3 and provides upgrade procedures for each environment.

- *Oracle Enterprise Manager Ops Center Administration*: This document provides instructions on administering, managing, and uninstalling Oracle Enterprise Manager Ops Center.

New Features Included In This Release

Oracle Enterprise Manager Ops Center 12*c* Release 3 (12.3.3.0.0) contains multiple new features and enhancements.

See the *Oracle Enterprise Manager Ops Center What's New In This Release* document for an overview of the new features and enhancements.

Acquiring the Software

You can download the product for installation from the Oracle Technology Network.

Navigate to `http://www.oracle.com/technetwork/oem/ops-center/index.html` for downloading the software.

Prerequisites

Before installing the Oracle Enterprise Manager Ops Center software, you should plan for the installation and how you will use the software.

See the Preparing Your Environment chapter in *Oracle Enterprise Manager Ops Center Installation for Oracle Solaris Operating System* or the Preparing Your Environment chapter in *Oracle Enterprise Manager Ops Center Installation for Linux Operating Systems* for prerequisite information.

OCDoctor is a tool utility that checks systems for installation prerequisites, troubleshoots issues, and tunes systems for the Oracle Enterprise Manager Ops Center installation. For more information, see the OCDoctor chapter in *Oracle Enterprise Manager Ops Center Administration*. The guide is available in the Oracle Enterprise Manager Ops Center Documentation Library at `http://docs.oracle.com/cd/E59957_01/index.htm`.

Known Issues

Lists the issues that you might encounter when installing, or upgrading to, Oracle Enterprise Manager Ops Center 12*c* Release 3 (12.3.3.0.0) and the possible workarounds available.

Known Issues:

- JDK Issue 8030956 - Breaks Oracle Enterprise Manager Ops Center Proxy Controller Database
- JDK Issue 8035283 - Breaks Oracle Enterprise Manager Ops Center In SPARC LDoms
- Find Assets Action Not Selectable
- Migration Forbidden If SUNWocmu Package Is Installed
- Unable to Stop OS Provisioning Job During OS Configuration
- System Runs Out of Memory and Times Out
- OS Provisioning Profiles Based on JumpStart Enterprise Toolkit (JET) Cannot Be Used for Provisioning Logical Domain Guests
- Automatic Failover Is Not Triggered For a Co-located Proxy Controller
- Too Many ASR Jobs Created When Upgrading Large Environments
- Oracle Linux Installer Does Not Check for Required Packages
- OS Provisioning Fails With DHCP Error After Upgrading to Version 12.2.0.0.0
- Initializing Oracle Solaris 11 Library Fails When Re-Using Existing Oracle Solaris 11 Package Repository
- Hardware Components Do Not Display Enhanced View After Upgrading to Version 12.2.0.0.0
- The Enterprise Controller Configuration Hangs When Oracle Solaris 11 Package Repository Source URL Is Not Provided

- Some Zones Do Not Display Correct Version After Upgrade to Version 12.2.0.0.0

- No Server Pool in Target Selector of a Combined Plan After Upgrade

- Newly Configured Network From Outside of Ops Center is Not Displayed in User Interface

- Ops Center Cacao Instances Missing After Upgrade

- Virtualization Agent Controller Memory Requirements Have Increased

- Migrate Branded Zone Wizard Does Not Have Value for Address Allocation

- Zone Migration Check For Opaque Storage Checks Script Existence On Enterprise Controller

- Zone Migration Wizard Incorrectly Reports That No Zone Update Is Required

- Oracle Solaris Suffers Performance Issues With High Number of LUNs

- Association of Network to Oracle Solaris 11 Control Domain Fails With Contradictory Result

- Deleted Oracle SuperCluster Rack Cannot Be Recreated

- Oracle Solaris 11.2 Import ISO Job Fails With 'Cannot Be Cast' Exception

- Association of Network to Oracle Solaris 11 Control Domain Job Fails With Unclear Results

- Oracle Solaris 10 Branded Zone Creation Fails: Global Zone Cannot Find OS Image

- Discovery of M6 Server Can Fail if PDOM Does Not Respond Correctly

- Adding Storage to an LDOM When NFS Base Disk is Not On Primary Leads to Job Error

- Delete Oracle SuperCluster From Asset Tree Action Does Not Delete Assets

- Newly Configured Network From Outside Ops Center Does Not Appear in the User Interface

- ILOM Hostname Is Displayed Instead of OS Hostname For Exadata Cell Asset Name

- The Power Status of ILOM Assets Sometimes Shows an Incorrect Status

- Execute Operation Is Not Enabled For Groups of Assets if One Asset Is Offline

- Unable to Use Console for Manually Created Zone in Agent-Managed Control Domain

- No Data in Storage Tab for LDOM

- Install Fails With Permission Error While Installing SUNWuces.pkg

- Scheduled OCDoctor and Product Metadata Jobs Are Duplicated

- Oracle VM Servers for SPARC Not Displayed After Control Domain Agent Provisioning Failure

- NFS Metadata Library Cannot be Added Using IP Address in Overlapping Network Environment

- Cannot Discover ILOM on Upgraded Oracle Solaris 10 Enterprise Controller Due To "IPMI Invalid" Command
- Command-Line Changes to Control Domain Vswitches or Networks Within A Server Pool Cause Inconsistencies
- Discovery of an Operating System Fails During the PopulateModel Task
- OS Provisioning From New Remote Proxy Controller Repeatedly Fails with HTTP 500 Error
- Service Request Tab Asks for MOS Credentials in Disconnected Mode
- Agentless Oracle Solaris 10 Branded Zones Show Incorrect Version in Sh(Solaris)OperatingSystem
- Oracle Solaris 11 Kernel Zones With the Same Hostid Are Correlated
- Kernel Zone Cannot be Deleted on a Control Domain With a Logical Domain Virtualization Controller
- Logical Domains Can Be Created Without Sufficient Memory To Run
- After Restoring, a Duplicate Enterprise Controller Appears in the User Interface
- During Restore, the Proxyadm Unconfigure -k Option Clears the Local Database
- Ops Center Cannot Properly Manage Non-Global Zones Created Using OpenStack
- Zstat Produces Excessive Amounts of Data in /var/adm/exacct/zstat-process
- Cannot Correlate Kernel Zone Instances if No Hostid in Kernel Zone Operating System
- OS Provisioning CDOM Manifest Does Not Have iSCSI Device Information
- USB VNIC Interfaces Are Not Filtered and Causes Various Issues
- Do Not Create an ETH Fabric for USB Interfaces
- Collision Guest Not Repaired After Host ID Change and Refresh
- Non-Global Zone Persistent Configuration Should Not Be Updated if Dynamic Reconfiguration Fails
- Database Migration From Local 12c to Remote 12c with Container Times Out
- Cannot Import the Latest X3-2 Firmware
- Update Management and Delete Asset Should Clear the Session
- Reinstalling Agent on an Oracle Solaris 10 Non-Global Zone May Fail if Truststore Directory is Not Removed
- LDAP User with Required Roles Unable to Upgrade From 12.2.2 to 12.3
- Kernel Zone Using Local Device on LDOM Guest Should Use Device Path Without Slice
- Limited Support for Oracle Linux 7.0 and 7.1
- Reverting to Earlier Version Without Reverting Customer-Managed Database Can Cause Issues

- Upgrading Java on Oracle Solaris 10 Control Domains and Logical Domains Causes Agent Communication Issues

- Ops Center 12.3.1 Solaris 10 Global Zone Shows Kernel Zone Create Action to be Available

- LUNs for Zone Storage Does Not Get Locked

- Add Assets Job Fails With Network Error

- Users and Groups Created by Ops Center Installation Not Specified

- Zones Using iSCSI Storage Are at Risk to Get Broken During Global Zone Reboot

- Create Kernel Zone Job Fails When Overriding CPU Model

- Ability to Create Kernel Zone Using Infiniband

- Java 7u95 Rejects by Default the MD5 Certificates

- Unable to Configure an Agent Using Latest Java 6 if Proxy Uses TLS Version 1.1

- proxyadm Configure\Start Fails on Java Warning: PICL (libpicl.so.1) is missing

- Dynamic Edition of a S10 Branded Zone Should Not Be Allowed in the User Interface

- Improve Error Message on Failed Hardware Discovery

- Kernel Zone Creation - IP Missing if Many Connections on the Same Global Zone Lower-link

- Kernel Zone Dynamic Add Network Does Not Set Network IP in Kernel Zone Operating System

- Swap Alarms False Positives

- Could Not Perform Operation After Automatic Recovery on LDOM Guests

- Mismatch in Vlan Tagging Information Shown on Network Dashboard and Details Tab

- After Upgrading the Primary Node in ECHA and Installing Version 12.3.2 on Standby Node, Configuring the Standby Node into ECHA (ha-configure-standby) Can Fail

- Proxy controller OFFLINE after rollback and subsequent upgrade

- Host ids for LDOMs should be 8 characters long

- After several days, EC gets stuck on waiting for connection to DB

- Ops Center fails to register with MOS starting with Java 8 Update 121 and newer

- No migration target available for selection to do Ldom guest migration on M8/T8

JDK Issue 8030956 - Breaks Oracle Enterprise Manager Ops Center Proxy Controller Database

The issue is encountered in Java 6u71 which is included in Oracle Solaris 11.1 SRU 15.4 and higher. It causes various problems with the Proxy Controller and might corrupt the Oracle Enterprise Manager Ops Center configuration. This version of Java

must not be used with the Proxy Controller. The issue is fixed in Java 6U75, which is included in Oracle Solaris 11.1.18.5, and in build 32 or later of Java 6U71, which is included in Oracle Solaris 11.1.17.5.

