Oracle® Enterprise Manager Ops Center

Release Notes

12c Release 4 (12.4.0.0.0)

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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 4 (12.4.0.0.0). 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 4 (12.4.0.0.0) 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 4 (12.4.0.0.0).

You can download the documents from the Oracle Enterprise Manager Ops Center Documentation Library at `https://docs.oracle.com/cd/ops-center-12.4/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 4 (12.4.0.0.0) 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 `https://docs.oracle.com/cd/ops-center-12.4/index.htm`.

Known Issues

This section explains the known issues that you might encounter when installing, or upgrading to, Oracle Enterprise Manager Ops Center 12c and the possible workarounds available.

For information on known issues related to installation and postinstallation configuration, see the *Oracle Enterprise Manager Ops Center Release Notes*.

The following are known issues that you might encounter:

- Oracle Linux Installer Does Not Check for Required Packages
- 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
- Newly Configured Network From Outside Ops Center Does Not Appear in the User Interface
- Execute Operation Is Not Enabled For Groups of Assets if One Asset Is Offline
- Install Fails With Permission Error While Installing SUNWuces.pkg
- OS Provisioning From New Remote Proxy Controller Repeatedly Fails with HTTP 500 Error
- Oracle Solaris 11 Kernel Zones With the Same Hostid Are Correlated
- Logical Domains Can Be Created Without Sufficient Memory To Run
- After Restoring, a Duplicate Enterprise Controller Appears in the User Interface
- 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
- USB VNIC Interfaces Are Not Filtered and Causes Various Issues
- Do Not Create an ETH Fabric for USB Interfaces

- 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

- Update Management and Delete Asset Should Clear the Session

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

- LUNs for Zone Storage Does Not Get Locked

- 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

- 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

- Could Not Perform Operation After Automatic Recovery on LDOM Guests

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

- Proxy Controller OFFLINE after Rollback and Subsequent Upgrade

- Host ids for LDOMs should be 8 Characters Long

- Remote Proxy Controller Unable to Configure Non-OC Publishers

- Without Upgrading to the Latest Version, Ops Center Agent and Proxy Controllers will fail with Java Version >= 1.8.0_181

- Latest fallback Boot Images Missing for T7

- Occasionally Scheduled Jobs Go Missing

- Actions on ILOM fail if Port 162 is Occupied on the Proxy Controller

- MOS SR Create Operation Fails

- User uce-sds Lacks sys Group Membership after Upgrade to 11.4

- DST Change Impacts Scheduled Jobs

- Two Expired Root CA Certificates

- Rebooting Solaris 11.4 with NFS Mounts in `/etc/vfstab` kills `smf:nfs/client` and Prevents HA EC and Agent Startup

- With EC and PC Running on Non-global Zones on a Solaris 11.3 Global Zone, Upgrading that Global Zone to Solaris 11.4 Fails

- Installation on a Freshly Installed Solaris 11.4 solaris-small-server Group Fails

- Cannot Rediscover a Greenfield Non-global Zone without Metadata. Disks are not Modeled

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` packages before or after the Oracle Linux installation.

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.

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.

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.

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.

Workaround

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.

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.

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.

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
```

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.

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.

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`.

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.

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

Once you have upgraded to the latest version of OpsCenter, 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.

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.

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.

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

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

Workaround

You can start a job when the zone is running. This job will not dynamically edit the zone configuration. 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

1. Halt the Kernel zone, Add the network while the Kernel zone is halted, Boot the Kernel zone and set the new IP address in the Kernel zone OS.

2. Add the network to the running Kernel zone (dynamic configuration will not be updated), reboot the Kernel zone (this will update the dynamic configuration) and set the new IP address in the Kernel zone OS.

3. On the global zone that hosts the Kernel zone, add the following new property in `/opt/sun/n1gc/lib/XVM_SERVER.properties` file.
   `zone.kz.force.dynamic.reconfig=true`

4. Restart the global zone VC agent:

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

   Perform add network operation dynamically.

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.

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'
```

Remote Proxy Controller Unable to Configure Non-OC Publishers

If a user adds non OpsCenter content to the Solaris 11 Library using the EC BUI, when installing / configuring a remote Proxy Controller on Solaris 11, it is not able to configure the non-OC IPS publishers.

