## Oracle® Exalogic Elastic Cloud

Capacity on Demand Information on Oracle Exalogic Physical Linux

Release Oracle Exalogic Elastic Cloud X4-2, X5–2, and X6-2 **E61390–01** 

April 2017



Oracle Exalogic Elastic Cloud Capacity on Demand Information on Oracle Exalogic Physical Linux, Release Oracle Exalogic Elastic Cloud X4-2, X5–2, and X6-2

E61390-01

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## **Preface**

This document describes the licensing information for an Exalogic rack and the concept of capacity on demand for Exalogic physical Linux installations.

### **Audience**

This guide is intended for Oracle Exalogic machine customers and those responsible for data center site planning.

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### **Conventions**

The following text conventions are used in this document:

| Convention | Meaning  |
|------------|--|
| boldface   | Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.         |
| italic     | Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.                          |
| monospace  | Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter. |

# Capacity on Demand Information on Oracle Exalogic Physical Linux

Capacity on Demand (CoD) is a sub-capacity operating option for Oracle Exalogic physical Linux installations. This option involves turning off a subset of processor cores during installation. Additional cores can be turned on and the applicable software licenses obtained as the need for processing capacity grows.

In order to use the CoD feature, one of the following must occur within three months of installation:

- Purchase the Oracle technical support services necessary to enable eligibility for receipt of Oracle Platinum Services, and then continuously maintain those services.
- Install, and then continuously utilize Oracle Configuration Manager in connectedmode.
- Install, and then continuously utilize Enterprise Manager 12c either in disconnected mode or connected mode.

### Restrictions

- 1. CoD applies only to new Exalogic physical Linux installations. CoD cannot be applied retroactively after an Exalogic system has been installed.
- **2.** Minimum number of cores that must be enabled:
  - **a.** For the Oracle Exalogic Elastic Cloud X6-2 system, a minimum of 40% of cores per node must be enabled. An Oracle Exalogic Elastic Cloud X6-2 compute node has 2 Intel 22-core processors, so a minimum of 16 cores per node (i.e. 8 cores in each processor) must be enabled.
  - **b.** For the Oracle Exalogic Elastic Cloud X5-2 system, a minimum of 40% of cores per node must be enabled. An Oracle Exalogic Elastic Cloud X5-2 compute node has 2 Intel 18-core processors, so a minimum of 14 cores per node (i.e. 7 cores in each processor) must be enabled.
  - **c.** For the Exalogic X4-2 system, a minimum of 50% of cores per node must be enabled. An Exalogic X4-2 compute node has 2 Intel 12-core processors, so a minimum of 12 cores per node (i.e. 6 cores in each processor) must be enabled.
- **3.** Additional cores can be enabled in increments of 2 cores per node (i.e. 1 core in each processor).
- **4.** Each compute node in an Exalogic rack can have a different number of cores enabled provided each node complies with the requirement to enable a minimum

- number of cores as stated above. For instance, an Oracle Exalogic Elastic Cloud X5-2 Eighth rack can have one compute node with 14 active cores, another compute node with 16 active cores and so on.
- 5. During Exalogic installation, the installation engineer will install the CoD utility, which is called the *Resource Control Utility* (see MOS Note 1671659.1), activate the number of cores specified by the customer in the Exalogic Configuration Utility and disable the remaining cores. The installation engineer will include the CoD report along with the Exalogic installation reports in the Oracle installation tracking system, as well as in the customer installation documentation.
- **6.** The *Resource Control Utility* provides scripts to show and change the number of active cores. Post installation, when the customer needs additional processing capacity they can run the utility scripts to increase the number of active cores provided that they also procure additional software licenses as required.
- **7.** CoD operating model allows customers to **enable**, not disable, cores as needed. In other words, the customer cannot disable cores that are already enabled.
- **8.** The *Exachk* utility or the *Resource Control Utility* can be used to validate the number of active cores at any time.
- **9.** Exalogic systems purchased under Infrastructure as a Service are not eligible for this CoD operating option.
- **10.** Existing Exalogic X2-2/X3-2 nodes are not eligible for CoD. However, when upgrading existing Exalogic X2-2/X3-2 nodes with physical Linux installations to new nodes (Exalogic X4-2 and future generations) with physical Linux installations, CoD can be used on the new nodes.