To find the version of Java 6 installed on the system, use the following command:

Oracle Solaris:

```
# /usr/jdk/instances/jdk1.6.0/bin/java -version
```

Linux:

```
/usr/java/jdk1.6*/bin/java -version
```

The following output displays the version 71, which has the bug.

```
java version "1.6.0_71"
Java(TM) SE Runtime Environment (build 1.6.0_71-b12)
Java HotSpot(TM) Server VM (build 20.71-b01, mixed mode)
```

If the Proxy Controller is started with Java 6u71, the following error is written to the cacao log file in /var/cacao/instances/scn-proxy/logs/cacao. `SEVERE: thr#11:"cacao-starter" Java version 1.6.0_71 is not supported due to bug https://bugs.openjdk.java.net/browse/JDK-8030956`

> **Note:**
>
> (Applies to Oracle Solaris 11 only) Operating system updates also update the Java environment. Always check the Java version after you update the operating system.

Workaround

This workaround is only specific to Oracle Solaris 11.1.15.4.0 or later.

Use a version of Java 6 that does not have the specified issue, for example, a version older than Java 6u71 or newer than Java 6u74. Java 6u71 Build 32 also includes a fix for the issue.

If you want the operating system of a Proxy Controller host to be upgraded to a version that includes Java 6u71, disable the Proxy Controller before applying the upgrade and rebooting to prevent the Proxy Controller from starting automatically when the system reboots.

Downgrading Java

Perform the following steps to downgrade Java:

1. Stop the Proxy Controller if it is running.

   Oracle Solaris:

   ```
   /opt/SUNWxvmoc/bin/proxyadm stop -w
   ```

Linux:

```
/opt/sun/xvmoc/bin/proxyadm stop -w
```

2. Unlock the Java 6 incorporation from the system constraints.

```
pkg change-facet facet.version-lock.consolidation/ub_javavm-6/ub_javavm-6-
incorporation=false
```

3. Downgrade the packages using the pkg update command.

   • If the developer/java/jdk-6 is not installed:

```
pkg update \
consolidation/ub_javavm-6/ub_javavm-6-incorporation@1.6.0.65.0-0 \
runtime/java@1.6.0.65,5.11-0.175.1.12.0.5.0 \
runtime/java/jre-6@1.6.0.65,5.11-0.175.1.12.0.5.0 \
consolidation/ub_javavm/ub_javavm-incorporation@0.5.11-0.175.1.12.0.5.0
```

   • If the developer/java/jdk-6 is installed:

```
pkg update \
consolidation/ub_javavm-6/ub_javavm-6-incorporation@1.6.0.65.0-0 \
runtime/java@1.6.0.65,5.11-0.175.1.12.0.5.0 \
runtime/java/jre-6@1.6.0.65,5.11-0.175.1.12.0.5.0 \
developer/java/jdk-6@1.6.0.65,5.11-0.175.1.12.0.5.0 \
consolidation/ub_javavm/ub_javavm-incorporation@0.5.11-0.175.1.12.0.5.0
```

JDK Issue 8035283 - Breaks Oracle Enterprise Manager Ops Center In SPARC LDoms

This issue exists in Java 7u51 which is included in Oracle Solaris 11.1.15.4 and higher. You might encounter this issue on OVM for SPARC guests if the `cpu-arch` is different than native. The result is that the Enterprise Controller, Proxy Controller, and Agent Controller do not work with Java 7u51 on OVM for SPARC guests. This issue is fixed in Java 7u55, which is included in Oracle Solaris 11.1.18.5.

To find the version of Java 7 installed on the system, use the following command:

```
# /usr/jdk/instances/jdk1.7.0/bin/java -version
```

Workaround

This workaround does not apply for Oracle Solaris 10 or lower and Linux.

If using Oracle Solaris 11.1, use a lower version than SRU 15.4.

Use an earlier version of Java, such as Java 7u45 or install an older or fixed version of Java 7 using the procedure described at http://www.oracle.com/technetwork/articles/servers-storage-admin/sol-howto-update-only-java-1948328.html.

Do not upgrade an existing Oracle Solaris 11.1 system running Oracle Enterprise Manager Ops Center to Oracle Solaris 11.1.15.4 or higher that is running in an Oracle VM Server for SPARC logical domain without native CPU-type, unless it contains a version of Java with a fix for this issue.

If a system with Oracle VM Server for SPARC logical domains and the Oracle Enterprise Manager Ops Center agent is upgraded to use Java 7u51, then change the agent's Java configuration.

Perform the following steps:

1. Stop the agent.

   ```
   /opt/SUNWxvmoc/bin/agentadm stop
   ```

2. Change the java-flags to include the option `-XX:-UseCBCond`.

   ```
   cacaoadm set-param `cacaoadm get-param java-flags -i scn-agent | sed 's/=/=-XX:-UseCBCond /'` -i scn-agent
   ```

3. Start the agent.

   ```
   /opt/SUNWxvmoc/bin/agentadm start
   ```

Find Assets Action Not Selectable

Beginning in version 12.2.0.0.0, the Find Assets action is disabled by default, because in large environments it can cause the Enterprise Controller to shut down.

You can use the following procedure to enable the Find Assets action.

1. In the Navigation pane, click **Administration**, then click **Enterprise Controller**.

2. In the center pane, select the **Configuration** tab.

3. In the Configuration Management section, select **Discovery** from the Subsystem drop-down list.

4. Set the value of the `service-tags-discovery-enabled` property file to `true`.

Migration Forbidden If SUNWocmu Package Is Installed

You will not be able to move the storage of a non-global zone if the SUNWocmu package is installed on a global zone. Likewise, if this package is installed on a global zone where you try to migrate or recover your non-global zone, the job fails in the ZoneAttach task with the following message:

```
These packages installed on this system were not installed on the source system:

SUNWocmu (11.11,REV=2012.11.13.16.42)

SUNWperl-xml-parser (2.34,REV=10.0.3.2004.12.15.14.13)
```

Workaround

Delete the SUNWocmu package from:

- The global zone that is hosting the non-global zone if you try to move its storage
- The global zone where the non-global zone will be migrated before starting a migration.

- Any global zone in the server pool if the non-global zone is used for automatic recovery.

If a move storage, migration, or automatic recovery job fails with the previous message before applying this workaround, then perform the following:

1. Delete the SUNWocmu package from the global zones.

2. Reattach the SUNWocmu package to the global zone that is hosting the non-global zone.

   ```
   zoneadm -z <zone name> attach
   ```

3. Using the Oracle Enterprise Manager Ops Center User Interface, refresh the package on the global zone that is hosting it.

Unable to Stop OS Provisioning Job During OS Configuration

When you try to stop the OS Provisioning job while the Monitor OS Installation task is running, the job takes long time to stop.

- If the OSP and OSC target IP address are the same, it takes up to a maximum of 2 hours

- If the OSP and OSC target IP address are different, it takes up to a maximum of 10 minutes.

Workaround

Invoke the stop job on the subsequent **Verify Agent Install** task.

System Runs Out of Memory and Times Out

The system runs out of memory sometimes due to ZFS Adaptive Replacement Cache (ARC) and the Oracle Enterprise Manager Ops Center's self monitoring times out and restarts the Enterprise Controller or Proxy Controller cacao instances.

Requirement

Tune the ZFS ARC on the Oracle Solaris Enterprise Controller and Proxy Controllers to make sure enough memory is available for them to run reliably.

Set the ZFS maximum ARC value to no more than 1 GB if the system has less than 10 GB of physical memory, or 10 GB less than the system memory value if the system has more than 10 GB of physical memory.

To set the ZFS max ARC value, edit the `/etc/system` file and add the following line: `set zfs:zfs_arc_max=<max_arc_size_in_bytes>`

Reboot the system after making this change.

OS Provisioning Profiles Based on JumpStart Enterprise Toolkit (JET) Cannot Be Used for Provisioning Logical Domain Guests

The OS profiles based on JET templates have a subtype of JET-template instead of the required subtype of Logical Domain. As a result, these OS profiles cannot be used to provision a logical domain.

Automatic Failover Is Not Triggered For a Co-located Proxy Controller

Only failure of remote Proxy Controllers triggers a failover of assets to a standby Proxy Controller. Because the Enterprise Controller's Operating System is running, it does not treat loss of the co-located Proxy Controller as a fatal error requiring recovery.

Too Many ASR Jobs Created When Upgrading Large Environments

When you upgrade large environments to version 12.2.0.0.0, too many Auto Service Request (ASR) jobs might be created. In some cases the number of ASR jobs can reach the thousands.

Workaround

Perform the following steps before beginning the upgrade:

1. Click **Administration** in the Navigation pane, then select the Enterprise Controller.
2. Click **Disable ASR** in the Actions pane.
3. Upgrade your environment.
4. Click **Administration** in the Navigation pane, then select the Enterprise Controller.
5. In the Actions pane, click **Enable ASR**.

Oracle Linux Installer Does Not Check for Required Packages

The installation does not check for the required packages such as `ksh` and `zlib.i686` on Oracle Linux.

Workaround

Install the `ksh` and `zlib.i686` RPM before or after the installation.

OS Provisioning Fails With DHCP Error After Upgrading to Version 12.2.0.0.0

After upgrading to version 12.2.0.0.0, OS provisioning fails with an error message indicating that DHCP is not initialized. This issue is encountered only on Oracle Solaris 11 Proxy Controllers.