Workaround

On the remote proxy controller, execute the following commands:

```
# rm -rf /var/opt/sun/xvm/uce/opt/server/proxy/*
#/var/opt/sun/xvm/utils/install_ips_ac.sh -P 127.0.0.1
```

Without Upgrading to the Latest Version, Ops Center Agent and Proxy Controllers will fail with Java Version >= 1.8.0_181

JDK 1.8.0_181 removes bundled Java derby. This breaks OpsCenter agent controllers and proxy controllers that rely on Java derby for monitored data. With Solaris 11.3 SRU 34 and Solaris 11.4, Java version greater than or equal to 1.8.0_181 is delivered

Workaround

Do not upgrade Java/Solaris to the versions mentioned above without upgrading Ops Center agent and proxy controllers to the latest version (12.4.0).

Latest fallback Boot Images Missing for T7

The latest boot image in the EC library for T7 is `sol-11_3_17_5_0-fallback_boot-sparc.pkg`, but it should be `sol-11_3_31_6_0-fallback_boot-sparc.pkg`.

Workaround

Contact Oracle support.

Occasionally Scheduled Jobs Go Missing

It is occasionally observed that on certain environments scheduled jobs go missing.

Workaround

Here are links to MOS Documents that help with recreating the missing scheduled jobs:a

- How to recreate Ops Center Missing CRON scheduled Jobs (Doc ID 2389372.1)
- How to recreate a Firmware Download job if it was accidentally deleted (Doc ID 1475210.1)

Create Oracle Solaris 11.4 Zone Fails when any Language other than English is Specified in the Wizard

When a language other than "English" is specified in the **Create Oracle Solaris Zone** wizard for Solaris 11.4 zones, the job fails at the **Start Zone** task. The SMF service `svc:/milestone/config:default` on the non-global zone goes into maintenance. This

is also observed outside of Ops Center when the zone is created through through command line as well.

Actions on ILOM fail if Port 162 is Occupied on the Proxy Controller

Actions like discover, delete, and reset SP on the ILOM will fail if port 162 is occupied by any process other than the java process belonging to the Ops Center Proxy Controller.

Workaround

Port 162 must be available for the Proxy Controller. No other application on the Proxy Controller should use this port.

MOS SR Create Operation Fails

On the Ops Center BUI, under **Message Center**, choosing the action **Open SR** on an incident fails with the error pop-up, **Error creating SR**.

User uce-sds Lacks sys Group Membership after Upgrade to 11.4

After upgrading Solaris to Solaris 11.4 on the Enterprise Controller and Proxy Controller, the user `uce-sds` loses the `sys` group membership. This is an underlying Solaris bug. This impacts the UCE SMF services (`uce-scheduler` and `uce-server`). This affects the corresponding operations like patching Solaris 10 servers, downloading OS image, and so on.

Workaround

1. Manually add the user `uce-sds` to the `/etc/group` directory of the `sys` group. Example: (After adding `uce-sds`)

   ```
   # grep sys: /etc/group
   sys::3:bin,adm,root,uce-sds
   ```

2. Restart the Enterprise Controller services.

DST Change Impacts Scheduled Jobs

Scheduled jobs run an hour prior on a Daylight Savings Time end date.

Two Expired Root CA Certificates

Glassfish (version 3.1.2.19) is bundled with OpsCenter 12.4.0 and delivered in the following:

```
/usr/lib/cacao/lib/tools/template/domain/cacerts.jks
```

> **Note:**
>
> Glassfish has several entries that have either expired or set to expire in 2019. These will be addressed by OCDoctor.

Rebooting Solaris 11.4 with NFS Mounts in `/etc/vfstab` kills `smf:nfs/client` and Prevents HA EC and Agent Startup

The existing NFS Library mountpoints in `/etc/vfstab prevent nfs/client` SMF service starts after an OS reboot. This prevents Agent Controller startup on Global zone with associated NAS libraries or Enterprise Controller startup on an EC-HA node configured with a NAS mounted voting disk. This affects EC or an Agent Controller only when they are running on a Solaris 11.4 Operating System. Solaris 11.2 and 11.3 are not affected.

