

Oracle® Enterprise Manager Ops Center

Add Volumes to SAN Storage Libraries

12c Release 3 (12.3.1.0.0)

E60013-02

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This guide provides an end-to-end example for how to use Oracle Enterprise Manager Ops Center.

Introduction

Description of how Oracle Enterprise Manager Ops Center organizes its storage resources.

A storage library can use block storage or file system storage. Block storage is backed by Fibre Channel disks or iSCSI disks in the form of Logical Units or LUNs. The LUNs store virtualization hosts' metadata and data and are assigned to storage libraries.

For LUNs backed by Fibre Channel disks, the block storage is static. From the user interface of Oracle Enterprise Manager Ops Center, you cannot change the size of the LUNs, delete them, or create new LUNs. However, you can add more LUNs to the library or remove LUNs if they are not in use. The number of LUNs in the storage library determines the number of virtual hosts that the library can support.

In this document, you use Oracle Enterprise Manager Ops Center to locate a specific LUN in one storage library and add it to an existing storage library.

See [Related Articles and Resources](#) for links to related information and articles

What You Will Need

Lists requirements for organizing SAN volumes in Oracle Enterprise Manager Ops Center.

You will need the following to add LUNS to a guest's storage capacity:

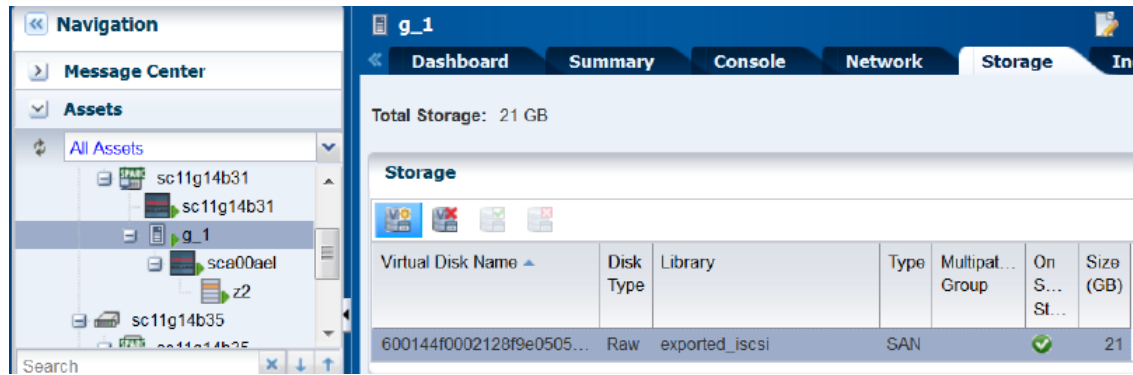
- SAN LUNs in an existing storage library

Adding a LUN to a SAN Storage Library

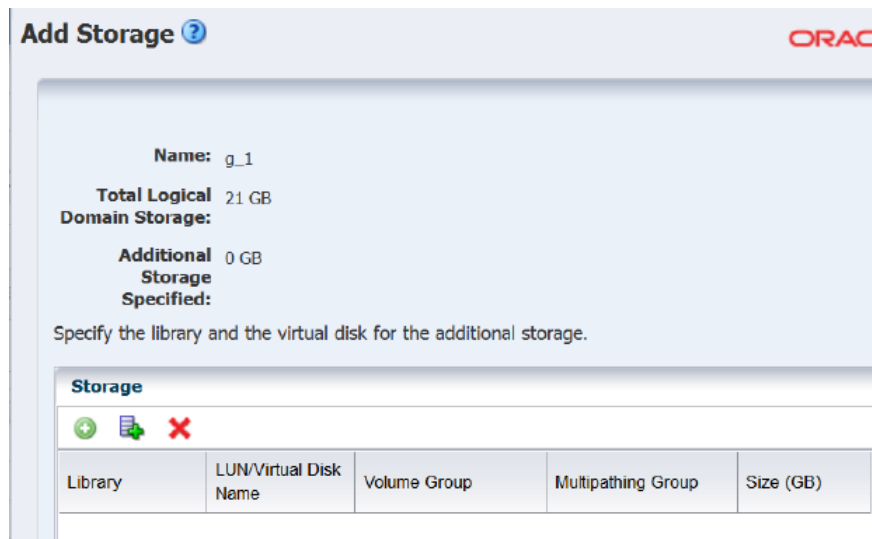
Procedure for adding a SAN volume in Oracle Enterprise Manager Ops Center.

These procedures demonstrate how to assign a set of LUNs to the storage capacity available to a guest.

