Oracle® Exalogic Elastic Cloud

ExaPasswd User's Guide

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This document describes how to install and use ExaPasswd, a tool that automates changing the passwords of the various hardware and software components of an Exalogic rack.

This document contains the following sections:

- Introduction to ExaPasswd
- Supported Platforms
- Installing ExaPasswd
- Using ExaPasswd
- Known Issues
- Documentation Accessibility

1 Introduction to ExaPasswd

An Exalogic rack consists of a variety of hardware and software components, each of which has unique credentials. Changing the passwords of each component would require you to log in to each component individually and synchronize the passwords with Exalogic Control. ExaPasswd automates this time-consuming process.

> **Note:**   Before running ExaPasswd for an Exalogic rack that was **upgraded** to EECS 2.0.6.0.0 from EECS 2.0.4.x.x, you must first synchronize the ECU configuration files with the current configuration of the machine, by running the ECU converter. The ECU converter is a tool that is included with ExaPatch. For more information about the ECU converter, see the ExaPatch User's Guide.

Table 1 lists the default users of an Exalogic rack and ExaPasswd's support for those components.

Table 1   Default Exalogic Credentials

Component	User	ExaPasswd Support
Physical components		
Linux Compute nodes	`root`	Yes
Solaris Compute nodes	`root`	**No**

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Table 1 (Cont.) Default Exalogic Credentials

Component	User	ExaPasswd Support
Oracle VM Server nodes	`root`	Yes
	`oracle` (Oracle VM agent)	Yes
Storage appliance	`root`	Yes
Compute node ILOMs	`root`	Yes (July PSU 2014 or later)
Storage appliance ILOM	`root`	Yes (July PSU 2014 or later)
InfiniBand switches	`root`	Yes (July PSU 2014 or later)
	`ilom-admin`	Yes (July PSU 2014 or later)
	`ilom-operator`	**No**
Management switch	`admin`	Yes
Power distribution units	`admin`	No
Exalogic Control[1]		
Exalogic Control vServer	`root`	Yes
Oracle Database	`emoc` (Database login)	Yes
	`emoc_ro` (Database login)	Yes
	`dbsnmp` (Database login)	Yes
	`ovs` (Database login)	**No**
	`sys` (Database login)	Yes
	`sysman` (Database login)	Yes
	`system` (Database login)	Yes
Proxy Controller vServers	`root`	Yes
Oracle VM Manager	`admin` (Oracle VM Manager login)	Yes
	`weblogic` (WebLogic Server login)	Yes

[1] In EECS release 2.0.6.x.x and later, the Exalogic Control stack consists of two Proxy Controller vServers and an Exalogic Control vServer, which hosts the Enterprise Controller, Oracle VM Manager, and Oracle Virtual Assembly Builder components. The Exalogic Control vServer also hosts the Oracle Database instance that is shared by EM Ops Center and Oracle VM Manager.

2 Supported Platforms

For a list of the EECS releases that are supported for ExaPasswd, see the My Oracle Support document ID 1912063.1.

3 Installing ExaPasswd

For instructions on installing ExaPasswd, see the Exalogic LifeCycle Toolkit My Oracle Support document ID 1912063.1.

After following the instructions in the My Oracle Support document, you can run ExaPasswd from `/exalogic-lctools/bin/`.

4 Using ExaPasswd

The following is the general syntax of the ExaPasswd command:

```
# ./exapasswd options
```

The options available to ExaPasswd vary depending on whether the Exalogic environment is physical or virtual.

This section contains the following topics:

4.1 ExaPasswd Options in Physical Environments

On physical environments, ExaPasswd supports only **component target** options. These options are suffixed with `-targets` and you must specify the address of each component for which you want to change the password.

Example: `--compute-nodes-targets`, `--infiniband-switches-targets`

ExaBR automatically obtains the passwords if password-less SSH has been configured between the specified components and the node running ExaPasswd. You can use the ExaBR `init-ssh` command to enable key-based authentication as described in Section 2.3.1, "Enabling Key-Based Authentication for ExaBR" in the *ExaBR User's Guide*. If password-less SSH is not enabled, ExaPasswd prompts for passwords.

Table 2 describes all the options applicable to ExaPasswd on physical environments.

Table 2   ExaPasswd Options in Physical Environments

Component	Option	Description
Compute nodes	`--compute-nodes-targets` `target1,[target2,...]`	Changes the `root` password(s) of the specified compute node(s). **Note:** ExaPasswd cannot change the passwords of **Solaris** compute nodes.
Compute node ILOMs	`--compute-node-iloms-targets` `target1,[target2,...]`	Changes the password(s) of the specified compute node ILOM(s).
Storage nodes	`--storage-nodes-targets` `target1,[target2,...]`	Changes the password(s) of the specified storage node(s). **Note:** For the storage nodes, ExaPasswd changes the password of the active head. As the storage nodes are configured in an active-passive cluster by default, the password of the active head is synchronized with the passive head.
Storage node ILOMs	`--storage-node-iloms-targets` `target1,[target2,...]`	Changes the password(s) of the specified storage node ILOM(s).

