Oracle DBA Training Course

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Overview

Database Administrators (DBAs) are responsible for the design, implementation, support and maintenance of computerized databases in today's organizations. The role also includes architecting, building and scaling databases for future data growth and capacity. They are also responsible for security, performance and availability of data to users and customers.

All the above tasks are performed with the help of a Database Management System (DBMS) and the leading and most widely used DBMS across the world today are the Oracle, Microsoft SQL Server, MySQL database etc.

DBAs play an important and responsible role in every company's Information Technology (IT) department. DBAs are also **very well paid** and the average annual salary is **more than \$100,000** in the USA.

Furthermore, it is projected that the **demand for DBAs** will grow at the rate of 20% per year until 2022. <u>www.cnn.com</u> also published an article recently that Database Administrators are in the **TOP TEN** indemand jobs for the next decade.

The leading technology job portal in the United States – <u>www.dice.com</u> often reports in its monthly job reports that DBAs are in the "Most Difficult to Fill" (<u>due to shortage of qualified DBAs</u>) IT job.

About DBA University, Inc.

DBA University, Inc. is a professionally run organization based in Chicago, USA specializing in training and services in computer database administration and development. We are currently offering training in Oracle DBA, Oracle SQL & PL/SQL, SQL Server DBA and Java using expert instructors and excellent REMOTE LAB access through affordable prices.

We are very dedicated and committed towards the success of our students. Our courses are **very hands**on and aimed at **job placement** and preparing our students to face the real world with self-confidence

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and expert level technical skills in Oracle DBA, Oracle SQL & PL/SQL, SQL Server DBA and Java Programming.

Most of our courses are taught online and hence students all <u>over the world</u> are welcome to register for our courses. Registration for our upcoming courses can be done at <u>http://DBAuniversity.webex.com</u>

About Srini Ramineni – Oracle DBA Instructor and Founder of DBA University

The Oracle DBA training is provided by Srini Ramineni (Srini).

Srini's video http://video.dbauniversity.com/2dH69/dba-university-remote-dba-services/

Srini Ramineni is also the founder of DBA University and a well experienced IT Professional with solid experience and knowledge in Oracle DBA, Oracle SQL and PL/SQL. He is an ex Oracle Corporation employee and has provides training in an interactive method with lots of LAB practice work in his classes.

A person who has a good work experience need not be a good teacher and vice-versa. What makes Srini different from others is the way he teaches the Oracle DBA courses quoting real time problems he faced during his industry work experience and a practical way to resolve those problems. All the courses he teaches are bundled with lot of hands-on practice, challenging tests and above all, he makes his students fall in love with Database Administration.

He can be reached at srini@DBAuniversity.com

In short, Srini is a "results oriented" training provider with the dual aim of providing a world class training experience and helping our students secure a well paying and stable job as an Oracle DBA.

Eligibility

Anyone is eligible to register for the Oracle DBA course. But the below is our recommended target audience.

- 1. Students and Professionals who already have prior exposure to SQL language skills.
- 2. Students having a bachelor's degree or more in an Engineering/Computer Science/IT discipline.
- 3. Students and Professionals who have at least an associate/diploma certificate in Computer Science/IT.

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- 4. Professionals who already have work experience in a Computer Science/ IT field and want to change their careers to become an Oracle Database Administrator.
- 5. Organizations who want to provide Oracle DBA training to their employees.

Note: If you are new to Oracle databases, we strongly recommend you to first complete our Oracle SQL Training course at <u>http://www.dbauniversity.com/oracle_sql_training.html</u>

Pricing and Registration

We offer world class Oracle DBA training at an affordable price of \$599. With \$599, you get approximately 64 hours of quality instruction (and) approximately 400 hours of Dedicated REMOTE LAB for hands-on practice throughout the 8 weekends of training.