1. In the Navigation pane, select Assets and then select a guest. In the example, g1 is selected. You could select the **Add Storage** action from the Action pane, but to see the guest's current storage capacity, click the **Storage** tab.



- To add storage, select the **Add Storage** icon, which is highlighted in the Storage tab. This opens the Add Storage wizard.



- In the Add Storage wizard, select the **Add Multiple SAN LUNs** icon, which is circled in the following example.

Add Storage ORAC




Name: g_1

Total Logical Domain Storage: 21 GB

Additional Storage Specified: 0 GB

Specify the library and the virtual disk for the additional storage.

Storage

Library	LUN/Virtual Disk Name	Volume Group	Multipathing Group	Size (GB)

The Select SAN LUNs wizard has no content in its initial view.

Additional Storage: 0

Additional Number of LUNs: 0

San Library:

Available LUNs

Search

LUN GUID	Size (GB)
No data	

Selected LUNs

LUN GUID	Size (GB)

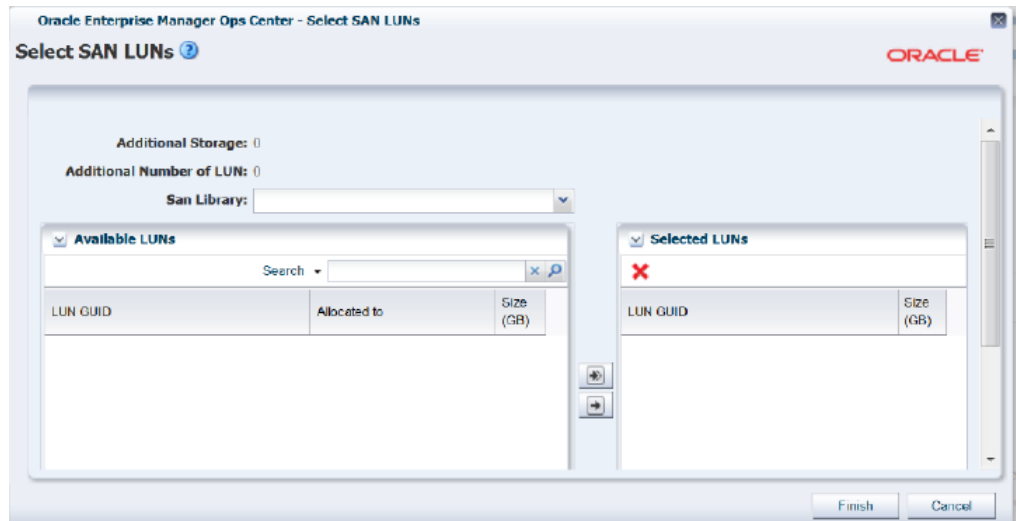
Available LUNs 0 Selected LUNs 0

Multipathing Configuration

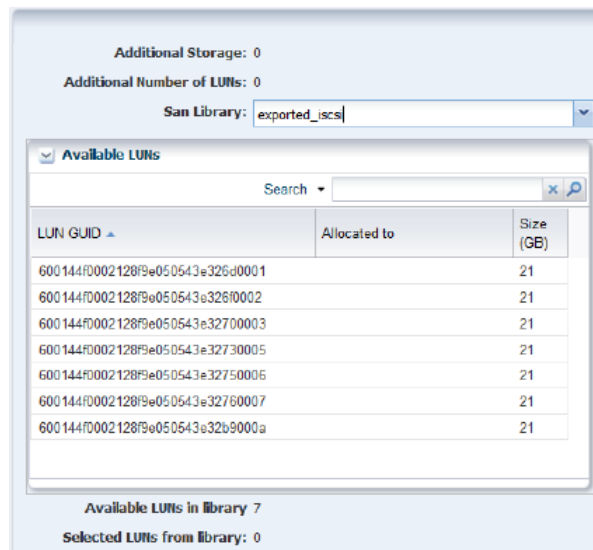
Select	Service Name	Domain Name	Active Path
<input checked="" type="checkbox"/>	primary-vds0	primary	<input checked="" type="checkbox"/>

