

# Oracle® Enterprise Manager Ops Center

Migrating Zones

12c Release 1 (12.1.1.0.0)

E27359-01

August 2012

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

## Introduction

Oracle Enterprise Manager Ops Center provides complete management options to create and manage zones. You can create and manage zones using the browser-based user interface. You can interchangeably use the UI or the command line interface to perform any actions on the zones.

In Oracle Enterprise Manager Ops Center, you can migrate zones between compatible Oracle Solaris operating systems. The global zones can either be standalone or placed in a server pool. Oracle Enterprise Manager Ops Center checks and lists the compatible global zones for a zone to be migrated. See *Oracle Enterprise Manager Ops Center Feature Reference Guide* for compatible global zones for migration.

This guide demonstrates a simple method to migrate a zone from one global zone to another global zone using the Oracle Enterprise Manager Ops Center UI. You must have the following conditions fulfilled for migrating a zone:

- The zone metadata is in shared storage, that is in NAS storage library.
- The target and the source global zones are compatible.
- The target and source global zones must have access to the storage libraries associated with the zone.
- The zone must be in running state.
- The target global zone must have at least one network interface to host the zone.

When you migrate a zone, an important aspect to look into is the target global zone configuration. The target global zone must have the same or later versions of the patches and packages installed on the non-global zone. If the target global zone supports update-on-attach capability, then the non-global zone is checked for patches and packages that must be updated and only those patches and packages are updated.

If the target global zone has a lower version of the patches and packages installed on the non-global zone and it does not support backout-on-attach capability, then you must manually backout the patches and packages of the zone to match the target global zone.

On matching the patches and packages of the target global zone and the non-global zone, you can continue the migration job. You can also force the migration job but it might lead to undefined behavior later.

Oracle Enterprise Manager Ops Center performs a dry run of the migration and checks for any differences in the patches and packages between the source and target global zones.

This example takes you through the steps of migrating a zone on Oracle Solaris 11 OS to another Oracle Solaris 11 OS in a server pool. A zone on Oracle Solaris 11 OS is a whole root zone with an exclusive IP network connection.

Since the global zones are placed in a server pool, they share the storage libraries and network connections. The source and the target global zone are compatible and are in the same patch levels.

## What You Will Need

You will need the following to migrate the zone:

- Virtualization Admin role to perform all of the operations described in this example.
- A zones server pool with two systems installed with Oracle Solaris 11 OS.
- A zone configured and installed in a system in the server pool.

## Migrating a Zone

This example describes how to migrate a zone from one global zone to another global zone using the Migrate Zone option.

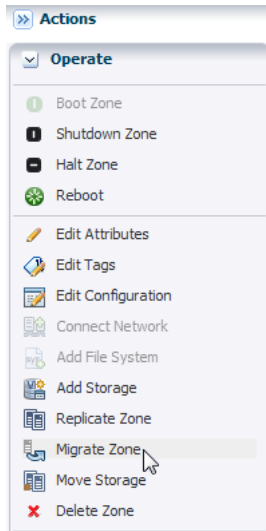
There are different ways by which you can migrate a zone using Oracle Enterprise Manager Ops Center. This example describes one of the methods by which you can migrate a zone.

The following procedure details the steps required to migrate the zone.

1. Select Server Pools in the Assets section of the Navigation pane.
2. Select the zone you want to migrate.

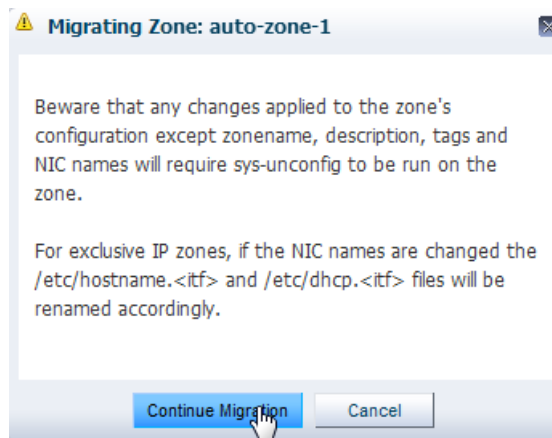


3. Click Migrate Zone in the Actions pane.



A warning message is displayed, indicating that when you change the zone configuration except for the Name, Description, Tags, and NIC details, you must execute the `sys-unconfigure` command on the zone. Also, when the NIC names are changed for a zone that uses exclusive IP mode, the `/etc/hostname.<itf>` and `/etc/dhcp.<itf>` files are renamed accordingly.