Please register online and pay online at http://DBAuniversity.webex.com

We accept online DEBIT CARD, CREDIT CARD or PayPal

Course Duration and Timings

Weekends ONLY (Saturday, Sunday)

- 1. Around 8 weekends (64 hours training) 16 sessions with each session for 4 hours along with a 30 min BREAK.
- 2. Saturday and Sunday ONLY
- 3. 8 am to 12:30 pm USA CENTRAL TIME (with 30 MIN BREAK from 10 am to 10:30 pm)

REMOTE LAB Access

- We provide the REMOTE IP address to the student to get access to server.
- The total no. of hours of LAB access is approximately 400 hours dedicated per student.
 - 16 hours each on Saturdays and Sundays5 hours each from Tuesday to Friday
- We provide LINUX 64-bit server as the operating system for the lab practical exercises.

Course Topics

Introduction to database management systems and databases

What is a database?

Popular database management system (DBMS) software and why Oracle DBMS.

History and Current trends of DBMS and Database Administration.

Oracle database market share and about its current competitive landscape.

Tasks of a Database Administrator.

Relational Database Model and Installing Oracle database software (11g R2 and 12c R1)

Designing a relational database using Entity-Relationship Modeling.

Understand pre-requisites for a successful Oracle RDBMS software installation.

Installation of Oracle 11g R2 database software.

Installation of Oracle 12c database software (Latest Release).

Oracle Database Architecture

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Planning for an Oracle database creation.
Creating an Oracle database using the MANUAL method .
Creating an Oracle database using the Graphical Tool (Database Configuration Assistant).
Startup and Shutdown of a database.
Components of an Oracle database and detailed architecture.
Advance Startup and Shutdown Scenarios.
Oracle database memory and process architecture.
The Oracle database job scheduler API (DBMS_SCHEDULER package)
Database storage

Oracle tablespaces and allocation types. How to createt small file (default) and big file tablespaces. How to create datafiles with fixed size and autoextend option. What are control files and how to view control file content in a trace file. How to rename datafiles in a controlfile. Oracle Redolog File architecture and best practices. Enabling Archivelog mode for a database with automatic archiving. Temporary tablespaces and temporary tablespace groups (11g R2 new feature).

Oracle Networking

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Introduction to Oracle Net Services component. Oracle listener configuration (Dynamic and Static Listeners). Dynamic Service Registration and Naming Methods configuration in sqlnet.ora. Oracle database connections from other computers. Oracle netca (Network Configuration Assistant) tool for configuration file generation. Oracle listener administration and TNS_ADMIN environment variable. What are database links and learn about best practices in creating them.

User Administration and Security

How to create database users. How to set database profile limits for a user for efficient resource management. Unlocking a user account and enabling password management. Oracle database authorization using object and system privileges Oracle database authorization using database roles How to audit Oracle database connections in XML mode and database mode (AUD\$ table) How to audit Oracle DBA commands (SYS Operations).

Used Managed (Manual) Backup and Recovery

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Introduction and planning for a robust Backup and Recovery Strategy. How to take an Oracle database backup in offline mode (COLD BACKUP). Hot to take an Oracle database backup in online mode (HOT BACKUP). How to clone a database using Cold Backup. How to clone a database using Hot Backup. How to recreate source database from a user-managed backup (Media failure scenario) **RMAN Backup and Recovery** Advantages of RMAN method compared to manual method. Database backup using RMAN in normal and compressed mode. Oracle database backup metadata. Database backup using RMAN catalog. Querying the RMAN metadata. How to clone a database using RMAN duplicate (*11g R2 new feature: Backup based duplication*).

How to restore and recover a database using its backup in the event of a media failure.

Oracle database backup retention policies and backups to Tape/offsite.

Fast Recovery Area for better management of backups and archive log files.

How to purge old backups using RMAN.

Oracle database upgrades

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Introduction to Oracle versions and how to understand a version. How to upgrade from a previous release to Oracle 12c. How to upgrade from one patchset to another patchset within a release. What is slip-streaming ? What are one-off/interim patches. What are quarterly CPU patches (Cumulative Patch Updates) Learn about Oracle Interim Patch Installer (OPATCH).

