

# Oracle Application Express: Administration Ed 2

**Course Duration: 16 Hours**

**Course code: OAE-ADM**

## 1. Course Overview

This course is designed for database administrators, developers, and IT professionals who want to manage and maintain Oracle Application Express (APEX) environments. Participants will learn how to install, configure, secure, monitor, and troubleshoot APEX applications and infrastructure. The course combines hands-on exercises and best practices for administering APEX in enterprise environments.

## 2. What you'll learn?

**By the end of this course, learners should be able to:**

- Describe Oracle APEX architecture and components
- Install and configure Oracle APEX environments
- Manage workspaces, applications, and users
- Apply security best practices for applications and the environment
- Perform monitoring, auditing, and performance tuning
- Backup, restore, and upgrade APEX instances
- Troubleshoot common issues in APEX environments

## 3. Target Audience

- Database Administrators (DBAs)
- Application Developers
- IT Administrators managing Oracle environments
- Technical Leads responsible for enterprise APEX deployments

## 4. Pre-Requisites

**Familiarity with:**

- Oracle Database architecture and administration
- Basic SQL and PL/SQL

- Web application concepts
- Oracle tools and utilities (helpful but not mandatory)

## 5. Course content

### Module 1: Course Introduction

- Introduction
- Course contents

### Module 2: Overview of Oracle APEX

- What is Oracle Application Express
- Architecture and components
- Use cases and benefits

### Module 3: Installing and Configuring APEX

- Installation prerequisites
- Installing APEX on Oracle Database
- Configuring web listeners and RESTful services
- Environment setup and workspace creation

### Module 4: Managing Workspaces and Users

- Creating and managing workspaces
- User roles and privileges
- Managing developer and end-user access
- Authentication and authorization schemes

### Module 5: Application Administration

- Managing applications and components
- Deploying and versioning applications
- Application lifecycle management

## **Module 6: Security Administration**

- Implementing authentication and authorization
- Session management
- Data protection and encryption
- Secure coding best practices

## **Module 7: Monitoring and Auditing**

- Tracking user activity
- Auditing workspace and application access
- Using APEX monitoring tools and reports

## **Module 8: Performance Tuning**

- Identifying bottlenecks
- Optimizing SQL and PL/SQL performance
- Tuning application components
- Caching and session management

## **Module 9: Backup, Recovery, and Upgrades**

- Backing up APEX environments
- Restoring workspaces and applications
- Upgrading APEX versions
- Managing patches and updates

## **Module 10: Troubleshooting and Maintenance**

- Common errors and solutions
- Log analysis and diagnostics
- Best practices for maintenance and support

## **Module 11: Integration and Extensibility**

- RESTful services and web APIs
- Integrating APEX with external applications
- Using plug-ins and custom components

## Module 12: Case Studies and Wrap-up

- Real-world administration scenarios
- Best practices for enterprise deployments
- Course summary and Q&A