Workaround

Disable DHCP on the networks and re-enable them. In some cases, the Configure DHCP button is disabled because the DHCP configuration is marked as in use in the database. Run the following commands on the Enterprise Controller host and then re-run the OS Provisioning job.

```
/opt/SUNWxvmoc/bin/ecadm sqlplus

SQL>delete from as_dhcp_config;

SQL>exit
```

Initializing Oracle Solaris 11 Library Fails When Re-Using Existing Oracle Solaris 11 Package Repository

When reusing an existing Oracle Solaris 11 Package Repository source during configuration of Oracle Enterprise Manager Ops Center, the Oracle Solaris 11 source repository step fails.

In the Storage Libraries section, when you click **Initialize Oracle Solaris 11 Software Update Library** and enter the URL, an error message is displayed and the job fails.

Workaround

Perform the following steps:

1. In the user interface, delete the current Oracle Solaris 11 Library.

2. On the system command line, create a new library directory for the existing Oracle Solaris 11 Library contents.

3. Go to the existing library directory, then change to the Ops Center-created directory named for your UUID.

4. Copy the `<Library>/<UUID>/data/pkg5.repository` and `<Library>/<UUID>/data/publisher` files to the new library directory.

5. On the user interface, click **Initialize Oracle Solaris 11 Software Update Library**.Enter the URL of the new library location.

Hardware Components Do Not Display Enhanced View After Upgrading to Version 12.2.0.0.0

After upgrading to version 12.2.0.0.0, some hardware component names differ from those seen in a new installation. Also, some PCI devices are not displayed in the upgraded Enterprise Controller.

Workaround

Delete the access point, then rediscover the ILOM.

Perform the following:

1. In the Navigation pane, under All Assets, select the asset.
2. In the center pane, click the **Configuration tab**.
3. Click the **Delete Access Point** icon in the Access Points section.
4. Re-discover the ILom of each hardware asset.

The Enterprise Controller Configuration Hangs When Oracle Solaris 11 Package Repository Source URL Is Not Provided

In the Enterprise Controller configuration wizard, provide a source repository for the Oracle Solaris 11 Package Repository during initial configuration. Otherwise, when you click Next, the wizard page for providing the source repository details hangs and the libraries are left in the following condition:

- The Oracle Solaris 11 Software library is not configured.
- The Linux/Oracle Solaris 8-10 Software Update Library is not fully configured.

Workaround

Perform the following:

1. Reload the browser.
2. Log in to Oracle Enterprise Manager Ops Center.
3. Complete the library configuration using the Libraries section of the user interface.

Some Zones Do Not Display Correct Version After Upgrade to Version 12.2.0.0.0

After upgrading the Enterprise Controller, Proxy Controllers, and Agent Controllers, some non-global zones are not displayed as upgraded.

Workaround 1

Retry the Agent Controller upgrade on the non-global zone.

Workaround 2

Restart the Agent Controller on the non-global zone. Change to the directory (/opt/SUNWxvmoc/bin) containing the `agentadm` command.

```
./agentadm stop
```

```
./agentadm start
```

No Server Pool in Target Selector of a Combined Plan After Upgrade

After upgrading to the latest version, server pool assets are not visible and thus cannot be selected when a combined Logical domain + OS provisioning plan is chosen.

Workaround

A workaround is to edit the deployment plan:

1. Select the deployment plan.
2. Click Edit Deployment Plan in the actions pane.
3. Click Save without making any changes.

The Server Pools are now shown when applying the deployment plan.

Newly Configured Network From Outside of Ops Center is Not Displayed in User Interface

After installing the Enterprise Controller, a new network created and configured on the OS level outside of Ops Center does not appear in the user interface. The OS Refresh action and Network Refresh action do not show the new network. Only an automatic refresh, with a long time interval, causes the network to appear.

Workaround

Restart the Enterprise Controller.

Ops Center Cacao Instances Missing After Upgrade

The Enterprise Controller, Proxy Controller, or Agent fails to start after an upgrade of the Common agent container (Cacao) on Solaris 10 (SUNWcacaort) or S11.1 (library/cacao) and the corresponding SMF service does not exist or is not online.

You can check the SMF services by running the following command:

```
svcs -l svc:/application/management/common-agent-container-1
```

The Enterprise Controller, Proxy Controller, and Agent SMF service names are:

```
svc:/application/management/common-agent-container-1:oem-ec

svc:/application/management/common-agent-container-1:scn-proxy

svc:/application/management/common-agent-container-1:scn-agent
```

Workaround

1. Stop the Enterprise Controller and co-located Proxy Controller using the ecadm and proxyadm commands.

   ```
   /opt/SUNWxvmoc/bin/ecadm stop -w
   ```

   ```
   /opt/SUNWxvmoc/bin/proxyadm stop -w
   ```

2. Verify that no Cacao process is running.

   ```
   ps -ef|grep cacao_launcher
   ```

3. Run: 'cacaoadm prepare-uninstall' to clean up any SMF services and mark cacao as not configured.

   ```
   /usr/sbin/cacaoadm prepare-uninstall
   ```

4. Restart Ops Center or resume installing Ops Center.

Virtualization Agent Controller Memory Requirements Have Increased

To prevent Agent configuration problems, the amount of memory used by Virtualization Agent Controllers has been increased to 1024 MB of memory in version 12.2.1.0.0.

Migrate Branded Zone Wizard Does Not Have Value for Address Allocation

When trying to migrate a branded zone the Ops Center UI does not have a value for "Address Allocation Method" in the "Specify Network Interfaces" screen.

Workaround

1. Deselect the network in the migration wizard.
2. Add the network again.
3. Click next.

Zone Migration Check For Opaque Storage Checks Script Existence On Enterprise Controller

If a zone has an opaque storage that is not of LOFS type (for example, a filesystem added in zonecfg with type "zfs") Ops Center will check if the user provides a script under "/var/opt/sun/oc/public/guest-operations" to manage these opaque filesystems.

This check is correct in the job itself when using it but in the migration wizard it's targeted on the satellite and not on the global zone. As a result the migration wizard will return: "Guest is not in migratable state (72078)".

Workaround

Create the following empty file on the Enterprise Controller:

`/var/opt/sun/oc/public/guest-operations`

Zone Migration Wizard Incorrectly Reports That No Zone Update Is Required

This issue appears in an environment with two Oracle Solaris 10 global zones, which differ only by one patch which requires an update of a zone when migrated between them. This patch is not installed on the target zone, so it must be backed out. However, the wizard does not present this, but reports that nothing is required which will result in a failed migration.

Oracle Solaris Suffers Performance Issues With High Number of LUNs

When using MPxIO in Oracle Solaris 11 with 1600 or more LUNs, Ops Center's `xvmluinfo` utility suffers performance problems due to an Oracle Solaris issue.

Association of Network to Oracle Solaris 11 Control Domain Fails With Contradictory Result

In an environment with two Control Domains and a network attached to both CDOMs using the statically allocated IPs, attaching the network again using NICs that are not interconnected and with the default IP assignment fails with a contradictory error message:

`- plumbing on cdom1 was reported as successful`

`- plumbing on cdom2 was reported as successful`

`- job failed complaining that one or more Virtualization Hosts are not properly plumbed on given network.`

The CDOMs are left in an intermediate state - a new VNIC is created, but no IP is assigned.

Workarounds

Rerun the job, but provide IP addresses instead of using system assigned IP addresses.

If you have already encountered this issue, use the following procedure to clean up before rerunning the job:

1. Log in to the CDOM.

2. Remove the IP:

   ```
   ipadm delete-ip <wrong_vnic>
   ```

3. Remove the vnic:

   ```
   dladm delete-vnic <wrong_vnic>
   ```

4. Remove the virtual switch:

   ```
   ldm remove-vswitch <wrong_vswitch>
   ```

5. Navigate to the Oracle Enterprise Manager Ops Center user interface.

6. Select the CDOM and run the **Refresh** action from the Actions pane.

Deleted Oracle SuperCluster Rack Cannot Be Recreated

If you have an Oracle SuperCluster system with one rack, and you remove the rack in the Oracle Enterprise Manager Ops Center UI, there is no way to recreate the rack.

Workaround

1. Delete all of the ILOMs of discovered servers within the Oracle SuperCluster.

2. Repeat the discovery of the Oracle SuperCluster system.

   The rack and its server assets are added.

3. Add all remaining assets into the rack, using the **Place/Remove assets in Rack** and **Place/Remove PDU(s) in Rack** actions.

Oracle Solaris 11.2 Import ISO Job Fails With 'Cannot Be Cast' Exception

Importing ISO images of Oracle Solaris 11.2 intermittently fails with a "Cannot Be Cast" exception.

Workaround

Apply the workaround found in MOS Note 1663862.1: Memory Management Between ZFS and Applications in Oracle Solaris 11.2.

Association of Network to Oracle Solaris 11 Control Domain Job Fails With Unclear Results

In an environment with multiple Control Domains that are directly interconnected using statically allocated IPs, attempting to attach a new network can fail with an inconsistent error message. The job indicates that the network plumbing was successful, then fails with an error saying that one or more hosts were not plumbed correctly. The Control Domains are actually left in an intermediate state with a new VNIC, but no IP address assigned.

Solution

1. Log in to the Control Domain.
2. Remove the IP address. For example:

   ```
   ipadm delete-ip <wrong_vnic>
   ```
3. Remove the VNIC. For example:

   ```
   dladm delete-vnic <wrong_vnic>
   ```
4. Remove the virtual switch. For example:

   ```
   ldm remove-vswitch <wrong_vswitch>
   ```
5. Log in to the Ops Center UI.
6. Select the Control Domain and click **Refresh** in the actions pane.