Oracle 12c database creation (non-CDB) and new features

How to create a non-CDB (traditional database) using 12c's dbca utility

Learn about the improvements in dbca utility

How to configure and use Oracle Enterprise Manager Database Express web based tool.

Oracle 12c Multitenant Architecture new feature

Understanding Container database (CDB) and Pluggable Database (PDB) in Oracle 12c release. How Oracle 12c CDB,PDB instance architecture differs from previous version architectures. How to create a non-CDB database in Oracle 12c (Traditional database) using DBCA Tool. How to create a CDB database in 12c (using the multitenant feature). How to move (plug) the non-CDB database into the CDB database as a pluggable database (PDB). Real world Business use cases for using Oracle 12c Multitenant architecture.

Oracle Data Movement Utilities

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Oracle database logical backup and restore operations (Data Pump Export and Import). Business use cases of logical backups compared to physical backups. Various Data Pump Export modes. Data Pump Import to import data from an export backup. Advanced features in Oracle Data Pump Export.

Oracle Database Performance Tuning

How to handle performance issues in the real world. V\$ dynamic views for performance monitoring and analysis. How to size the Oracle database memory structures for optimal performance. Oracle database wait events. Explain Oracle UNDO management internals and sizing. Explain Oracle TEMP space internals and sizing. How to trace database sessions using DBMS_MONITOR and DBMS_SESSION packages. How to format SQL trace files using the tkprof utility. Database wide tracing for Oracle Errors (Event Tracing). Index Monitoring and internals of index maintenance by Oracle. Statistics data collection for Oracle database optimizer. What is Oracle automatic workload repository (AWR) and how to obtain AWR reports.

Real world life of an Oracle DBA

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Type of Oracle errors . Valid errors and internal exceptions (ORA-00600 and ORA-07445 errors).

How to work with Oracle Support to create Service Requests.

Parlance and terminology used by Oracle DBAs.

Working with Oracle Forums for issues.

Productivity tools required when you join the work place.

Scheduling JOBS and scripts through UNIX/LINUX crontab utility.

Oracle 12c ASM (Automatic Storage Management)

For RAC, ASM and Data Guard we have a separate 6 week (40 hour) course conducted by Michelle. Please click <u>http://www.dbauniversity.com/oracle_rac_asm_dg_training.html</u> to register for this course. One must either have at least 1 year of Oracle DBA work experience (or) should have taken our Oracle DBA Training course before registering for this separate course by Michelle.

Oracle Database High Availability (RAC, DataGaurd)

For RAC, ASM and Data Guard we have a separate 6 week (40 hour) course conducted by Michelle. Please click <u>http://www.dbauniversity.com/oracle_rac_asm_dg_training.html</u> to register for this course. One must either have at least 1 year of Oracle DBA work experience (or) should have taken our Oracle DBA Training course before registering for this separate course by Michelle.

Unique Teaching Methodology

We use a *DIGITAL WHITE BOARD* for teaching our online courses. Teaching with a DIGITAL WHITE BOARD gives our students a traditional *classroom like experience*. The instructor writes and draws by free hand on the DIGITAL WHITE BOARD and all our students can see it in real time in the online classroom.

Please attend a FREE DEMO session at <u>http://DBAuniversity.webex.com</u>. We will give a DEMO on the DIGITAL WHITE BOARD, LAB access and all your questions will be answered.

More Information

- 1. Please register online for the Oracle DBA course at http://DBAuniversity.webex.com
- 2. Please read our Frequently Asked Questions (FAQ) page at <u>http://www.DBAuniversity.com/faq.html</u> if you have more questions.
- 3. For any additional information email <u>info@DBAuniversity.com</u>. To reach the course instructor directly, please email <u>srini@DBAuniversity.com</u>