Deploying an Exadata DB System on Oracle Cloud Infrastructure

You can find the most recent versions of the Oracle Cloud Infrastructure white papers at <https://cloud.oracle.com/iaas/technical-resources>.

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**Introduction**

This white paper provides step-by-step guidelines for deploying an Exadata DB system on Oracle

Cloud Infrastructure. This paper outlines some best practices; it is not intended to be used as a full reference guide for implementing Exadata.

This document assumes that you have a basic understanding of various components of Oracle

Cloud Infrastructure:

* Fundamentals of Oracle Cloud Infrastructure
* Oracle Cloud Infrastructure Networking, specifically virtual cloud networks (VCNs), subnets, security lists, and route tables
* Oracle Cloud Infrastructure Identity Access Management (IAM)

**Overview of Exadata on Oracle Cloud Infrastructure**

An Exadata DB system consists of a quarter rack, half rack, or full rack of compute nodes and

storage servers, tied together by a high-speed, low-latency InfiniBand network and intelligent

Exadata software. You can configure automatic backups, optimize for different workloads, and

scale up the system to meet increased demands.

The compute nodes are each configured with a virtual machine (VM). You have root privilege for

the compute node VMs, so you can load and run additional software on them. However, you do

not have administrative access to the Exadata infrastructure components, such as the physical

compute node hardware, network switches, power distribution units (PDUs), integrated lights-out

management (ILOM) interfaces, or the Exadata Storage Servers, which are all administered by

Oracle.

You have full administrative privileges for your databases, and you can connect to your databases

by using Oracle Net Services from outside Oracle Cloud Infrastructure. You are responsible for

database administration tasks such as creating tablespaces and managing database users. You

can also customize the default automated maintenance setup, including backups, and you have

full control of the recovery process in the event of a database failure.

Oracle Cloud Infrastructure offers two versions of Exadata, X6 and X7, and each version comes

with three shapes. For details about these shapes, see the System Configuration section of the

Exadata DB Systems topic in the Database service documentation.

Note: Actual usable storage for the DATA disk group depends on the backup option that you choose when

you launch an Exadata DB system. See the Exadata DB system documentation for details.

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Supported Database Edition and Versions

**Steps to Launch an Exadata DB System on Oracle Cloud Infrastructure**

This section provides the steps to create the required networking components and launch an Exadata DB system in Oracle Cloud Infrastructure. References to the Oracle Cloud Infrastructure Networking and Database services documentation are provide for detailed steps.

Step 1: Create a VCN

1. Sign in to the Oracle Cloud Infrastructure Console.

2. Create a VCN, following the steps in To create a cloud network. For this example, enter the following values in the Create Virtual Cloud Network dialog box:

* ? For Name, enter ExaVCN.
* ? Select Create Virtual Cloud Network Only
* For CIDR Block, enter 10.0.0.0/16.

Note: We recommend using one of the private IP address ranges specified in RFC 1918

(10.0.0.0/8, 172.16/12, and 192.168/16). However, you can use a publicly routable range. The

VCN’s CIDR must not overlap with your on-premises network or another VCN you peer with.

For details, see Access to Other VCNs: Peering.

* ? Select the Use DNS Hostnames in This VCN check box.
* ? For DNS Label, enter exavcn.