Workaround

Rerun the job, but provide IP addresses rather than using system-generated IP addresses.

Oracle Solaris 10 Branded Zone Creation Fails: Global Zone Cannot Find OS Image

If a Global Zone is in a private network and cannot directly access the Enterprise Controller, it cannot use ISO images stored in the Enterprise Controller library.

Workaround

Copy the ISO image to the target system and use the local copy.

Discovery of M6 Server Can Fail if PDOM Does Not Respond Correctly

If the PDOM hangs or is slow to respond during an M6 discovery, the system can be displayed as a generic server.

Adding Storage to an LDOM When NFS Base Disk is Not On Primary Leads to Job Error

When adding storage to a LDOM guest using a NFS library provided by an alternate root domain (not the primary), the CreateVirtDiskImage job fails in the Create Concrete task on the non-primary root domain.

Delete Oracle SuperCluster From Asset Tree Action Does Not Delete Assets

The Delete Rack action deletes the Oracle SuperCluster rack from the asset tree but does not delete assets such as servers, switches, or storage that belong to the rack.

Newly Configured Network From Outside Ops Center Does Not Appear in the User Interface

If you configure a private network on the OS level outside of Oracle Enterprise Manager Ops Center, and the OS instance is the Enterprise Controller OS which is not agent managed, the newly configured network does not appear in the user interface.

Workaround

Restart the Enterprise Controller.

ILOM Hostname Is Displayed Instead of OS Hostname For Exadata Cell Asset Name

On an Oracle SuperCluster system, in some cases the ILOM hostname is displayed instead of OS hostname for Exadata cells.

The Power Status of ILOM Assets Sometimes Shows an Incorrect Status

The power status of ILOM assets sometimes shows "Off" at Dashboard tab in the user interface, even though the current power status is "On".

When this occurs, the **Power On** icon in the Actions pane is active and the **Power Off** icon is inactive.

Execute Operation Is Not Enabled For Groups of Assets if One Asset Is Offline

The "Execute Operation" action is greyed out for groups of Operating System assets if at least one of them is in an unknown/offline state.

Workaround

Select the Operational Plan first and then select the group as a target.

Unable to Use Console for Manually Created Zone in Agent-Managed Control Domain

If you manually create a zone in an agent-managed control domain, the console access user is given an incorrect role and cannot access the console.

Workarounds

The first workaround is to connect to the control domain console, then connect to the zone.

The second workaround is to give the user the correct role.

1. Select **Administration** in the Navigation pane.

2. Click the **Roles** tab.

   The Roles page is displayed.

3. Select the oemOCxxxx user from the list of users, where xxxx is a number set by the system.

4. Click the **Manage User Roles** icon.

5. Add the Zone Management role, then click **Next**.

6. The Summary page is displayed. Click **Finish**.

No Data in Storage Tab for LDOM

For an LDOM system, the Network Connectivity sub-tab in the Network tab shows no data, even though the Port Connectivity sub-tab correctly shows the ports.

Install Fails With Permission Error While Installing SUNWuces.pkg

An installation can fail during the Install application packages step when SUNWuces.pkg failed to install. This occurs when the "users" group is an LDAP managed group, not a local group.

Workarounds

The first workaround is to continue the installation if it is in progress, or restart the installation if it has been interrupted.

The second workaround is to manually create a local "users" group and manually install the SUNWuces.pkg.

Scheduled OCDoctor and Product Metadata Jobs Are Duplicated

After an upgrade, the OCDoctor and Product Metadata Update jobs appear twice. If they are deleted, they are recreated when the Enterprise Controller is restarted.

Workaround

1. Select the older versions of the two jobs in the jobs pane and delete them using the delete icon.
2. Select the scheduled versions of the same two jobs in the jobs pane and delete them using the delete icon.

Oracle VM Servers for SPARC Not Displayed After Control Domain Agent Provisioning Failure

When discovering and managing Oracle VM Servers for SPARC, if an Agent provisioning job is launched on the control domain, the guest domains are not displayed in the UI if the Agent provisioning job fails.

Workarounds

The first workaround is to repeat the Agent provisioning on the control domain. The guests are discovered and displayed normally if the Agent provisioning job is successful.

The second workaround is to discover and manage the control domain agentlessly.

NFS Metadata Library Cannot be Added Using IP Address in Overlapping Network Environment

During NFS library creation on an Oracle SuperCluster system, an NFS metadata library cannot be created using an Storage IP address in an overlapping network setup.

Workaround

Use the storage IB hostname instead of the storage IB IP address during the NFS library creation.

Cannot Discover ILOM on Upgraded Oracle Solaris 10 Enterprise Controller Due To "IPMI Invalid" Command

On an Oracle Solaris 10 system, upgraded from 12.2.1 to 12.2.2, the following error sometimes appears when discovering ILOM assets:

11/07/2014 06:14:51 AM UTC ERROR Discovery driver reported: Fail to retrieve the ethernet ports IPMI for host 10.133.246.6 exit with errors:

Invalid command: /opt/sun/n1gc/pkgs/usr/sbin/ipmitool

Commands:

raw Send a RAW IPMI request and print response

i2c Send an I2C Master Write-Read comma..., driver={1}, at target {2}. (10137)

Workaround

1. Remove the duplicate value of `/opt/sun/n1gc/pkgs/usr/sbin/ipmitool` from the `platformproperties.ipmitoolpath` property in the `/opt/sun/n1gc/os/platform.properties` file. For example:

   ```
   bash-3.2# grep ipmitool /opt/sun/n1gc/os/platform.properties
   platformproperties.ipmitoolpath: /opt/sun/n1gc/pkgs/usr/sbin/ipmitool
   /opt/sun/n1gc/pkgs/usr/sbin/ipmitool
   ```

2. Restart the Proxy Controller using the `proxyadm` command.

Command-Line Changes to Control Domain Vswitches or Networks Within A Server Pool Cause Inconsistencies

Using the command line to make changes to the vswitches or networks of a control domain, after the control domain has been added to a Server Pool, can cause inconsistencies in the modeling of these objects.

Solution

You can prevent this issue by making any such changes through the user interface rather than the command line.

Workaround

If you have encountered this issue, use this procedure to correct the inconsistencies on the affected systems.

1. Remove the Control Domain from the Server Pool.

2. (Optional) Perform any additional command line changes.

3. Refresh the Control Domain using the Refresh action in the Actions Pane.

4. Add the Control Domain to the Server Pool.

Discovery of an Operating System Fails During the PopulateModel Task

When using the "Add Asset" action to discover an Oracle Solaris 11 Control Domain or Oracle Solaris 10 OS, the job is successful in the "DriverDiscovery" task but fails at the "PopulateModel" task with the following error message:

<timestamp> ERROR Failed to prepare agent for <system>: No Service Tag data available on com.sun.hss.domain:name=NORM-<IP>,type=OperatingSystem. (80301). The asset is currently managed agentlessly. To convert to agent management, select the OS and perform Switch Management Access after correcting the problem. (10213)

Workaround

The workaround is to manually install the Agent Controller on the target system.

OS Provisioning From New Remote Proxy Controller Repeatedly Fails with HTTP 500 Error

When attempting to OS Provision LDOM guests from a newly installed Proxy Controller, the AI downloads keep failing with an http 500 error showing different URL locations that are noted as the failure points. For example:

```
23:23:19 Download: 25862/71703 items 251.0/723.4MB 34% complete (7.4M/s)
23:23:24 Download: 27804/71703 items 338.3/723.4MB 46% complete (14.9M/s)
23:23:29 Download: 30360/71703 items 354.3/723.4MB 48% complete (10.2M/s)
23:23:34 Download: 32781/71703 items 376.3/723.4MB 52% complete (3.8M/s)
23:23:39 Download: 33078/71703 items 403.1/723.4MB 55% complete (4.9M/s)
23:23:45 Download: 33080/71703 items 408.2/723.4MB 56% complete (3.3M/s)
23:23:48 Error occurred during execution of 'generated-transfer-1197-1' checkpoint.
23:23:48 Failed Checkpoints:23:23:4823:23:48 generated-
transfer-1197-123:23:4823:23:48 Checkpoint execution error:23:23:4823:23:48 http
protocol error: code: 500 reason: Internal Server Error23:23:49
URL: 'http://<IP Address>:8003/IPS/solaris/file/1/
bf7046c17838279aaf2639f92317deaf14349673'23:23:4923:23:49 Automated Installation
Failed.
See install log at /system/volatile//install_logAutomated Installation failedPlease
refer to the /system/volatile/install_log file for details
```

Workaround

Edit the Apache `KeepAliveTimeout` and `ProxyTimeout` variables to increase them. Doubling the values should resolve the issue, but both can be further increased if necessary.

- The `KeepAliveTimeout` variable is in the `/var/opt/sun/xvm/uce/etc.opt/server/uce_server/httpd.conf` file.

- The `ProxyTimeout` variable is in the `/var/opt/sun/xvm/uce/etc.opt/server/uce_server/ips-proxy.conf` file.

Service Request Tab Asks for MOS Credentials in Disconnected Mode

When accessing the Service Request tab, a popup window asks for My Oracle Support credentials, even if the Enterprise Controller is in Disconnected Mode and is not registered with MOS.

Workaround

When the popup appears, click cancel.