Click Continue Migration.

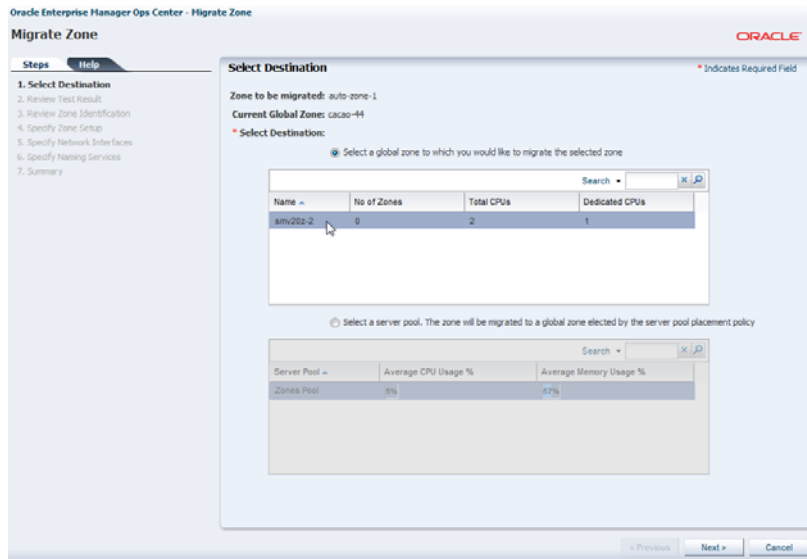


The Migrate Zone wizard is displayed.

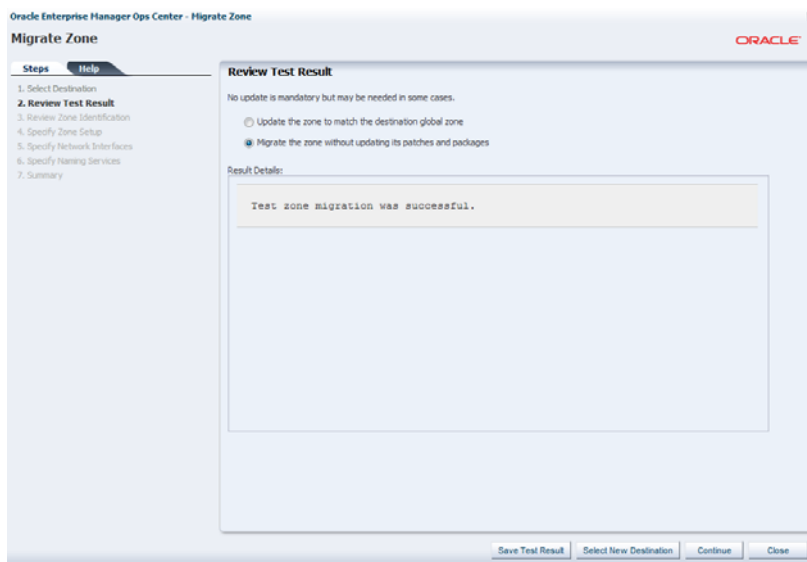
4. Choose the option Select a global zone to which you would like to migrate the selected zone and select a global zone as the target.

The global zones in the server pool are listed, showing the number of zones that are running, total CPUs, and available dedicated CPUs.

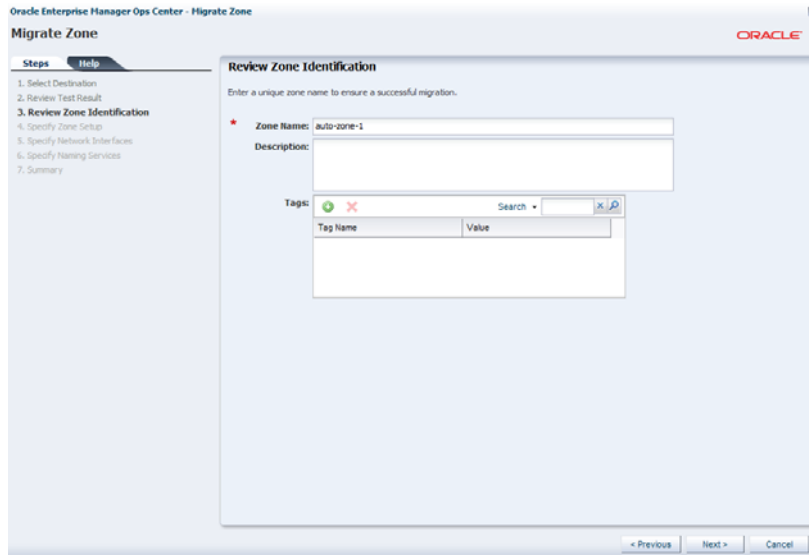
Click Next. The zone test migration starts.



