Oracle® Linux

Storage Appliance Deployment and User’s Guide
About this document

This guide describes the Oracle Linux Storage Appliance that is delivered as an Oracle Cloud Infrastructure image. The guide includes overview information, a basic use summary, and deployment instructions, including migration and upgrade tasks.
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Preface

*Oracle® Linux: Storage Appliance Deployment and User's Guide* describes how to launch and deploy Oracle Linux Storage Appliance Compute instances and covers the following topics: overview information, requirements, prerequisite tasks, deployment tasks, including migrating and upgrading an appliance instance, and a description of the Oracle Linux Storage Appliance web interface.

Note that support for the Oracle Linux Storage Appliance is limited to use on Oracle Cloud Infrastructure.

**Audience**

This guide is intended for users and administrators who want to use the Oracle Linux Storage Appliance to administer NFS and SMB shares on Compute instances that they provision on Oracle Cloud Infrastructure. The guide includes an overview of the appliance; instructions for deploying, migrating, and upgrading an appliance instance; and basic instructions on accessing and using its web interface. It is assumed that readers have a general understanding of the Oracle Linux operating system.

**Document Organization**

The document is organized as follows:

- **Chapter 1, About the Oracle Linux Storage Appliance** provides an overview of the Oracle Linux Storage Appliance.
- **Chapter 2, Deploying an Oracle Linux Storage Appliance Instance** describes tasks for deploying the Oracle Linux Storage Appliance.
- **Chapter 3, Working With the Oracle Linux Storage Appliance Web Interface** summarizes the various pages that constitute the Oracle Linux Storage Appliance web interface.
- **Chapter 4, Accessing Appliance Shares Over the NFS and SMB Protocols** describes how to access shares that you create on client VMs over the NFS and SMB protocols.
- **Chapter 5, Migrating Appliance Instances** describes how to migrate an appliance storage pool from one Oracle Cloud Infrastructure compute instance to another Oracle Cloud Infrastructure compute instance or from version 1 to version 2 of the appliance.
- **Chapter 6, Upgrading the Oracle Linux Storage Appliance Version** describes guidelines and caveats for upgrading the appliance version.

**Related Documents**

The latest version of this document and other documentation for this product are available at:

*Oracle® Linux Documentation*

**Conventions**

The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
</tbody>
</table>
Documentation Accessibility

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td><strong>monospace</strong></td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>

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Oracle is fully committed to diversity and inclusion. Oracle recognizes the influence of ethnic and cultural values and is working to remove language from our products and documentation that might be considered insensitive. While doing so, we are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is an ongoing, long-term process.
Chapter 1 About the Oracle Linux Storage Appliance

This chapter introduces you to the Oracle Linux Storage Appliance, which is a Linux-based server that is used as a file server on Oracle Cloud Infrastructure. The Oracle Linux Storage Appliance simplifies the deployment of a file server on Oracle Cloud Infrastructure by providing a preconfigured custom image to tenants.

The Oracle Linux Storage Appliance provides a fast and easy way to build a shared storage system on Oracle Cloud Infrastructure and enables you to export files by using multiple protocols, namely Network File System (NFS) v3 and v4, and Windows Server Message Block (SMB) v3 (Samba).

This appliance can run on any Oracle Cloud Infrastructure compute shape. When no NVMe devices are attached to a shape, block volumes can be used.

**Note**

The Oracle Linux Storage Appliance is intended for use on Oracle Cloud Infrastructure only. If you are not managing compute instances on Oracle Cloud Infrastructure, use the standard tools that are provided in Oracle Linux to manage NFS and SMB configuration. For more information, see the chapter on administering shared file systems in Oracle® Linux 7: Managing File Systems.

After deploying the appliance and configuring the web interface, tenants can configure and monitor the file server by using the web interface. Supported browsers include the following: Google Chrome, version 63 and later, and Mozilla Firefox Extended Support Release (ESR), version 52 and later. For detailed instructions on using the web interface, refer to the online help.

### 1.1 Using the Web Interface

Tasks that you can perform by using the web interface include the following:

- View the storage capacity that is available for sharing.
- View status and configuration information about the appliance.
- Create and manage shares that use the NFS and SMB protocols.