Agentless Oracle Solaris 10 Branded Zones Show Incorrect Version in Sh(Solaris)OperatingSystem

Oracle Solaris 10 branded zones on Oracle Solaris 11 have incorrect Sh(Solaris)OperatingSystem properties:

in ShOperatingSystem : isS10 is false

in ShSolarisOperatingSystem : isSol10 is false

Workaround

Provision an Agent Controller on the Oracle Solaris 10 branded zone.

> **Note:**
>
> This issue is fixed in version 12.3.2.

Oracle Solaris 11 Kernel Zones With the Same Hostid Are Correlated

Ops Center relies on a kernel zone hostid to identify it uniquely from the global zone or the kernel zone, and to persist its configuration among different global zones.

If 2 kernel zones have the same hostid, they will correlate together, which means that there will be only 1 kernel zone listed in the UI, and management of a kernel zone may target the other kernel zone with the same hostid.

Having the same hostid is possible if the user manually sets the same hostid for 2 kernel zones, or if the same hostid is generated for 2 KZs configured in the same second.

Workaround

Manually change the hostid for both of the kernel zones, then refresh the global zone.

Kernel Zone Cannot be Deleted on a Control Domain With a Logical Domain Virtualization Controller

You cannot delete a kernel zone from Ops Center if it is running on a control domain with a logical domain virtualization controller.

The Delete Zone action fails and no job is executed.

Workarounds

The first workaround is to switch management access to agentless management or to a zone Virtualization Controller, which enables you to delete the kernel zone from the user interface.

The second workaround is to manually delete the kernel zone and refresh the control domain.

> **Note:**
>
> This issue is fixed in version 12.3.1.

Logical Domains Can Be Created Without Sufficient Memory To Run

The Logical Domain creation process allows the creation of LDoms with 1 GB of memory, but Oracle Solaris 11.2 requires a minimum of 2 GB. The creation job fails and the LDom cannot be used.

Workaround

When creating a Logical Domain with Oracle Solaris 11.2, do not assign it less than 2 GB of memory.

After Restoring, a Duplicate Enterprise Controller Appears in the User Interface

After backing up the Enterprise Controller and restoring from that backup on a new system with the same hostname, a duplicate Enterprise Controller system is displayed in the UI in an unknown state.

Workaround

Delete the missing assets from the user interface. If you cannot delete the missing assets from the user interface, delete the missing assets from CLI.

1. Launch the CLI on the system hosting the Enterprise Controller.

   ```
   /opt/SUNWoccli/bin/oc
   ```

2. Type `connect` to connect to the Enterprise Controller.

3. Type `gear` to enter the gear mode.

4. Type `list` to list the assets to get the UUID of the asset you want to delete.

5. Delete the assets by using the following command:

   ```
   delete -U <UUID> -f
   ```

During Restore, the Proxyadm Unconfigure -k Option Clears the Local Database

During a restoration of an Enterprise Controller on a new system where the EC will be using a new IP, any remote Proxy Controllers will need to be redirected to the new Enterprise Controller IP. This is done with the `proxyadm` command option (added in 12.3.1.0.0) to reconfigure the Proxy Controller to the new Enterprise Controller IP.

From the remote Proxy Controller use:

```
proxyadm update -s|--satellite-ip <Enterprise Controller IP>
```

Do not use any form of the proxyadm unconfigure/configure commands for this purpose. This will cause the assets that are connecting through the Proxy Controller to be lost.

Ops Center Cannot Properly Manage Non-Global Zones Created Using OpenStack

Ops Center does not currently support OpenStack. A non-global zone created from OpenStack will be properly discovered in Ops Center (if its global zone is discovered), and Ops Center will be able to change its configuration using Solaris CLI. However, OpenStack does not support changing a non-global zone configuration using an external tool. Do not change the configuration of a non-global zone created with OpenStack, or it will cause issues in OpenStack.

Zstat Produces Excessive Amounts of Data in /var/adm/exacct/ zstat-process

On Oracle Solaris 10 systems, zstat on occasions produces excessive amounts of data in /var/adm/exacct/zstat-process resulting in filesystem fillup in production environment.

Workarounds

A temporary workaround is to run the following command:

```
svcadm restart svc:/application/xvm/zstat:default
```

However, this only clears the file temporarily, it will continue to grow.

A permanent workaround tells zstat not to record detailed tracking of system processes. Run the following commands on the system:

```
% mkdir -p /etc/opt/sun/oc
% echo "zstat_exacct_allowed=false" > /etc/opt/sun/oc/zstat.conf
% chmod 755 /etc/opt/sun /etc/opt/sun/oc
% chmod 644 /etc/opt/sun/oc/zstat.conf
% chown -Rh root:sys /etc/opt/sun/oc
% /opt/SUNWxvmoc/bin/agentadm stop
% /opt/SUNWxvmoc/bin/agentadm start
```

Cannot Correlate Kernel Zone Instances if No Hostid in Kernel Zone Operating System

If a hostid generated in zonecfg is not within the range 0x0 to 0x7fffffff, then there is no hostid in the kernel zone operating system.

As the hostid is the correlation entry in Oracle Enterprise Manager Ops Center, following are the consequences:

- If the kernel zone is running, the kernel zone asset is discovered or is removed from the Oracle Enterprise Manager Ops Center as you get the hostid from the OS.

- If the kernel zone is not running, the kernel zone asset is recreated with the hostid set.

- If the OS of the kernel zone is discovered, an OS is created but it does not correlate with the kernel zone asset as there is no hostid.

Workaround 1

Update the kernel zone to a SRU when the hostid problem is fixed. Remove the operating system of the kernel zone from the Oracle Enterprise Manager Ops Center and rediscover the asset with or without agent.

Workaround 2

1. Change the hostid in the kernel zone by providing a hostid that it supports using the command:

```
zonecfg -z <kz> set hostid=...
```

2. Remove the image UUID by using the command:

```
zonecfg -z <kz> remove attr name=image-uuid
```

3. Refresh the global zone. This destroys the current kernel zone model and recreates a new one with a new hostid.

4. If the operating system is running an agent, unconfigure and reconfigure the agent. If the OS is discovered agentlessly, delete the OS asset in Oracle Enterprise Manager Ops Center and rediscover the OS.

OS Provisioning CDOM Manifest Does Not Have iSCSI Device Information

The OS Provisioning S11 manifest does not have the iSCSI devices information to install the operating system to an iSCSI disk. The iSCSI parameters are set incorrectly by CDOM OS Provisioning.

Hence, it installs the operating system to a local disk.

USB VNIC Interfaces Are Not Filtered and Causes Various Issues

After discovering a system with a USB VNIC, an extra ethernet fabric appears in the domain model.

During the system discovery, the Oracle Enterprise Manager Ops Center must skip the USB interfaces. But, as the system is discovered with a USB VNIC with an IP plumbed on it, all the USB interfaces are considered as regular interfaces and causes an extra ethernet fabric to appear in the domain model. This leads to incorrect domain model and affects the network functionality.

Do Not Create an ETH Fabric for USB Interfaces

Oracle Enterprise Manager Ops Center does not support USB network creation or representation.

As the USB network creation or representation is not supported, creating fabric for a USB data link on a server is not useful.

Collision Guest Not Repaired After Host ID Change and Refresh

Logical Domains are identified by their domain UUID and their host ID.

Two logical domains managed by Oracle Enterprise Manager Ops Center with the same host ID leads to domain model corruption and an incorrect representation of the logical domains in the user interface with the following instances:

•   Only one of the two logical domains appears in the navigation tree.

•   The same logical domain appears under two different control domains in the navigation tree.

For example, consider two domains guest-1 and guest-2 belonging to f1.example.com and f2.example.com respectively, have the same host ID. This leads to the either of the following incorrect representations of the logical domains:

- only guest-1 is displayed under f1.example.com in Oracle Enterprise Manager Ops Center UI navigation tree.

- guest-1 is displayed twice, under f1.example.com and f2.example.com and guest-2 is not displayed.

Workaround

To repair the guest with the host ID collision, delete all the existing resources of guest in collision with and recreate the guest with a new host ID that does not exists in the Oracle Enterprise Manager Ops Center domain model. The repair procedure is as follows:

1. Identify the guest in collision using the Oracle Enterprise Manager Ops Center CLI with the following command:

```
localhost > collisions
localhost/collisions > list -t all

CRITICAL collision on hostid 11111111  :
           server          |              name             |
UUID                    |         MAC         |
--------------------------------------------------------------------------------
-------------------------------------------
       f1.example.com      |          guest-1              | 0ee154ca-4f80-4e9c-
a698-a403baf7b92a  | 00:14:4F:FB:72:E9
       f2.example.com      |          guest-2              |
bbeb689c-79bf-4954-9afb-ce55f86e307d  | 00:14:4F:F9:1B:C0
```

   This indicates that guest-1 and guest-2 are in collision and guest-2 needs to be repaired.

2. Delete the Operating System asset as a wrong operating system may be displayed in case of collision under a given logical domain.

   a. Select the OS of the logical domain in the left navigation panel.

   b. Select **Delete Assets** in the Actions pane.

3. Change the host ID in collision using the following command:

   a. Log in to f2.example.com.

   b. Stop the logical domain using the following command:

      ```
      ldm stop guest-2
      ```

   c. Set a new host ID using the following command:

      ```
      ldm set-domain hostid=0x22222222 guest-2
      ```

   d. Set the `hostid-collision-repair` variable using the following command:

      ```
      ldm set-var hostid-collision-repair=true guest-2
      ```

   e. Start the logical domain by using the following command:

```
ldm start guest-2
```

4. Refresh the respective control domain.

    a. Log in to Oracle Enterprise Manager Ops Center user interface.

    b. Select the f2.example.com control domain in the left navigation panel.

    c. Select **Refresh** in the Actions pane.

