

Oracle® Enterprise Manager Ops Center

Discover a Kernel Zone

12c Release 3 (12.3.0.0.0)

E60838-01

June 2015

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

Introduction

This guide explains how to discover an Oracle Solaris 11 kernel zone.

Oracle Solaris 11 kernel zones each have a separate kernel from the global zone, giving you more flexibility in terms of their operating system level.

Oracle Enterprise Manager Ops Center provides basic monitoring and management for Oracle Solaris 11 kernel zones. To enable these capabilities, you must fully discover the kernel zone.

Unlike other types of zone, kernel zones are not fully discovered and managed when the global zone is discovered. The operating system of the kernel zone must be discovered in addition to the global zone, although the two discoveries can be combined in a single discovery job.

In this document, you will create and use a discovery profile to discover a global zone, a kernel zone hosted on that global zone, and the kernel zone's operating system.

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

What You Will Need

You will need the following:

- A configured Enterprise Controller.
- A user with the Ops Center Admin role.
- A global zone hosting a configured kernel zone.
- The IP addresses of the global zone and kernel zone.

Discover the Global Zone and Kernel Zone Using a Discovery Profile

A discovery profile is a combination of an asset type, a set of host names or IP addresses, and a set of credentials. You can use discovery profiles to locate specific systems such as a global zone and a kernel zone.

The tasks that are covered in this section are as follows:

- [Create Credentials](#)
- [Create a Discovery Profile](#)
- [Add the Global Zone and Kernel Zone Using the Discovery Profile](#)

Create Credentials

Assets are managed using a set of credentials. You can create or use existing credentials to discover and connect with assets.

When creating a credential, if your target OS supports root login, enter a root user (or other privileged user) and leave the Privileged Role field blank. If the target OS does not support root login, then enter a non-root user that can login to the OS and also specify a root/privileged user in the Privileged Role field.

To discover a global zone and a kernel zone, create one set of credentials if the zones have the same login information, or create two sets of credentials if the zones have different login information.

To create credentials, perform the following steps:

1. In the Navigation pane, click **Plan Management**, then click **Credentials**.
2. In the Actions pane, click **Create Credentials**.
3. In the Protocol field, select **SSH** from the drop-down list.
4. In the Name field, enter a name for the credential.
5. (Optional) In the Description field, enter a description.
6. Select **Password** as the Authentication Type.
 - **Custom SSH Key:** If you prefer not to use password-based SSH credentials, you can create an SSH key to access to the operating system.
 - **Ops Center Key:** A new SSH key pair is generated. During discovery, Oracle Enterprise Manager Ops Center configures key-based authentication by installing the generated public key in the login account. Note that different credentials must be used to discover the Operating System before the new public key has been installed.
7. In the Login User field, enter a user name to login.
8. In the Password field, type a password. Retype the same password in the Confirm Password field.

Note: After the non-privileged user logs in, Oracle Enterprise Manager Ops Center runs the "su" command to elevate the user to a root/privileged user.

9. (Optional) If the target system does not allow root access, enter a name and password for the Privileged Role. Also, confirm the role password.
10. Enter the SSH port number. The SSH port number is populated by default.
11. Click **Create**.

The credentials are created.

Create a Discovery Profile

You can create a discovery profile and then run a discovery using the profile. You can provide some discovery information, such as the targeted IP addresses and the discovery credentials, during profile creation or when the profile is run.

1. In the Navigation pane, click **Plan Management**.
2. Under Profiles and Policies, click **Discovery**.
3. In the Actions pane, click **Create Profile**.
4. Enter a name and description for the discovery profile.
5. In the Asset Type, under Operating Systems, select **Solaris, Linux OS**. Click **Next**.
6. The tag page is displayed. Click **Next**.
7. The IP range page is displayed. Click **Next**.
8. In the Discovery Credentials wizard, click **Select** to choose an SSH protocol. Under Management, select **Deploy Agent Controller** option, then click **Next**.
9. Review the summary information, then click **Finish** to create the Discovery Profile.

Add the Global Zone and Kernel Zone Using the Discovery Profile

After you have created the discovery profile, you can run it to discover and manage the global zone and kernel zone.

This procedure assumes that you have already created a discovery profile with an IP range, a specified network, and discovery and management information.

1. Click **All Assets** in the Assets section of the Navigation pane.
2. Click **Add Assets** in the Actions pane.
3. Select **Add and Manage Various Types of Assets via Discovery Probes**, then click **Next**.
4. Select the newly-created discovery profile.
5. In the Hostnames/IP Addresses field, enter the IP addresses of the global zone and kernel zone in a comma-separated list.
6. In the network field, associate the targets with a managed network or use automatic routing to route the discovery to the appropriate Proxy Controller.
7. In the Discovery and Management sections, click **Select**, then select the discovery credentials you created.
8. Click **Add Now** to launch the discovery.

The discovery job is launched. When it is complete, the global zone, the kernel zone, the kernel zone operating system, and any nested zones installed on the kernel zone are displayed in the UI.

Related Articles and Resources

See the Oracle Solaris Zones in the *Oracle Enterprise Manager Ops Center Virtualize Reference* for information about other virtualization tasks.

This document is available in the Oracle Enterprise Manager Ops Center Documentation Library at http://docs.oracle.com/cd/E59957_01/index.htm.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Oracle Enterprise Manager Ops Center Discover a Kernel Zone, 12c Release 3 (12.3.0.0.0)
E60838-01

Copyright © 2007, 2015, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.