The Oracle Linux Storage Appliance currently provides support for the following export protocols: NFSv3 and NFSv4 and SMB version 3.

When deploying an Oracle Linux Storage Appliance compute instance, block volume selection is only supported at creation time and cannot be modified afterwards. Also, detaching and reattaching block volumes while the appliance is running is not supported and will result in data corruption or loss. See Section 2.3, “Configuring an Oracle Linux Storage Appliance Compute Instance” for instructions.

- Perform backup and restore operations for shares.
- Perform instance migration.

The Oracle Linux Storage appliance supports compute instance migration, where you can migrate one appliance compute instance to another Oracle Cloud Infrastructure compute instance. Note that migration support is only for compute instances that have remotely attached block volumes. Migrating DenseIO shapes with local NVMe devices is not supported. For migration instructions, refer to Chapter 5, Migrating Appliance Instances and the online help in the web interface.

- Perform autonomous actions. For more information, see Section 1.2, “Using the Oracle Linux Storage Appliance With Oracle Autonomous Linux”. 
• Perform the following system and user administrative actions on the appliance: reboot and update the appliance, restart NFS and SMB services, enable and configure supported features, view system, boot, service, and autonomous logs.

You access the shares that you create with the appliance on client virtual machines (VMs) over NFS and SMB by using a standard `mount` command.

The remaining chapters of this guide provide instructions on configuring Oracle Cloud Infrastructure requirements; deploying, migrating, and upgrading an Oracle Linux Storage Appliance instance; configuring and accessing the web interface for the appliance; and basic information about creating, managing, and mounting shares over NFS and SMB.

1.2 Using the Oracle Linux Storage Appliance With Oracle Autonomous Linux

The Oracle Cloud Marketplace offers an Oracle Linux Storage Appliance image that is configured with Oracle Autonomous Linux. Autonomous Linux provides capabilities such as autonomous package updates and automated Oracle Ksplice patching with zero downtime, and known exploit detection, to keep the appliance instance highly secure, reliable, and up to date.

The Autonomous Linux version of the appliance includes autonomous actions in the web interface. For more information about these actions, refer to Section 3.4, “Administration Page” and the online help in the web interface.

Note

The Autonomous Linux version of the appliance is listed in the Oracle Cloud Marketplace as Oracle Linux Storage Appliance (Autonomous Linux). The Oracle Cloud Marketplace also offers an Oracle Linux version of the appliance, which is listed as Oracle Linux Storage Appliance.

For more information about migrating to the Autonomous Linux version of the appliance, see Chapter 5, Migrating Appliance Instances.
Chapter 2 Deploying an Oracle Linux Storage Appliance Instance

This chapter describes how to deploy Oracle Linux Storage Appliance instances on Oracle Cloud Infrastructure.

This chapter provides instructions on launching an Oracle Linux Storage Appliance instance on Oracle Cloud Infrastructure from either the Oracle Cloud Marketplace or the embedded Marketplace, which is accessed from the Oracle Cloud Infrastructure Console.

For more information about the Marketplace, visit https://www.oracle.com/linux/technologies/linux-storage-appliance.html.

2.1 Oracle Linux Storage Appliance Deployment Prerequisites

Note

• If you have previously deployed the Oracle Linux Storage Appliance and are running an earlier version, you can upgrade to the latest package version for the appliance by using the appliance’s web interface. Select the Update Appliance option, which is located on the Administration page.

• The Oracle Linux Storage Appliance does not provide a way to upgrade from version 1 to version 2 of the Oracle Linux Storage Appliance or from an Oracle Linux version to an Oracle Autonomous Linux version of the appliance. Before you upgrade to the latest appliance version, refer to Chapter 6, Upgrading the Oracle Linux Storage Appliance Version for guidelines and caveats related to upgrading the appliance version.

For information about migrating to an Oracle Autonomous Linux version of the appliance, see Section 1.2, “Using the Oracle Linux Storage Appliance With Oracle Autonomous Linux” and Chapter 5, Migrating Appliance Instances.

Before you deploy Oracle Linux Storage Appliance instances, review the following information and perform all of the prerequisite tasks that are described:

• **Obtain an Oracle Cloud Infrastructure account.**
  For more information, go to https://www.oracle.com/index.html.