    The logical domains appear under their respective control domains.

5. Discover the Operating Systems using **Add Assets** in the Actions pane.

    The operating systems appear under their respective control domains.

Non-Global Zone Persistent Configuration Should Not Be Updated if Dynamic Reconfiguration Fails

When performing dynamic zone management operations, current Oracle Enterprise Manager Ops Center behavior is to update the persisted zone configuration prior to the live zone configuration.

If a job fails to update the live zone configuration, the persisted zone configuration may be updated successfully. To synchronize the live zone configuration with the configuration displayed in Oracle Enterprise Manager Ops Center, restart the non-global zone.

Database Migration From Local 12c to Remote 12c with Container Times Out

Migrating local 12c database to remote 12c database with container times out after several hours as it was unable to lock an object during migration.

Ops Center migration from local database to remote database fails with the following error:

```
ORA-04021: timeout occurred while waiting to lock object
```

The ORA-04021 timeout error is caused by another session locking or using a package that you are attempting to execute. During migration, the Enterprise Controller drops and recreates the remote DB procedure `copy_oc_schema`, if it exists from previous migration attempt. If the previous migration was aborted, this may cause a lock hold in the remote schema procedure `copy_oc_schema` and the current migration waits until the lock is released or timeout occurs.

Workaround

Apply the solution found in MOS Note 2079362.1: Ops Center migration from local database to remote database fails with error `ORA-04021: timeout occurred while waiting to lock object`.

Cannot Import the Latest X3-2 Firmware

While importing the latest X3-2 firmware zip file, it displays an error.

The following error is displayed:

```
Error in reading firmware metadata information.
```

ILOM 3.2.4.26.b r101722

BIOS 17.11.05.00

Server 1.4.2 download

EC: 12.3.1.0.0

The issue is due the metadata file which indicates that the binary file is in the current directory. However, the binary file appears in the parent directory.

Workaround

Manually unzip and upload only the service processor metadata file.

Update Management and Delete Asset Should Clear the Session

When performing Update Management and Delete Assets actions on a Proxy Controller, the session times out due to inactivity.

The session times out due to the presence of an active old session. This leads to performance issues.

Workaround

Restart the Proxy Controller.

Reinstalling Agent on an Oracle Solaris 10 Non-Global Zone May Fail if Truststore Directory is Not Removed

When an agent in an Oracle Solaris 10 non-global zone environment is uninstalled, it does not uninstall the truststore directory.

As a result, when the agent is rediscovered and the agent provisioning job is performed in the non-global zone, it displays the following error:

```
11/27/2015 03:26:32 PM MET ERROR 'echo mkdir:; /usr/bin/mkdir/zones/smvt-174-148/
root//var/tmp/fromProxy/' exited with status: 2 (80055)
```

Workaround

Manually remove the `/var/tmp/fromProxy` when uninstalling the agent controller and rerun the provisioning job.

> **Note:**
>
> This issue is fixed in version 12.3.2.

LDAP User with Required Roles Unable to Upgrade From 12.2.2 to 12.3

A LDAP user cannot download or upgrade Oracle Enterprise Manager Ops Center from version 12.2.2 to version 12.3. If a LDAP user is used for this action, it will impact the download action for all users.

> **Note:**
>
> This issue is fixed in version 12.3.1.

> **Note:**
>
> You can download or upgrade from version 12.3.1 to any later version using an LDAP user, but cannot use an LDAP user when downloading or upgrading from version 12.2.2 to version 12.3 and from version 12.3 to version 12.3.1.

You must have a non-LDAP user with the Ops Center Admin role to initiate the upgrade or to download the updates. If an LDAP user with the Ops Center Admin role is used, then the following error is displayed:

```
No upgrades found.
```

If this error is also displayed for local users with Ops Center Admin role, then restart the Enterprise Controller for a non-LDAP user to be able to download the update.

Kernel Zone Using Local Device on LDOM Guest Should Use Device Path Without Slice

In Oracle Enterprise Manager Ops Center 12.3.1, you cannot use local devices when creating a kernel zone in LDOM.

Oracle Enterprise Manager Ops Center uses full device path when using a LDOM local device in a kernel zone.

The job fails with the following error:

```
Must be a block device or regular file
```

Workaround

Use direct LUN access from a SAN library.

Limited Support for Oracle Linux 7.0 and 7.1

Oracle Linux 7.1 is supported for OS provisioning, monitoring and management but not supported for EC installation, PC installation, and OS patching.

Oracle Linux 7.0 is supported for monitoring and management but not supported for OS provisioning, EC installation, PC installation, and OS patching.

> **Note:**
>
> Oracle Linux 6.6 and Oracle 6.7 is not supported for OS patching.

> **Note:**
>
> Starting with version 12.3.2, Oracle Linux 7.0 and 7.1 supports EC and PC installation.

Reverting to Earlier Version Without Reverting Customer-Managed Database Can Cause Issues

Once you have upgraded to version 12.3.1, if you are using a customer-managed database, you cannot revert to an earlier version by reverting only the Enterprise Controller system to a saved boot environment. You must revert both the Enterprise Controller system and database system to the same pre-upgrade state.

If you revert to an earlier version, all monitoring data gathered since the reversion point is lost.

Upgrading Java on Oracle Solaris 10 Control Domains and Logical Domains Causes Agent Communication Issues

Do not upgrade the Java version on Oracle Solaris 10 Control Domains or Logical Domains that have LDOM Manager version 3.2 or earlier installed. An issue with the latest version can cause agent communication issues on these systems.

If you have upgraded the Java on these systems to version 1.6.0_101 or higher, downgrade to Java 1.6.0_95.

Ops Center 12.3.1 Solaris 10 Global Zone Shows Kernel Zone Create Action to be Available

Ops Center version 12.3.1 displays **Create Oracle Kernel Zones** action as available for Oracle Solaris 10 global zone.

This option should be available only for Oracle Solaris 11 global zone.

LUNs for Zone Storage Does Not Get Locked

If a deployment plan is initiated to create multiple zones in one job, using LUNs from a SAN library as zone storage, the deployment wizard uses a LUN for each zone from the SAN library as storage. The LUNs used are not locked until the matching zone gets created.

If a second deployment plan is initiated using the same SAN library, when the first deployment plan is still in progress, the deployment wizard will use the same available LUNs for zone storage which were already used earlier.

Therefore, both jobs will partially fail with only a few zones created. Do not submit these kind of jobs in parallel.

Add Assets Job Fails With Network Error

When adding an asset to the Enterprise Controller with network that is not associated with any Proxy Controller and if there are multiple Proxy Controllers, then the Job Manager cannot determine the right Proxy Controller for the discovery job and fails with an error.

The following error is displayed:

```
Job failed at start-up :  There was no Network that could access <IP Address>.
```

Users and Groups Created by Ops Center Installation Not Specified

The accounts that are created as part of the Oracle Enterprise Manager Ops Center 12c installation are not listed in the documentation.

The following users and groups are created in Oracle Enterprise Manager Ops Center 12c:

- Enterprise Controller Users - svctag, allstart, uce-sds, xvm, webservd
- Enterprise Controller Groups - jet, uce-sds, webservd
- Proxy Controller Users - svctag, allstart, uce-sds
- Proxy Controller Groups - jet, uce-sds

The svctag and xvm users are expected to have the default UIDs of 95 and 60, respectively. The UIDs for the other users depend on the OS settings and are not expected to be a specific value.

Zones Using iSCSI Storage Are at Risk to Get Broken During Global Zone Reboot

On an Oracle Solaris platform, when you reboot the global zone hosting the kernel zone based on iSCSI storage, an error is displayed.

Workaround

1. After the global zone has booted successfully, manually attach zones on the global zone again by using the following command:

   ```
   zoneadm -z <ngz> attach
   ```

2. The zones disappear from the user interface. Hence refresh the Global zone to add them again.

Create Kernel Zone Job Fails When Overriding CPU Model

During the creation of zone with a shared CPU, if you choose the **allow override any profile values** option, the shared CPU value is changed to dedicated CPU value and hence the creation of kernel zone fails.

Ability to Create Kernel Zone Using Infiniband

The discovery of Kernel Zones using Infiniband is supported, but creating a Kernel Zone with Infiniband from Oracle Enterprise Manager Ops Center user interface is not supported.

Java 7u95 Rejects by Default the MD5 Certificates

If a Proxy Controller uses MD5 certificates, all the Agent Controllers using a latest version of JDK will not be able to register the Proxy Controller. This impacts the discovery, OS Provisioning, and manual installation.

To verify if the Proxy Controller uses MD5 certificates, use the keytool and check the signature algorithm name.

On the Proxy Controller:

- **For Oracle Solaris:** `/usr/jdk/latest/bin/keytool -v -list -keystore /etc/cacao/instances/scn-proxy/security/jsse/keystore`

- **For Linux:** `/usr/java/latest/bin/keytool -v -list -keystore /etc/opt/sun/cacao2/instances/scn-proxy/security/jsse/keystore`

On the Agent Controller:

- **For Oracle Solaris:** `/usr/jdk/latest/bin/keytool -v -list -keystore /var/opt/sun/xvm/security/jsse/scn-agent/truststore`

- **For Linux:** `/usr/java/latest/bin/keytool -v -list -keystore /var/opt/sun/xvm/security/jsse/scn-agent/truststore`

Workaround 1

1. On the Enterprise Controller or the Proxy Controller, depending on the operating system used by these systems, upgrade the local cacao to the latest version 2.4.7.0 or later.