Wordaround

1. Comment out the NFS mount entries in `/etc/vfstab` (Using # at the beginning of the line).

2. Run the following command:

   ```
   $ svcadm clear nfs/client
   ```

3. Uncomment the entries from `/etc/vfstab` (Remove # from the beginning of the entries commented in the first step).

4. Start the Agent controller or Enterprise Controller services.

With EC and PC Running on Non-global Zones on a Solaris 11.3 Global Zone, Upgrading that Global Zone to Solaris 11.4 Fails

As an example, a Solaris 11.3 Global zone has 2 non-global zones – one running the Enterprise Controller and the other running a remote Proxy Controller. The following upgrade path is performed on these non-global zones: OpsCenter 12.3.3 JIDR1 (On Solaris 11.3) -> OpsCenter 12.4.0 (On Solaris 11.3). There is no agent running on the global zone (not supported). Manually upgrading the global zone at this point to Solaris 11.4 fails with:

```
Planning linked: 0/2 done; 1 working: zone:eczone
Linked progress: \pkg: update failed (linked image exception(s)):
```

```
A 'sync-linked' operation failed for child 'zone:eczone' with an
unexpected
return value of 1 and generated the following output:
pkg: 0/1 catalogs successfully updated:

Framework error: code: 6 reason: Could not resolve host:
oracle-oem-oc-mgmt-eczone
URL: 'https://oracle-oem-oc-mgmt-eczone:8002/IPS/versions/0/
```

The global zone publisher looks like the following:

```
(GZ)# pkg publisher
PUBLISHER                 TYPE     STATUS P LOCATION
solaris                   origin   online F http://ipsrepo.oracle.com/
solaris11/support/
GZ#
```

The non-global zone EC publisher looks like the following:

```
(NGZ) # pkg publisher
PUBLISHER             TYPE      STATUS    P      LOCATION
solaris  (syspub)     origin    online    T      <system-repository>
solaris  (syspub)     origin    online    F      https://oracle-oem-oc-mgmt-
eczone:8002/IPS/
cacao                 origin    online    F      https://oracle-oem-oc-mgmt-
eczone:8002/IPS/
mp-re   (non-sticky)  origin    online    F      https://oracle-oem-oc-mgmt-
eczone:8002/IPS/
opscenter             origin    online    F      https://oracle-oem-oc-mgmt-
eczone:8002/IPS/
```

Workaround

1. Ascertain that the OpsCenter version of the EC/PCs on all the underlying non-global zones is the same.

2. Unset all publishers pointing to OpsCenter's Solaris 11 IPS repository on the Global zone (if any) and all the non-global zones. Disabling does not work. Example on the NGZ:

   ```
   (NGZ)# pkg set-publisher -G https://oracle-oem-oc-mgmt-eczone:8002/IPS/
   solaris
   (NGZ)# pkg set-publisher -G https://oracle-oem-oc-mgmt-eczone:8002/IPS/
   cacao
   (NGZ)# pkg set-publisher -G https://oracle-oem-oc-mgmt-eczone:8002/IPS/
   mp-re
   (NGZ)# pkg set-publisher -G https://oracle-oem-oc-mgmt-eczone:8002/IPS/
   opscenter
   ```

> **Note:**
>
> There might be other publishers pointing to OpsCenter's IPS repository.
> For example: ha-cluster and so on.