• **Configure ports for the Virtual Cloud Network.**
  To access the appliance and its services, you must add the required ports to the stateful ingress rules, which is located in the default security list for the Virtual Cloud Network (VCN). The appliance will then be associated with each of these ports, thereby allowing traffic on that port for the specified protocol, service, and function.

The following table lists each of the ports that you can configure.

<table>
<thead>
<tr>
<th>Service</th>
<th>Destination Port Range</th>
<th>Protocol Type</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>nfs-server</td>
<td>111</td>
<td>TCP</td>
<td>NFS</td>
</tr>
<tr>
<td>nfs-server</td>
<td>2049</td>
<td>TCP</td>
<td>NFS</td>
</tr>
</tbody>
</table>
When adding the port configuration, use the following format:

**Source:** CIDR-range-of-your-VCN

**IP Protocol:** IP-protocol

**Source Port Range:** All

**Destination Port Range:** port-range

For example, if your VCN Classless Inter-Domain Routing (CIDR) range is 172.16.0.0/16, you would use the following port configuration:

**Source:** 172.16.0.0/16

**IP Protocol:** TCP

**Source Port Range:** All

**Destination Port Range:** 111

The port configuration in the previous example provides access to the appliance from any instance within your VCN. You can restrict access to a smaller set of instances by changing the source CIDR, as required. For more details, see [https://docs.cloud.oracle.com/en-us/iaas/Content/Network/Concepts/securitylists.htm](https://docs.cloud.oracle.com/en-us/iaas/Content/Network/Concepts/securitylists.htm).

Note that the source CIDR range for SSH should be 0.0.0.0/0 so that you can access SSH remotely. See Step 2g. of Section 2.3, “Configuring an Oracle Linux Storage Appliance Compute Instance” for instructions on accessing the web interface over SSH.

## 2.2 Launching an Oracle Linux Storage Appliance Compute Instance

You can launch an Oracle Linux Storage Appliance Compute instance either from the Oracle Cloud Marketplace or by using the embedded Marketplace, which is accessed from the Oracle Cloud Infrastructure Console.
2.2.1 Launching an Oracle Linux Storage Appliance Instance by Using the Oracle Cloud Marketplace

To launch an Oracle Linux Storage Appliance by using the Oracle Cloud Marketplace, follow these steps:

1. Go to the Oracle Cloud Marketplace.
2. Type Oracle Linux Storage Appliance in the search box.
3. Select the version of the image to deploy in Oracle Cloud Infrastructure.
4. Follow the image deployment click-through instructions.

2.2.2 Launching an Oracle Linux Storage Appliance Instance by Using the Embedded Marketplace

To launch an Oracle Linux Storage Appliance instance by using the embedded Marketplace accessed from the Oracle Cloud Infrastructure Console, follow these steps:

1. Login to the Console.
2. Open the navigation menu. Under Solutions and Platform, go to Marketplace and select Applications.
3. Type Oracle Linux Storage Appliance in the search box and press Enter.
4. Select the Oracle Linux Storage Appliance version.
5. To launch the instance:
   a. Select the Version of the image and the Compartment in which you want to deploy the image.
   b. Accept the Oracle Standard Terms and Restrictions.
   c. Click Launch Instance.
   The Create Compute Instance page automatically pre-populates with the Oracle Linux Storage Appliance image source and instance configuration details.
6. Follow the instructions in Section 2.3, “Configuring an Oracle Linux Storage Appliance Compute Instance” to configure the instance.

2.3 Configuring an Oracle Linux Storage Appliance Compute Instance

On the Create Compute Instance page, after completing the launch instructions by using either of the previously described methods, you can configure and create the instance as follows:

1. Enter a name for the instance. You can add or change the name later. The name does not need to be unique, because an Oracle Cloud Identifier (OCID) uniquely identifies the instance.
2. Select the compartment to create the instance in.
3. In the Configure placement and hardware section, select the Availability domain that you want to create the instance in.
4. If you imported the appliance image to a custom image, click Change Image Source, and select the image that you imported previously, which is located in the Custom Images section.
5. In the **Shape** section, click **Change Shape** and select a supported shape.