Table 2   (Cont.) ExaPasswd Options in Physical Environments

Component	Option	Description
InfiniBand switches	`--infiniband-switches-targets` `target1,[target2,...]`	Changes the password(s) of the specified InfiniBand switch(es).
Management switch	`--cisco-switch-targets management_` `switch_address`	Changes the password of the specified management switch. ExaPasswd tool supports both SSH and telnet access. By default, ExaPasswd uses SSH access and logs in to the management switch using the `root` user. If the user name of your management switch is not `root`, use the `--cisco-user` option.
	`--cisco-user username`	If the user name of the management switch is not `root`, use this option to specify the user name ExaPasswd should use. his option must be used with the `--cisco-switch-targets` option. ExaPasswd will log in with this user and modify the password of the user.

4.2 ExaPasswd Options in Virtual Environments

In virtual environments, ExaPasswd has two types of options:

- When the Exalogic Configuration Utility (ECU) files are present, use **component** options. Component options run on all components of the specified type and ExaPasswd uses the ECU files to obtain the addresses of the components.

    Example: `--compute-nodes`, `--infiniband-switches`

- When the ECU files are not present, use **component target** options. These options are suffixed with `-targets` and you must specify the address of each component for which you want to change the password.

    > **Note:**   On virtual environments, when using the **component target** options, you must use the `--emoc` option to specify the IP address or host name of Exalogic Control. ExaPasswd uses this address to connect to Exalogic Control and synchronize the new password.
    >
    > On virtual environments, Oracle recommends that you use the component target options only when the ECU files are not present.

    Example: `--compute-nodes-targets`, `--infiniband-switches-targets`

ExaPasswd automatically obtains the passwords in the following scenarios:

- The rack is using the factory default passwords that were configured by the ECU.

- Password-less SSH has been configured between the specified components and the compute node running ExaPasswd. You can use the ExaBR `init-ssh` command to enable key-based authentication as described in Section 2.3.1, "Enabling Key-Based Authentication for ExaBR" in the *ExaBR User's Guide*.

In all other scenarios, ExaPasswd prompts for the passwords for each component.

Table 3 describes the options of ExaPasswd on virtual environments.

Table 3   ExaPasswd Options in a Virtual Environment

Component	Option	Description
For all components	`--emoc exalogic_control_address`	When using any of the **component target** options in a virtual environment, you must specify this option. Use this option to specify the IP address or host name of Exalogic Control. **Note:** In virtual environments, only use the `--emoc` option when the ECU configuration files are not present.
Compute nodes	`--compute-nodes`	Changes the `root` passwords of all the compute nodes.
	`--compute-nodes-targets target1,[target2,...]`	Changes the `root` password(s) of the specified compute node(s). Oracle recommends that you use this option only when the ECU files are not present.
Compute node ILOMs	`--compute-node-iloms`	Changes the passwords of all the compute node ILOMs.
	`--compute-node-iloms-targets target1,[target2,...]`	Changes the password(s) of the specified compute node ILOM(s). Oracle recommends that you use this option only when the ECU files are not present.
Storage nodes	`--storage-nodes`	Changes the passwords of all the storage nodes.
	`--storage-nodes-targets target1,[target2,...]`	Changes the password(s) of the specified storage node(s). Oracle recommends that you use this option only when the ECU files are not present. **Note:** For the storage nodes, ExaPasswd changes the password of the active head. As the storage nodes are configured in an active-passive cluster by default, the password of the active head is synchronized with the passive head.
Storage node ILOMs	`--storage-node-iloms`	Changes the passwords of all the storage node ILOMs.
	`--storage-node-iloms-targets target1,[target2,...]`	Changes the password(s) of the specified storage node ILOM(s). Oracle recommends that you use this option only when the ECU files are not present.