   - For Oracle Solaris 10 and Linux OS, upgrading Oracle Enterprise Manager Ops Center will upgrade the cacao to latest version.

   - For Oracle Solaris 11 and later, to upgrade the cacao to latest version, use the `pkg update entire` command.

2. Use cacaoadm create-keys command with `-n` option and `-d <directory>` for cacao to generate new keys in the `<directory>`.

   ```
   mkdir <directory>
   cacaoadm create-keys -n -d <directory>
   ```

3. Copy the useful files to the following location:

   For Oracle Solaris:

   ```
   cp <directory>/jsse/keystore /etc/cacao/instances/scn-proxy/security/jsse/
   keystore_new
   cp <directory>/password /etc/cacao/instances/scn-proxy/security/password_new-U
   <UUID> -f
   ```

   For Linux:

   ```
   cp <directory>/jsse/keystore /etc/opt/sun/cacao2/instances/scn-proxy/security/
   jsse/keystore_new
   cp <directory>/password /etc/opt/sun/cacao2/instances/scn-proxy/security/
   password_new
   ```

4. Follow the Replace the Certificate for the Enterprise Controller or Replace the Certificate for the Proxy Controller procedures as described in the *Oracle Enterprise Manager Ops Center Security* to propagate the new certificate using the CLI security mode and then activate it.

Workaround 2

This procedure can be applied on Agent Controllers or Virtual Controllers if their Proxy Controller uses MD5 certificates.

> **Note:**
>
> This procedure is not secure and hence not recommended.

1. Verify if the certificate has the Signature algorithm name as `MD5withRSA` in the following location:

   On the Proxy Controller:

- For Oracle Solaris: `/usr/jdk/latest/bin/keytool -v -list -keystore /etc/cacao/instances/scn-proxy/security/jsse/keystore`

- For Linux: `/usr/java/latest/bin/keytool -v -list -keystore /etc/opt/sun/cacao2/instances/scn-proxy/security/jsse/keystore`

On the Agent Controller:

- For Oracle Solaris: `/usr/jdk/latest/bin/keytool -v -list -keystore /var/opt/sun/xvm/security/jsse/scn-agent/truststore`

- For Linux: `/usr/java/latest/bin/keytool -v -list -keystore /var/opt/sun/xvm/security/jsse/scn-agent/truststore`

> **✎ Note:**
>
> These commands for the Enterprise Controller or the Proxy Controller will prompt for a password. No password is required here and select Return.

2. If the `MD5withRSA` signature exists, edit the following lines to remove `MD5` and `MD5withRSA` on the Agent Controller or the Virtual Controllers.

   - For Oracle Solaris, edit the following lines in the `/usr/jdk/latest/jre/lib/security/java.security` file:

     – `jdk.certpath.disabledAlgorithms=MD2, MD5, RSA keySize < 1024`

     – `jdk.tls.disabledAlgorithms=SSLv3, MD5withRSA, DH keySize < 76`

   - For Linux, edit the following lines in the `usr/java/latest/jre/lib/security/java.security` file:

     – `jdk.certpath.disabledAlgorithms=MD2, MD5, RSA keySize < 1024`

     – `jdk.tls.disabledAlgorithms=SSLv3, MD5withRSA, DH keySize < 76`

3. Restart the Agent Controllers or the Virtual Controllers.

Unable to Configure an Agent Using Latest Java 6 if Proxy Uses TLS Version 1.1

If the Proxy Controller is configured to use only TLS 1.1 and 1.2, the Agent Controller using Java 6 version may not be able to connect.

Workaround

If the agent is installed with Java 6 115 or later, you can enable TLS 1.1 to resolve the communication issue with the following steps.

> **📝 Note:**
>
> If the agent is installed with a JDK version lesser than 6u115, you cannot disable TLSv1.0 for agents at the proxy level without losing the agent.

1. Stop the Agent Controller.

    ```
    /opt/SUNWxvmoc/bin/agentadm stop -v
    ```

2. Read the current value.

    ```
    cacaoadm get-param tls-server-version-backup -i scn-agent
    ```

3. Set the value to 1.1.

    ```
    cacaoadm set-param tls-server-version-backup=TLSv1.1 -i scn-agent
    ```

4. Restart the Agent Controller.

    ```
    /opt/SUNWxvmoc/bin/agentadm start -v
    ```

proxyadm Configure\Start Fails on Java Warning: PICL (libpicl.so. 1) is missing

Installation of a remote Proxy Controller on a Non-Global zone fails as the system does not include the `system/picl` package.

Workaround

Install the `system/picl` package and retry to configure and start the remote Proxy Controller using the `proxyadm` command with the `configure and start` subcommands.

Dynamic Edition of a S10 Branded Zone Should Not Be Allowed in the User Interface

The dynamic network edition of a zone is based on the Global Zone Solaris version. For Oracle S10 branded zones, the dynamic network edition should not be allowed.

You can start a job when the zone is running. This job will not dynamically edit the zone configuration. You must restart the S10 branded zone at the end of the job for the zone configuration to be updated.

Improve Error Message on Failed Hardware Discovery

During the discovery of Oracle SPARC S7-2 and Oracle SPARC S7-2L systems, the discovery fails with an error message due to the `servicestate` property which is disabled under the `/SP/services/ipmi/` file on the service processor.

The following error message is displayed:

```
Discovery driver reported: Fail to retrieve the ethernet ports IPMI for host <IP>
exit with errors:
Error: Unable to establish IPMI v2 / RMCP+ session Get Channel Info command failed
```

This error message does not describe the cause for the failure and the fix for the issue.

Workaround

Log in to the service processor and enable the `servicestate` property value by using the following commands:

```
cd /SP/services/ipmi/
set servicestate=enabled
show /SP/services/ipmi/

/SP/services/ipmi
 Targets:

 Properties:
        servicestate = enabled
        v1_5_sessions = disabled
```

Kernel Zone Creation - IP Missing if Many Connections on the Same Global Zone Lower-link

When creating a Kernel Zone from Oracle Enterprise Manager Ops Center user interface, if the user requires 2 interfaces, in order to connect 2 networks with an IP address in both interface in the Kernel Zone and if both networks are connected on the same interface in the Global Zone that will host the Kernel Zone, then both anets are properly created but one of the IPs may be missing in the Kernel Zone OS (the datalink is not configured in the OS).

Workaround

Create the Kernel Zone without a maximum of 1 network interface from the same Global Zone lower-link. Once the Kernel Zone is created, additional network connections may be added from the same Global Zone lower-link using the Attach Network action.

Kernel Zone Dynamic Add Network Does Not Set Network IP in Kernel Zone Operating System

When adding a new network interface with an IP address to a running kernel zone from its server asset, the new anet will be added only in the persistent zone configuration but does not add in the live zone configuration.

As a consequence, the new IP address will not be set in the kernel zone operating system.

Workaround

Add the new network on a halted kernel zone and reboot the kernel zone at the end of the job in order to add the new anet, then add the IP address from the network tab of the Kernel Zone OS asset.

Swap Alarms False Positives

In some unique scenarios, the usage percentage shown by **zpool list** and **zfs list** differ. In such circumstances, the ZPool Usage Percentage would generate false alarms on environments prior to 12.3.2.

This issue has been resolved in 12.3.2. For a fresh Ops center 12.3.2 installation nothing has to be done. For an upgraded environment to 12.3.2, the following steps need to be performed to completely fix the issue:

• For all the Managed OS Assets who are part of OC-Global Zone Monitoring Policy:

Go to **Message Center**, search for all raised incidents against the Alert Monitoring Rule **ZPool Usage Percentage** and delete them.

• For all the Managed OS Assets which are not part of OC-Global Zone Monitoring Policy:

Disable or delete the existing OS Alert Monitoring Rule **ZPool Usage Percentage** and create the similar Rule but using the Monitoring Attribute as **ZPoolUsage.name=*.zpoolUsedSpacePercentage** .

To create a new monitoring rule:

1. For any managed OS asset with the Monitoring tab open in the center pane, click the Add icon.

2. Select **Threshold** from the menu.

3. Enter the monitored attribute as **ZPoolUsage.name=*.zpoolUsedSpacePercentage** and the description.

4. Define the amount of time that can elapse before an alert is generated, then define the alert severity parameters and limits.

5. Click **Apply**.

Could Not Perform Operation After Automatic Recovery on LDOM Guests

After an automatic move of the logical domain guest from a source server to a destination server, launching some operations on the recovered guest (reboot, delete, migrate, connect network, move metadata, automatic recovery) fails.

Error message displayed is as follows:

```
Could not perform operation because host ID collision has been found. You should
apply the repair procedure described in Ops Center documentation and try again
(61021).
```

Workaround

Some operations fail when the host ID collision detection finds two images for the recovered guest, on source server and destination server. This issue will be automatically fixed when the source server is reachable again, since the image gets cleaned once the server is available.

You can also set **collision.actions.check.hostid** to **false**. Navigate to Administration > Configuration > Virtualization panel to set the configuration variable. This will prevent checking host ID collisions before launching these operations. After the source server is available again, set the variable back to **true**.

Mismatch in Vlan Tagging Information Shown on Network Dashboard and Details Tab

There is mismatch between vlan tagging information shown on network Dashboard and Network Details tab.

For any selected network from Network accordion, Network Dashboard always shows `vlan Tagging` attribute value as enabled, whereas Network Details tab shows `vlan Tagging` attribute value as enabled only if vlan id is greater than VLAN_MIN value which is currently set to 2, otherwise it shows it as disabled for untagged networks.