The Oracle Linux Storage Appliance can run on all Oracle Cloud Infrastructure shapes. When selecting a shape instance, note the following additional information:

- For Oracle Cloud Infrastructure Compute instances with NVMe disks attached, the storage pool is created automatically.

![](Note)

When you create an Oracle Linux Storage Appliance instance on a Dense I/O shape or a Compute instance with attached NVMe devices, any block volumes that are attached to the instance are not available for share creation. Mixed NVMe and block volume support per instance is not available.

- For Oracle Cloud Infrastructure shape instances without NVMe disks attached, block volumes that are attached to the shape instance can be used as the storage pool.

For this shape instance, you must create the block volumes and attach them to an instance. For instructions, see **Adding a Block Volume** in the Oracle Cloud Infrastructure documentation.

Note that attached block volumes are automatically mounted and attached. There is no need to mount them manually.

After an initial login to the web interface for the Oracle Linux Storage appliance, you are presented with a list of available block volumes that you can use to create the appliance storage pool.

![](Caution)

Block volume selection is only supported at creation time and cannot be modified afterwards. Also, detaching and reattaching block volumes while the appliance is running is not supported and will result in data corruption or loss.

6. In the **Configure networking** section, select the VCN that has its ports configured with the appropriate information.

Refer to **Section 2.1, "Oracle Linux Storage Appliance Deployment Prerequisites"**.

7. Define any remaining parameters for the instance as you normally would for any other instance.

8. When you are done configuring the instance, click **Create**.

The instance will deploy and start immediately.
9. Gain secure access to the web interface by using SSH to port forward, as follows:
   a. On your local Linux or macOS client, run the following command:

   ```
   # ssh -N -L 8443:127.0.0.1:443 opc@public_IP_of_the_storage_appliance
   ```

   Note that the command does not return.

   b. Open a browser and point to https://localhost:8443, then accept the self-signed certificate to continue.

   Note
   If you are running at least Oracle Linux 7 Update 3, you will also need to perform an NFS client installation as part of the deployment. See Chapter 4, *Accessing Appliance Shares Over the NFS and SMB Protocols*. 
Chapter 3 Working With the Oracle Linux Storage Appliance Web Interface

This chapter provides a summary of the web interface for the Oracle Linux Storage Appliance. For detailed instructions on using the web interface, refer to the online help that is included with the appliance.

After you have deployed the Oracle Linux Storage Appliance, you must configure access to the web interface by pointing your browser at the instance’s public IP address. See Section 2.3, “Configuring an Oracle Linux Storage Appliance Compute Instance”. In addition, you must create an Admin password.

After logging into the web interface with the appropriate credentials, you can do the following:

• View the storage capacity that is available for shares.
• Display status and configuration information about the appliance.
• Create and manage shares and associate them with the NFS and SMB protocols.
• Migrate an appliance storage pool from one Oracle Cloud Infrastructure compute instance to another Oracle Cloud Infrastructure compute instance.
• Perform backup and recovery operations and other system and user administrative actions.

3.1 Dashboard Page

The Dashboard page provides an overview of the storage capacity that is available for sharing. You can also view the number of NFS and SMB clients that are currently connected to the appliance on this page.

The Dashboard page also includes information about the appliance itself, such as configuration information and the status of the appliance’s main resources, for example, CPU, memory, swap usage, and file system utilization. Items with an Okay status are shown in Green on this page, while a Red status for any item indicates a potential problem.

3.2 Storage Page

The Storage page is where you can view information about the storage capacity that is available for sharing, as well as create and manage shares and perform backup and recovery operations.

You can view the following information about existing shares on this page:

• Name of the share
• Disk space that is reserved for the share
• Remaining free space that is available for the share
• List of the protocols that are used to export the share content
• Date of the last backup for the share

You can also view information about the RAID health status of the appliance on the Storage page.

On the Storage page, you can perform the following actions:

• Add a share.
• Associate an export protocol with a share.
The protocols that you can associate with a share include NFS and SMB. See Section 2.1, “Oracle Linux Storage Appliance Deployment Prerequisites” for additional, required configuration information.

