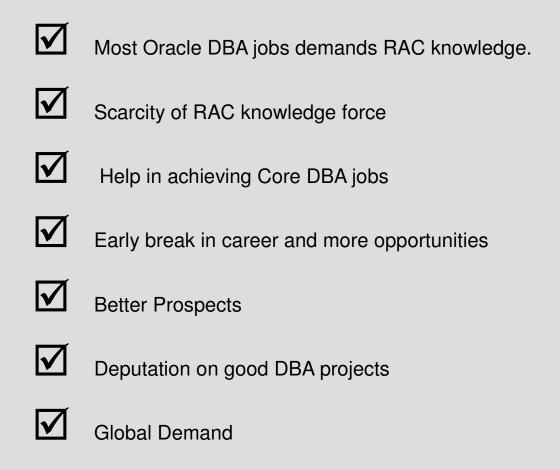
# Why Oracle RAC?



Experience	Oracle DBA profile	Oracle DBA with RAC and Linux profile
2 years	2 to 3 lacs yearly package	4 to 5 lacs yearly package
5 years	4 to 8 lacs yearly package	7 to 10 lacs yearly package

Source: ITS Alumni - Placement

# ITS DATA-SOLUTIONS PVT LTD

# **Oracle Real Application Cluster (RAC)**

# What is RAC?

RAC stands for Real Application Clusters. It allows multiple nodes in a clustered system to mount and open a single database that resides on shared disk storage. Should a single system (node) fail, the database service will still be available on the remaining nodes. A non-RAC database is only available on a single system. If that system fails, the database service will be down (single point of failure).

# **RAC Advantages**

- 100% Uptime
- Performance
- Scalability

# Why RAC ? (Oracle Real Application Cluster - Previously called OPS -Oracle Parallel Server)

Oracle Real Application Clusters (RAC) allows Oracle Database to run any packaged or custom application, unchanged across a server pool. This provides the highest levels of availability and the most flexible scalability. If a server in the pool fails, the Oracle database continues to run on the remaining servers. When you need more processing power, simply add another server to the pool without taking users offline. To keep costs low, even the highest-end systems can be built out of standardized, commodity parts.

# Advantages to Oracle DBA

RAC is Most Demanding skill for DBAs. What could be better than 24x7 availability, true scalability, rock-bottom hardware prices due to commodity servers, high performance, and maximum user concurrency? It all sounds like a miracle piece of software. Major Oracle DBA Jobs ask for RAC and Dataguard skills. If you know RAC as DBA you will have altogether different and better job opportunities in terms of growth than regular DBAs. Fresher DBAs are also considered differently if having RAC knowledge.

# Can any application be deployed on RAC?

Most applications can be deployed on RAC without any modifications and still scale linearly. Applications with 'hot' blocks (the same data blocks continuously accessed by processes on different nodes) may not work well. This is because data blocks will constantly be moved from one Oracle Instance to another. In such cases the application may need to be partitioned based on function or data to eliminate the contention. Oracle Real Application Clusters is a key component of Oracle's Maximum Availability

Architecture (MAA)1, which provides direction to architect the highest availability for applications. Oracle RAC provides the ability to remove the server as a single point of failure in any database application environment.

# Do you need special hardware to run RAC?

RAC requires the following hardware components:

- A dedicated network interconnect might be as simple as a fast network connection between nodes; and
- A shared disk subsystem.

Example systems that can be used with RAC:

- Windows Clusters
- Linux Clusters
- Unix Clusters like SUN PDB (Parallel DB).
- IBM z/OS in SYSPLEX
- HP Serviceguard extension for RAC

Many such more RAC concepts explore practically at ITS.

# **Course Contents**

# Oracle 11g RAC

# Installation of Clusterware and RAC

- Introduction to Real Application Clusters (RAC)
- Oracle Clusterware Installation and Configuration
- RAC Software Installation and Database Creation

# **RAC Database and Oracle Clusterware Administration**

- RAC Database Administration
- Oracle Clusterware Administration
- Managing Backup and Recovery in RAC

# **RAC Performance Tuning**

- RAC Instance Recovery and Performance Tuning
- Monitoring RAC Performance Using EM and ADDM

# Configure, Manage and Use Services in RAC

- Creating and Using Services in RAC
- · Managing Services in RAC

# **Diagnosing Oracle Clusterware and Node Management**

- Diagnosing and Debugging Oracle Clusterware and RAC Components
- · Adding and Removing Nodes in a RAC Cluster

# **High Availability in RAC**

- Configuring Connections for High Availability
- Designing for High Availability

# **About Trainer:**

15 years experience handling live servers (Production servers), have already trained more than thousands of students and professionals on various Oracle courses. 100% student satisfaction guaranteed \*

\* To learn RAC participant must have Oracle DBA knowledge and good command on Linux / Unix

For any question feel free to contact us on 9825306119, 99879558787

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