3. The publisher `opscenter` needs to be added to the global zone, so that the non-global zones can find the required OpsCenter packages during the OS upgrade. To do this, copy the file `oc-archive.p5p` from the OpsCenter EC/PC installation on one of the non-global zones.
   For example:

   ```
   (GZ)# cp <EC-zonepath>/root/var/opt/sun/xvm/images/IPS/oc-
   archive.p5p /var/tmp/
   ```

4. Configure the OpsCenter publisher on the global zone:
   For example:

   ```
   (GZ)# pkg set-publisher -G '*' -g /var/tmp/oc-archive.p5p opscenter
   ```

5. Try the OS upgrade to Solaris 11.4. If this works – proceed to Step 6. If not, then it might be because of a Solaris bug. The symptom of this bug is the following error during the upgrade:

   ```
   pkg sync-linked: Package 'network/ipfilter' must be uninstalled or
   upgraded
   if the requested operation is to be performed.
     Reject:  pkg://solaris/network/ipfilter@0.5.11-0.175.3.34.0.3.0
     Reason:  Package network/ipfilter is not installed in global zone.
     Reason:  Excluded by synced parent incorporation
   'consolidation/osnet/osnet-incorporation'
   ```

   The above solaris bug is related to the two packages `network/ipfilter` and `system/locale/setterm`, if they are installed on any of the non-global zones, but not on the global zone. The workaround is to install these packages on the global zones as well. The OS upgrade to 11.4 should now be successful. The above error may look different if the package `network/ipfilter` is already installed on the global zone or not installed on any of the non-global zones.

6. Restart the global zone to Solaris 11.4.

7. Fix the OpsCenter publishers on the global zone and the non-global zones:

   a. Unset the temporary OpsCenter publisher on the global zone:

      ```
      (GZ)# pkg unset-publisher opscenter
      ```

b. For non-global zones that had OpsCenter publishers configured, login to the non-global zone running the EC and run the following command first, followed by each non-global zone running PCs.

```
(GZ)# /var/opt/sun/xvm/utils/install_ips_ac.sh -P 127.0.0.1
```

This will reconfigure the OpsCenter publishers on the non-global zones.

Installation on a Freshly Installed Solaris 11.4 solaris-small-server Group Fails

On a freshly installed Solaris 11.4 small-server group, installation of OpsCenter 12.4.0 might fail with the following error:

```
Executing job: jobs/04installPrereqs.pl --install
Can't exec "pkginfo": No such file or directory at /var/tmp/
xvmoc_full_bundle/./SunOS_sparc/Product/installer/Modules/util.pm line
1123.
Use of uninitialized value in split at /var/tmp/xvmoc_full_bundle/./
SunOS_sparc/Product/installer/Modules/util.pm line 1123.
scripts/should_install_pkg[280]: pkginfo: not found [No such file or
directory]
Error in running pkginfo against
/var/tmp/xvmoc_full_bundle/./SunOS_sparc/Product/components/packages/
SFWrpmlib.pkg.
Error determining whether  /var/tmp/xvmoc_full_bundle/./SunOS_sparc/
Product/components/packages/SFWrpmlib.pkg is newer than installed.
```

This is because the svr4 package is no longer automatically installed with the solaris-small-server group installation in Solaris 11.4.

Workaround

Install the svr4 package before installing OpsCenter:

```
$ pkg install package/svr4
```

Cannot Rediscover a Greenfield Non-global Zone without Metadata. Disks are not Modeled

For zones created through OpsCenter, rediscovering the global zone without previous metadata, would lose the disk modeling of these greenfield non-global zones.

Workaround

1. Before rediscovering a global zone with greenfield non global zones, ensure the existing metadata is backed up. The new agent will re-read the **good** metadata.

2. (This will require zone downtime) Change the mountpoint of the zone and delete the `image-uuid` attribute, to discover the zone as if manually created:

- Halt the zone:

  ```
  $ zoneadm -z <zoneName> halt
  ```

- Get the zone path:

  ```
  $ zonecfg -z <zoneName> info zonepath
  ```

- Get the corresponding zpool:

  ```
  $ zfs list -o name <zonepath>
  ```

- Change the mountpoint of the zone datasets:

  ```
  $ zfs set -r mountpoint=<newMountpoint> <zpoolName>
  ```

- Change the zonepath to this new mountpoint:

  ```
  $ zonecfg -z <zoneName> set zonepath=<newMountpoint>
  ```

- Delete the image-uuid attribute:

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

- Reboot the zone:

  ```
  $ zoneadm -z <zoneName> boot
  ```

3. If both step 1 and step 2 are not possible, file a ticket with Oracle support.