Table 3   (Cont.) ExaPasswd Options in a Virtual Environment

Component	Option	Description
InfiniBand switches	`--infiniband-switches`	Changes the passwords of all the InfiniBand switches.
	`--infiniband-switches-targets target1,[target2,...]`	Changes the password(s) of the specified InfiniBand switch(es). Oracle recommends that you use this option only when the ECU files are not present.
Management switch	`--cisco-switch`	Changes the password of the management switch. ExaPasswd tool supports both SSH and telnet access. By default, ExaPasswd uses SSH access and logs in to the management switch using the `root` user. If the user name of your management switch is not `root`, use the `--cisco-user` option.
	`--cisco-switch-targets management_switch_address`	Changes the password of the specified management switch. Oracle recommends that you use this option only when the ECU files are not present. ExaPasswd tool supports both SSH and telnet access. By default, ExaPasswd uses SSH access and logs in to the management switch using the `root` user. If the user name of your management switch is not `root`, use the `--cisco-user` option.
	`--cisco-user username`	This option must be used with the `--cisco-switch` or `--cisco-switch-targets` option. This option allows you to specify the user name of the management switch. By default, these options use the `root` user.
All hardware components	`--all-physical`	Changes the passwords for all hardware components of a rack.
Oracle VM agents	`--ovs-agents`	Changes the passwords of the Oracle VM agents.
	`--ovs-agents-targets exalogic_control_address`	Changes the passwords of the specified Oracle VM agents. The IP address or host name of the Oracle VM Manager vServer should be specified. Oracle recommends that you use this option only when the ECU files are not present.
Oracle VM Manager `admin` user	`--ovm-admin`	Changes the password of the Oracle VM Manager `admin` user.
	`--ovm-admin-targets target1`	Changes the password of the specified Oracle VM Manager `admin` user. Oracle recommends that you use this option only when the ECU files are not present.

Table 3   (Cont.) ExaPasswd Options in a Virtual Environment

Component	Option	Description
Oracle VM Manager database	`--ovm-database`	Changes the passwords of the `sys`, `system`, `sysman`, and `dbsnmp` database users.
	`--ovm-database-targets` *exalogic_control_address*	Changes the passwords of the `sys`, `system`, `sysman`, and `dbsnmp` database users. Oracle recommends that you use this option only when the ECU files are not present.
Exalogic Control database	`--emoc-database`	Changes the passwords of the `emoc` and `emoc_ro` database users.
	`--emoc-database-targets` *exalogic_control_address*	Changes the passwords of the `emoc` and `emoc_ro` database users. Oracle recommends that you use this option only when the ECU files are not present.
Exalogic Control vServers	`--control-vms`	Changes the passwords for all the Exalogic Control vServers.
	`--control-vms-targets` *target1*,[*target2*,...]	Changes the password(s) for the specified Exalogic Control vServer(s). Oracle recommends that you use this option only when the ECU files are not present.
All virtual components	`--all-virt`	Changes the passwords for all the software components of a rack.
All physical and virtual components	`--all`	Changes the passwords for both the physical and software components of the rack

4.3 Running ExaPasswd

Run ExaPasswd as follows:

> **Note:**   When you update passwords using ExaPasswd, the tool does not update the ECU files with these new passwords. However ExaPasswd can still use the ECU files to obtain the addresses of the various components.

1. Log in to the compute node on which you installed the Exalogic Lifecycle Toolkit as described in Section 3, "Installing ExaPasswd."

> **Note:**   On virtual environments, you must run ExaPasswd from the compute node that has the ECU configuration files.

2. Navigate to the directory that contains ExaPasswd:

    ```
    cd /exalogic-lctools/bin/
    ```

3. Run ExaPasswd in one of the following ways:

- To run ExaPasswd on a specific target on a **physical environment**, run ExaPasswd as follows:

  ```
  ./exapasswd --target_name target1,[target2,...]
  ```

  For a list of various targets, see Section 4.1, "ExaPasswd Options in Physical Environments."

  Example:

  ```
  ./exapasswd --infiniband-switches-targets ib01.example.com,ib02.example.com
  --cisco-switch-targets mgmt.example.com --cisco-user admin
  ```

- To run ExaPasswd on a type of component for **virtual environments on which the ECU files are present**, run ExaPasswd as follows:

  ```
  ./exapasswd --component-type
  ```

  For a list of various component types, see Section 4.2, "ExaPasswd Options in Virtual Environments."

  Examples:

  ```
  ./exapasswd --all
  ./exapasswd --control-vms --emoc-database
  ```

- To run ExaPasswd on a specific target for **virtual environments on which the ECU files are not present**, run ExaPasswd as follows:

  ```
  ./exapasswd --emoc address_of_exalogic_control --target_name
  target1,[target2,...]
  ```

  For a list of various targets, see Section 4.2, "ExaPasswd Options in Virtual Environments."

  Example:

  ```
  ./exapasswd --emoc elcont.example.com --infiniband-switches-targets
  ib01.example.com
  ```

ExaPasswd displays the number of components for which the passwords will be changed.

4. Verify if the number of components is correct and press y to continue.

   ExaPasswd displays a list of the targets.

5. When prompted, enter the new passwords.

4.4 ExaPasswd Log Files

ExaPasswd stores log files on the compute node on which ExaPasswd is run in the /var/log/ directory in the format exapasswd-*YYMMDD-HHMMSS*.log.

5 Known Issues

For known issues, see the Exalogic LifeCycle Toolkit My Oracle Support document ID 1912063.1

6 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.

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