Note
If you associate the SMB export protocol with a share, you must also configure the Samba global settings on the Administration page of the appliance for the export protocol to work.

- Delete a share.
- View and modify a share and its associated exports.
- Duplicate a share.
- Perform backup and restore operations for shares.

3.3 Appliance Page
The Appliance page is where you can view configuration information for the appliance, including the status of its main resources and the state of key services.

On the Appliance page, you can view the following platform status information about the appliance:

- CPU
- Memory
- Swap usage
- Utilization of the root file system

Items that are shown in Green indicate an Okay status for the appliance, while items in Red indicate a potential problem. If you need to troubleshoot common issues, go to the Administration page, where you can view log files and perform several administrative actions.

3.4 Administration Page
The Administration page is where you can perform several administrative actions and troubleshoot problems with the appliance.

This page is also where you can migrate an appliance storage pool from one Oracle Cloud Infrastructure compute instance to another Oracle Cloud Infrastructure compute instance. This feature is useful if any initial instance resources, such as Oracle Compute Unit (OCPUs) or memory resources are running out. For instructions, see Chapter 5, Migrating Appliance Instances and the online help in the web interface.

The Administrative page provides actions that are organized under the following sections: System Logs, Systems Actions, Autonomous Actions, and User Actions.

System Logs

Actions that you can perform in this section include the following:

- View system, boot, service, and autonomous log entries.

  Autonomous log entries are available only Autonomous Linux versions of the appliance.
System Actions

Actions that you can perform in this section include the following:

• Reboot the appliance.
• Update the appliance.

Note
This option updates the system with the latest available security updates and appliance package version. This option does not allow you to update the appliance from version 1 to version 2 of the appliance or from an Oracle Linux to an Oracle Autonomous Linux version of the appliance. Also, this option is not available if you are using the Autonomous Linux version of the appliance because that version performs these updates automatically.

• Prepare the appliance storage for safe migration to a new instance.
• Restart NFS and SMB services.
• Enable the Oracle Ksplice feature.

This option is not available in the Autonomous Linux versions of the appliance because Ksplice is enabled by default in those versions.

• Configure Samba global settings.

Autonomous Actions

Autonomous actions are available in the Autonomous Linux versions of the appliance. Actions that you can perform in this section include the following:

• View and modify the Oracle Cloud Infrastructure Notifications service topic OCID (Oracle Cloud Identifier) used for receiving auto-update messages

Note
For information about configuring topics using the Oracle Cloud Infrastructure Notifications service, see Notifications Overview in the Oracle Cloud Infrastructure documentation.

• View and modify the time window for auto-updates.

User Actions

Actions that you can perform in this section include the following:

• Change the Admin password.
• Update the list of SSH public keys.
• Configure service access for the Oracle Cloud Infrastructure.

Note
Using the command line to modify the appliance is not supported. Per Oracle support, only use the command line for recovery purposes. Refer to the recovery
User Actions

instructions that are described in the online help in the web interface for more information. See also Security Lists in the Oracle Cloud Infrastructure documentation.
Chapter 4 Accessing Appliance Shares Over the NFS and SMB Protocols

This chapter describes how to access shares that you create on client VMs over the NFS and SMB protocols by using a standard `mount` command.

For example, you would mount an NFS share as follows:

```
# mount appliance_ip:share_path destination_path
```

See *Oracle® Linux 7: Managing File Systems* for more information about configuring NFS.

**Note**

Starting with Oracle Linux 7 Update 3, the installation image does not install NFS packages by default. To mount NFS shares on this release, you must install the `nfs-utils` package on the client:

```
# yum install -y nfs-utils
```

If you are mounting an SMB share, type the following command:

```
# mount -t cifs -o guest //server_address/share_name mountpoint
```

See *Oracle® Linux 7: Managing File Systems* for more information about configuring SMB.

If you want to make automount directories available, such as `/net`, you must first install the `autofs` package.
Chapter 5 Migrating Appliance Instances

This chapter describes how to use the Oracle Linux Storage Appliance migration feature, which enables you to easily migrate an appliance storage pool from one Oracle Cloud Infrastructure Compute instance to another Oracle Cloud Infrastructure Compute instance. This feature is useful if you need to deploy your appliance on a new Compute instance with additional Oracle OCPU and memory resources, as it eliminates the need to rebuild your existing file system server.