Multipathing Configuration

Select	Service Name	Domain Name	Active Path



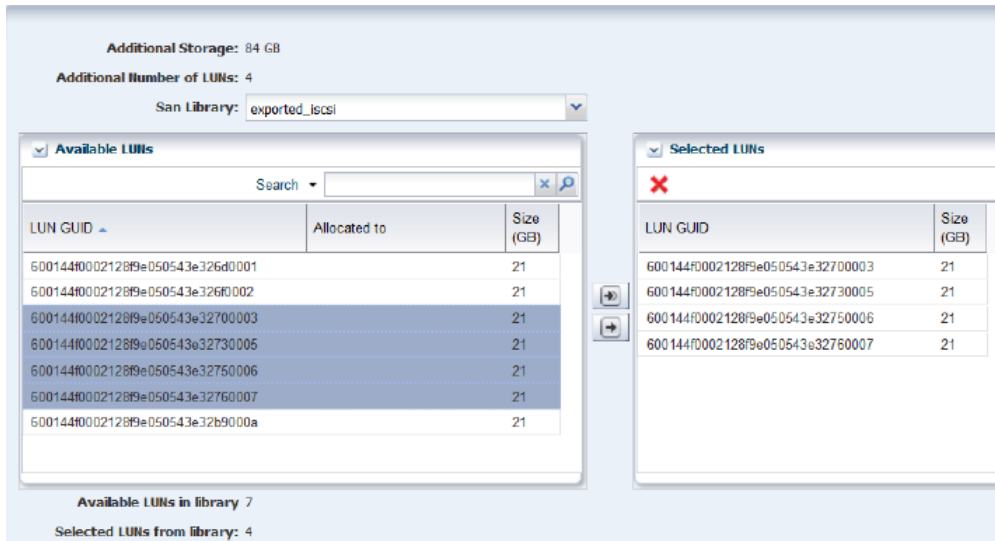
- In the **SAN Library** drop-down list, select a storage library. In the following example, the `exported_iscsi` library is selected, which populates the **Available LUNs** table with all of LUNs in the storage library. This example has seven LUNs, all the same size.



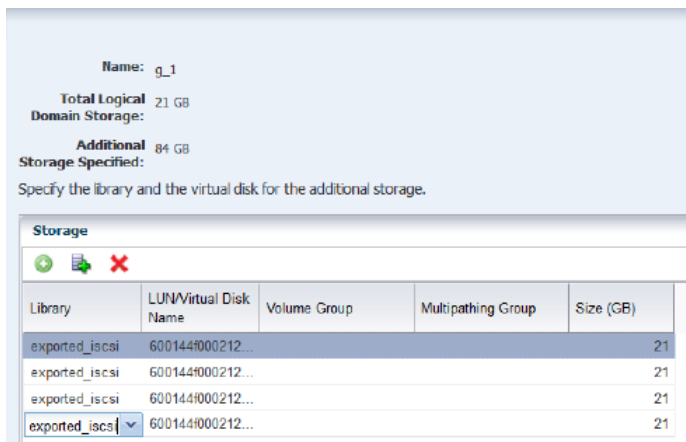
- To add storage to the guest, select one or more LUNs from the **Available LUNs** table, using one of these methods:
 - Identify a LUN by its GUID and click it. You can select multiple LUNs. Click the right arrow button to assign them to the **Selected LUNs** table.
 - Enter text in the Search field to filter the list of LUNs to those GUIDs that match the text string. Click one or more LUNs. Click the right arrow button to assign them to the **Selected LUNs** table.
 - Select all the LUNs by clicking the double-right arrow button.

As you assign LUNs, the counter for **Available LUNs** decreases and the counters for **Additional Storage** and **Additional Number of LUNs** and **Selected LUNs** increases.

In this example, four LUNs have been selected and assigned as additional storage.



6. You can configure multipathing on all the selected LUNs at the same time. Select one or more paths to these LUNs by selecting multiple service domains. Identify one path as the Active Path, the default path.
7. When the list of Selected LUNs is complete, click **Finish** to update the Add Storage wizard, as shown in the following example.



You can continue to add LUNs from the same storage library or from another storage library. When you have added sufficient storage capacity, click the **Finish** button. The center pane is displayed.

8. Click the **Refresh** icon to show the new LUNs.

Virtual Disk Name	Disk Type	Library	Type	Multipat... Group	On S... St...	Size (GB)
600144f0002128f9e0505...	Raw	exported_iscsi	SAN		✓	21
600144f0002128f9e0505...	Raw	exported_iscsi	SAN		✓	21
600144f0002128f9e0505...	Raw	exported_iscsi	SAN		✓	21
600144f0002128f9e0505...	Raw	exported_iscsi	SAN		✓	21
600144f0002128f9e0505...	Raw	exported_iscsi	SAN		✓	21

What's Next

Description of the status of the guest's storage when the procedure is completed.

The guest now has the added storage capacity to store its metadata and data.

Related Articles and Resources

The following chapters for more information:

- Configure Storage in *Oracle Enterprise Manager Configuration Reference*
- Storage for Virtualization in *Oracle Enterprise Manager Virtualization Reference*

See the *Deploy Storage Workflow* in the Deploy How To library at http://docs.oracle.com/cd/E59957_01/nav/deploy.htm.

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