Workaround

Follow the **Network Details** tab to get the correct vlan tagging information about the network.

After Upgrading the Primary Node in ECHA and Installing Version 12.3.2 on Standby Node, Configuring the Standby Node into ECHA (ha-configure-standby) Can Fail

During the Oracle Enterprise Manager Ops Center upgrade with High Availability configuration, when attempting to reconfigure the standby node into the ECHA configuration, the `ecadm ha-configure-standby` command will fail with the following error:

```
scp: /var/opt/sun/xvm/bui/conf/password: No such file or directory
```

Workaround

On the primary node, if `/var/opt/sun/xvm/bui/conf/password` does not exist, execute the following:

```
echo "trustpass" > /var/opt/sun/xvm/bui/conf/password
chmod 400 /var/opt/sun/xvm/bui/conf/password
```

After executing the above commands, retry the `ecadm ha-configure-standby` command on the standby node.

Proxy controller OFFLINE after rollback and subsequent upgrade

When upgrade fails at a customer site for some reason, rolling back to previous version, the subsequent successful upgrade leaves Proxy Controller in OFFLINE state, until it is manually restarted by the customer. Without restart, the Proxy Controller remains unreachable (OFFLINE), affecting the upgrade of associated Agent Controllers.

Workaround

If Proxy Controller remains unreachable (OFFLINE) after upgrade, use proxyadm stop -w && proxyadm start -w to restart it.

Host ids for LDOMs should be 8 characters long

oocli is not able to process correctly with shorter host ids. For example, reporting host ids collisions.

Workaround

Host ids must be 8 characters long with pre-pending zeros if necessary.

```
/opt/SUNWoccli/bin/oc -e 'connect -u root -p xxxxxxx ; collisions ;  check -t
hostid -v 0x00999996'
```

After several days, EC gets stuck on waiting for connection to DB

The logs show that after several days, EC seems to be stuck on waiting for connection to DB. It never recovers until EC is restarted. This issue occurs only on Solaris 11.3 Sparc EC.

For Example:

```
grep CumulativeFailedConnectionWaitCount /var/cacao/instances/oem-ec/logs/cacao.0

CumulativeFailedConnectionWaitCount:38392
CumulativeFailedConnectionWaitCount:0
CumulativeFailedConnectionWaitCount:0
CumulativeFailedConnectionWaitCount:0
CumulativeFailedConnectionWaitCount:0
CumulativeFailedConnectionWaitCount:38426
CumulativeFailedConnectionWaitCount:0
CumulativeFailedConnectionWaitCount:0
CumulativeFailedConnectionWaitCount:0
CumulativeFailedConnectionWaitCount:0
CumulativeFailedConnectionWaitCount:38526
```

Workaround

Download ojdbc8.jar and ucp.jar and place them in /var/tmp/ on EC. You can download the jar files from

Then execute following script on EC.

```
cp /var/tmp/ojdbc8.jar /opt/sun/n1gc/lib/oracle/

cp /var/tmp/ucp.jar /opt/sun/n1gc/lib/oracle/

rm /opt/sun/n1gc/lib/oracle/ojdbc7.jar


for i in \

/etc/cacao/instances/oem-ec/modules/com.sun.hss.satellite.domain.xml \

/opt/SUNWxvmoc/bin/ecadm; do cp $i $i.old; \

sed -e 's/ojdbc7.jar/ojdbc8.jar/g' $i.old > $i; done


/opt/SUNWxvmoc/bin/satadm stop -w

/opt/SUNWxvmoc/bin/satadm start -w
```

Ops Center fails to register with MOS starting with Java 8 Update 121 and newer

Ops Center fails to register with MOS starting with Java 8 Update 121 and newer, because these Java releases no longer include the required certificate. This only happens when an unregistered Ops Center tries to register. This includes new or upgraded installation that has not yet been registered, for example, switching from disconnected mode to connected mode and then registering Ops Center. The already registered Ops Center will continue to work. In order to register Ops Center, a Java certificate needs to be imported into the Java truststore.

Workaround

After installing Ops Center and before configuring it in connected mode, follow the instructions below to import the certificate into the Java truststore:

• Copy and save the following certificate to a text file `/var/tmp/second_chain.crt`

> **✏ Note:**
>
> The first line of the saved certificate file should start with:
> ```
> -----BEGIN CERTIFICATE-----
>
> MIIE0DCCBDmgAwIBAgIQJQzo4DBhLp8rifcFTXz4/TANBgkqhkiG9w0BAQUFADBf
> MQswCQYDVQQGEwJVUzEXMBUGA1UEChMOVmVyaVNpZ24sIEluYy4xNzA1BgNVBAsT
> LkNsYXNzIDMgUHVibGljIFByaW1hcnkgQ2VydGlmaWNhdGlvbiBBdXRob3JpdHkw
> HhcNMDYxMTA4MDAwMDAwWhcNMjExMTA3MjM1OTU5WjCByjELMAkGA1UEBhMCVVMx
> FzAVBgNVBAoTDlZlcmlTaWduLCBJbmMuMR8wHQYDVQQLExZWZXJpU2lnbiBUcnVz
> dCBOZXR3b3JrMTowOAYDVQQLEzEoYykgMjAwNiBWZXJpU2lnbiwgSW5jLiAtIEZv
> ciBhdXRob3JpemVkIHVzZSBvbmx5MUUwQwYDVQQDEzxWZXJpU2lnbiBDbGFzcyAz
> IFB1YmxpYyBQcmltYXJ5IENlcnRpZmljYXRpb24gQXV0aG9yaXR5IC0gRzUwggEi
> MA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQCvJAgIKXo1nmAMqudLO07cfLw8
> RRy7K+D+KQL5VwijZIUVJ/XxrcgxiV0i6CqqpkKzj/i5Vbext0uz/o9+B1fs70Pb
> ZmIVYc9gDaTY3vjgw2IIPVQT60nKWVSFJuUrjxuf6/WhkcIzSdhDY2pSS9KP6HBR
> TdGJaXvHcPaz3BJ023tdS1bTlr8Vd6Gw9KIl8q8ckmcY5fQGBO+QueQA5N06tRn/
> Arr0PO7gi+s3i+z016zy9vA9r911kTMZHRxAy3QkGSGT2RT+rCpSx4/VBEnkjWNH
> iDxpg8v+R70rfk/Fla4OndTRQ8Bnc+MUCH7lP59zuDMKz10/NIeWiu5T6CUVAgMB
> AAGjggGbMIIBlzAPBgNVHRMBAf8EBTADAQH/MDEGA1UdHwQqMCgwJqAkoCKGIGh0
> dHA6Ly9jcmwudmVyaXNpZ24uY29tL3BjYTMuY3JsMA4GA1UdDwEB/wQEAwIBBjA9
> BgNVHSAENjA0MDIGBFUdIAAwKjAoBggrBgEFBQcCARYcaHR0cHM6Ly93d3cudmVy
> aXNpZ24uY29tL2NwczAdBgNVHQ4EFgQUf9Nlp8Ld7LvwMAnzQzn6Aq8zMTMwbQYI
> KwYBBQUHAQwEYTBfoV2gWzBZMFcwVRYJaW1hZ2UvZ2lmMCEwHzAHBgUrDgMCGgQU
> j+XTGoasjY5rw8+AatRIGCx7GS4wJRYjaHR0cDovL2xvZ28udmVyaXNpZ24uY29t
> L3ZzbG9nby5naWYwNAYIKwYBBQUHAQEEKDAmMCQGCCsGAQUFBzABhhhodHRwOi8v
> b2NzcC52ZXJpc2lnbi5jb20wPgYDVR0lBDcwNQYIKwYBBQUHAwEGCCsGAQUFBwMC
> BggrBgEFBQcDAwYJYIZIAYb4QgQBBgpghkgBhvhFAQgBMA0GCSqGSIb3DQEBBQUA
> A4GBABMC3fjohgDyWvj4IAxZiGIHzs73Tvm7WaGY5eE43U68ZhjTresY8g3JbT5K
> lCDDPLq9ZVTGr0SzEK0saz6r1we2uIFjxfleLuUqZ87NMwwq14lWAyMfs77oOghZ
> tOxFNfeKW/9mz1Cvxm1XjRl4t7mi0VfqH5pLr7rJjhJ+xr3/
>
> -----END CERTIFICATE-----
> ```

- Execute the following command to import the certificate into the truststore. If prompted for password, enter **changeit**

  - For Solaris:

    ```
    keytool -importcert -file /var/tmp/second_chain.crt -keystore \
    /usr/jdk/latest/jre/lib/security/cacerts
    ```

  - For Linux

    ```
    keytool -importcert -file /var/tmp/second_chain.crt -keystore \
    /usr/java/latest/jre/lib/security/cacerts
    ```

  Output:

  ```
  % keytool -importcert -file /var/tmp/second_chain.crt -keystore /usr/jdk/
  latest/jre/lib/security/cacerts
  ```

  Enter keystore password:

  Certificate was added to keystore

- You can now proceed with registering Ops Center

If you have already attempted to configure and register Ops Center and it has already failed, then proceed with the certificate installation instructions above and then you should be able to register Ops Center. There is no need to restart the Enterprise Controller while installing the certificate or after.

No migration target available for selection to do Ldom guest migration on M8/T8

This can be observed also on M7/T7. The problem is that on following servers, M8/T8 and M7/T7 if we have a guest there and we would like to migrate it to compatible server, target server is not recognized as compatible and not shown in the UI wizard.

Workaround

Restart OC agent on source and target server.