5. Review the migration test result. The test migration is successful. Choose the option Migrate the zone without updating its patches and packages option, and click Continue to review the zone identification.

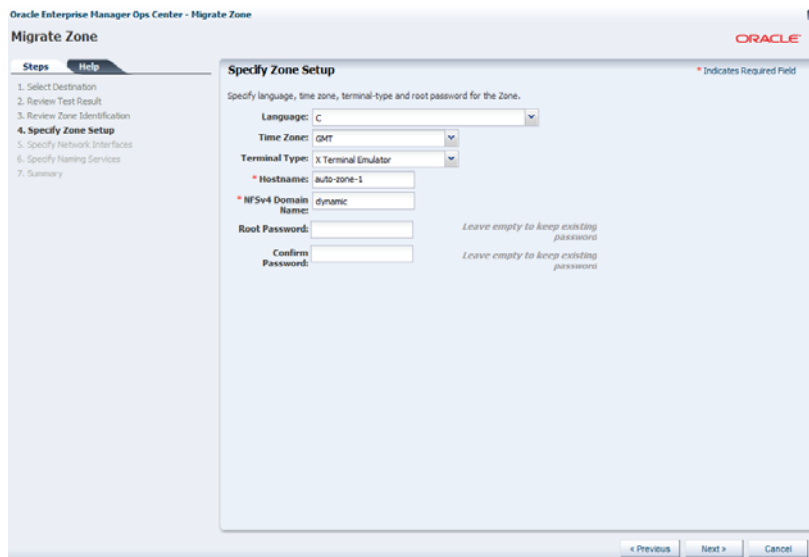


6. If the zone name exists in the target global zone, you must change the zone name. In this example, it is not required to change the name of the zone. Click Next to specify the zone setup.



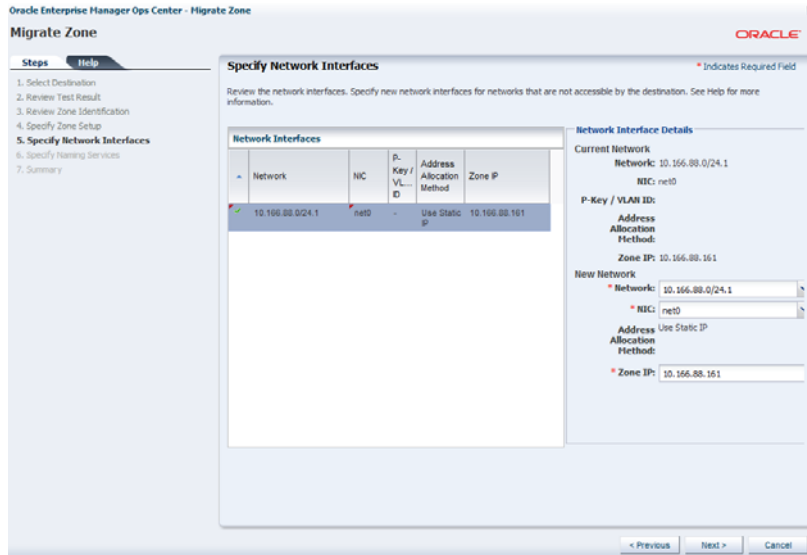
7. Retain the zone setup from the source global zone.

Leave the password fields empty to use the existing password. Click Next to define the network interfaces.