The migration feature is also necessary if you need to upgrade your appliance from version 1 to version 2 of the appliance or from an Oracle Linux to an Oracle Autonomous Linux version of the appliance. For more information about Oracle Linux Storage Appliance with Oracle Autonomous Linux, see Section 1.2, “Using the Oracle Linux Storage Appliance With Oracle Autonomous Linux”.

5.1 About Migrating Appliance Instances

Note the following important information about migrating your appliance instances:

- During the migration process the block volume storage pool is reconfigured on the newly migrated Compute instance.
- No shared file systems are migrated during the migration process, as these file systems remain on the existing block volumes.
- Migration only works for Compute instances that have remotely attached block volumes. Migrating DenseI0 shapes with local NVMe devices is not supported.

5.2 Migrating an Appliance Instance

The following information applies to migrating an appliance from one Compute instance to another Compute instance. If you are upgrading from version 1 to version 2, see Section 6.2, “Upgrading the Oracle Linux Storage Appliance From Version 1 to Version 2”.

Important

Before migrating an existing appliance instance, first back up your appliance instance, including the Samba global settings, ssh keys and OCI service access configuration on the Administration page, which are not included in the migration process.

You initiate the migration process in the Administration page of the Oracle Linux Storage Appliance web interface. You then complete the migration steps in the Oracle Cloud Infrastructure console.

The following procedure describes how to migrate an existing appliance to a new Oracle Cloud Infrastructure Compute instance.

1. In the web interface for the source instance, click the Administration tab, then click Prepare for migration.

2. In the Oracle Cloud Infrastructure console for the source instance, do the following:
   a. Stop the source instance.
   b. Detach all of the block volumes that are currently attached to the source instance, then terminate the source instance.
Migrating an Appliance Instance

3. In the Oracle Cloud Infrastructure console for the destination instance, do the following:
   a. Create a new appliance instance that meets the following requirements:
      - Must use a shape with no local storage attached.
      - Must be in the same compartment and availability domain as the source instance.
      - Must be the same or later appliance version as the source instance's version.
   b. Attach all of the block volumes that were detached from the source instance to the destination instance.
      
      Note
      The process of attaching the volumes can take a few minutes.
   c. Reboot the destination instance.
   d. Log in to the web interface for the destination instance and confirm that all of the shares and exports that you migrated are available.
Chapter 6 Upgrading the Oracle Linux Storage Appliance Version

This chapter describes how to upgrade the Oracle Linux Storage Appliance version.

6.1 Upgrading From Version 1.7.1 to Version 1.8 of the Oracle Linux Storage Appliance

To enable Active Directory support after you upgrade from version 1.7.1 to version 1.8, all of the SMB exports that are present on the system must be updated.

For each SMB export on the system, do the following:

1. Launch the web interface for the Oracle Linux Storage Appliance.
2. On the Storage page, select the SMB export to modify, then from the Actions drop-down list, select View/Modify.
3. Under Export Protocols, change the name of the SMB export using the SMB share name field.
4. Click Modify to validate the change.
5. Open the View/Modify dialog box for the SMB export again, then revert the change that you made in Step 3.
6. Click Modify to validate the change.

6.2 Upgrading the Oracle Linux Storage Appliance From Version 1 to Version 2

Important

- The Oracle Linux Storage Appliance does not provide a way to upgrade from version 1 to version 2; or from an Oracle Linux version to an Oracle Autonomous Linux version of the appliance. The workaround is to migrate the appliance instance.

- Before migrating an appliance instance, be sure to back up the existing appliance instance, including the Samba global settings, ssh keys and OCI service access configuration on the Administration page, which are not included in the migration process.

To migrate the Oracle Linux Storage Appliance from version 1 to version 2, follow these steps:

1. Create a new Compute instance based on the latest 2.x version of the Oracle Linux Storage Appliance. For more information, see Section 2.2, “Launching an Oracle Linux Storage Appliance Compute Instance”.
2. Migrate the existing appliance instance to a Compute instance that is running version 2.x. For more information, see Chapter 5, Migrating Appliance Instances.