

ORACLE RAC ONE NODE

KEY FEATURES AND BENEFITS

EXTENDS BENEFITS OF
SERVER VIRTUALIZATION TO
SINGLE-INSTANCE
DATABASES ON PHYSICAL
HARDWARE

FEATURES

- Consolidation
- Cluster Failover
- Live Migration - Omotion
- Rolling Patches
- Online upgrade to Oracle RAC
- Certified with Oracle Virtual Machine

BENEFITS

- **High Availability**
 - Failover protection for database and server failures
 - Operating System Rolling Upgrades and Patches
 - Database Rolling Patches
- **Performance**
 - Server scalability with no core limit
 - Online load balancing and scale-up
 - Online upgrade to Oracle RAC
- Support for all Oracle supported platforms
- Standardized database deployment across enterprise
- Increases the benefit of Oracle VM with the high availability and scalability of Oracle RAC

Oracle RAC One Node is a single instance of Oracle RAC running on one node in a cluster. Many databases can be consolidated into a single cluster with minimal overhead yet providing the high availability benefits of failover protection, online rolling patch application, as well as rolling upgrades for Operating System and Oracle Clusterware. You can limit the resource utilization using Oracle Database Resource Manager Instance Caging. There is no limit to server scalability and if applications grow to require more resources than a single node can supply, they can be easily upgraded online to Oracle Real Application Clusters. If the node running your Oracle RAC One Node becomes overloaded, you can migrate the instance to another node in the cluster using the Omotion online migration utility with no downtime for application users.

Cluster Consolidation with Oracle RAC One Node

With Oracle RAC One Node you can standardize all Oracle Database deployments across the enterprise. Oracle RAC One Node is supported on all platforms where Oracle Real Application Clusters (RAC) is certified. Many databases can be consolidated into a single cluster with minimal overhead while providing the high availability benefits of failover protection, online rolling patch application, as well as rolling upgrades for the operating system and Oracle Clusterware.

The Omotion utility is provided to migrate an Oracle RAC One Node instance to another node in the cluster without downtime to the application. Once the instance has been migrated, the node can be patched or upgraded. Once the maintenance is complete; the Oracle RAC One Node can be migrated back to its original home.

Oracle Clusterware provides failover protection to Oracle RAC One Node. If the node fails, Oracle Clusterware will automatically restart the Oracle RAC One Node instance on another server in the cluster.

You can limit CPU utilization of individual database instances within the cluster through Resource Manager Instance Caging. You can dynamically change this limit if needed. With Oracle RAC One Node, there is no limit to server scalability and if applications grow to require more resources than a single node can supply, then you can easily upgrade your applications online to Oracle Real Application Clusters. If the node that is running your Oracle RAC One Node becomes overloaded, you can migrate the instance to another node in the cluster using the Omotion online migration utility with no downtime for application users.

Oracle RAC One Node with Oracle Virtual Machine

Oracle RAC One Node is certified Oracle Virtual Machine (Oracle VM). Oracle VM is a free, next-generation server virtualization and management solution that makes enterprise applications easier to deploy, manage, and support. Using Oracle RAC or Oracle RAC One Node with Oracle VM increases the benefit of Oracle VM with the high availability and scalability of Oracle RAC. If your VM is sized too small, you can migrate the Oracle RAC One instance to another larger Oracle VM node in the cluster (using Omotion) or move the Oracle RAC One instance to another Oracle VM node, and then resize the Oracle VM. When you move the Oracle RAC One Node instance to the newly resized Oracle VM node, you can dynamically increase any limits programmed with Resource Manger Instance Caging.

Contact Us

For more information about Oracle RAC One Node, please visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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