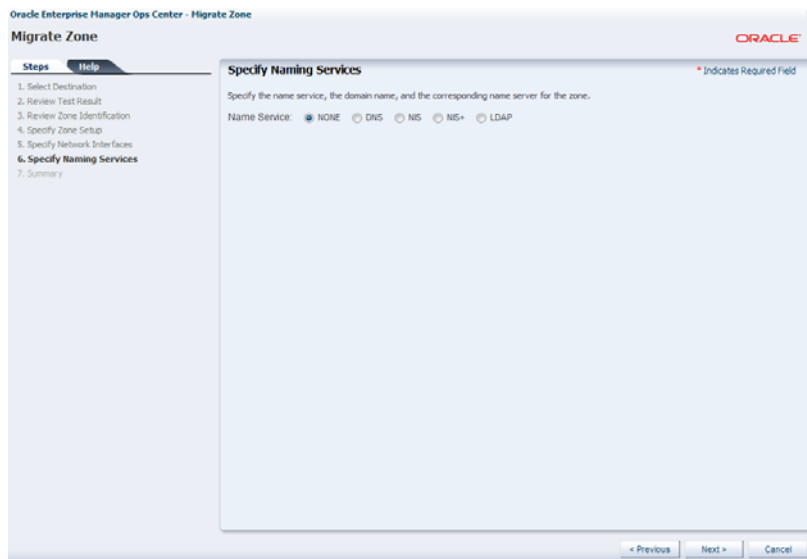


8. The network interfaces of the source global zone that are accessible to the target global zone are mapped accordingly. Since the global zones are placed in a server pool, the zone network connections remains the same and there is no change in the zone IP.

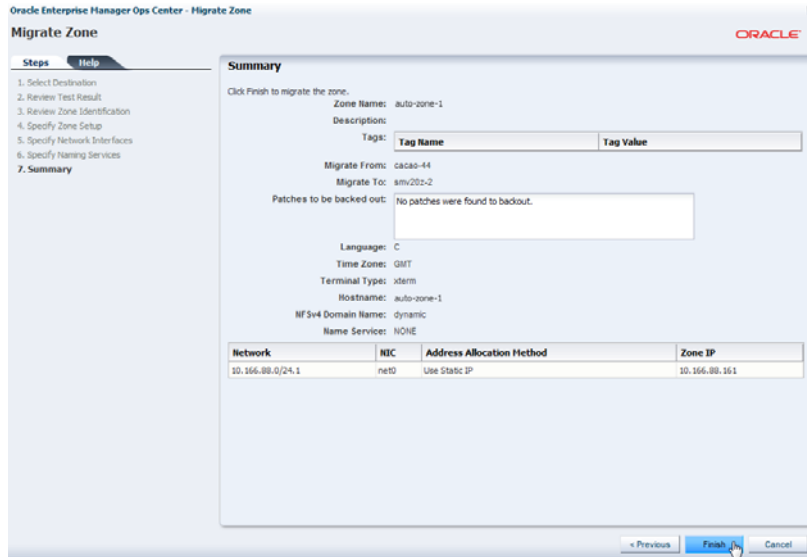
Click Next.



9. Select None for the naming service of the zone.  
Click Next.

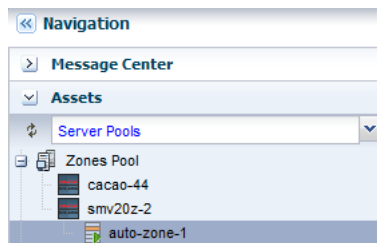


10. Review the summary of the migration job. Click Finish to submit the migration job.



## Zone Migration Job

The zone migration is a cold migration as the zone is shut down, migrated to the target global zone, and then booted. You can see in this example, the zone is migrated to the selected target global zone in the server pool.



The zones in a server pool remain attached to the global zone even when the global zone is removed from the server pool.

## What's Next?

You can manage the lifecycle of your zones or manage your zone configuration. See [Related Articles and Resources](#) for more information about zones.

## Related Articles and Resources

The Oracle Enterprise Manager Ops Center 12c documentation is located at <http://www.oracle.com/pls/topic/lookup?ctx=oc121>.

See the following guides for more information:

- *Oracle Enterprise Manager Ops Center Feature Reference Guide* for information about zones and server pools.
- *Oracle Enterprise Manager Ops Center Administration Guide* for information about user roles and permissions.

Other examples are available at [http://docs.oracle.com/cd/E27363\\_01/nav/howto.htm](http://docs.oracle.com/cd/E27363_01/nav/howto.htm).

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