GENERAL

# api 16c certification

Published: September 19, 2026 | Index ID: #-

## Introduction

In the fast moving world of database technology, staying current with industry standards is more than a career advantage—it's a necessity. Oracle's **API 16c certification** is a highly respected credential that demonstrates mastery of Oracle Database 16c's advanced features, architecture, and performance tuning. Whether you're a seasoned database administrator, a developer looking to deepen your knowledge, or a newcomer aiming to break into the field, earning this certification can open doors to new opportunities and elevate your professional profile.

This comprehensive guide will walk you through everything you need to know about the Oracle API 16c certification: what it is, why it matters, how the exam is structured, where to study, and how to prepare effectively. By the end, you'll have a clear roadmap to achieving this prestigious credential.

## What Is Oracle API 16c Certification?

Oracle's API 16c certification is an official recognition that an individual possesses the skills required to install, configure, administer, and troubleshoot Oracle Database 16c. It focuses on the database's core capabilities—such as data storage, SQL optimization, backup and recovery, security, and high availability features—alongside the specific enhancements introduced in the 16c release.

The certification is part of Oracle's broader certification program, which includes roles such as Oracle Database Administrator (OCA), Oracle Certified Professional (OCP), and Oracle Certified Master (OCM). The API 16c certification sits at the OCP level, indicating a deep technical understanding that goes beyond foundational knowledge.

## Why Pursue Oracle API 16c Certification?

There are several compelling reasons to invest time and effort into this certification:

- Industry Credibility: Oracle is a global leader in database technology. Certification signals to employers that you meet Oracle's rigorous standards.
- Career Advancement: Certified professionals often qualify for higher positions—such as senior DBA, database architect, or lead developer—and receive better compensation.
- Skill Validation: The exam tests real world scenarios, ensuring you can apply your knowledge effectively in production environments.
- Competitive Edge: In a talent rich market, certification distinguishes you from peers who may rely solely on experience.
- Continual Learning: Preparing for the exam encourages you to stay updated on the latest Oracle features and best practices.

## Oracle 16c Exam Overview

The Oracle API 16c certification exam—commonly referred to as the **Exam 1Z0-058**—is a computer based test administered by Pearson VUE. The exam is designed for professionals with at least one year of experience working with Oracle Database 16c.

**Exam Format:**

- Duration: 120 minutes
- Number of questions: 70–80 multiple  choice and multiple  select questions
- Passing score: 68%
- Languages: English, Chinese, Japanese, Spanish, French, German, Korean, and Portuguese

Oracle 16c introduces new features such as *In-Memory Column Store*, *Automatic Storage Management (ASM)* enhancements, and advanced security options. The exam tests your ability to leverage these features to optimize performance, ensure data integrity, and maintain high availability.

## Exam Objectives and Topics

Understanding the exam objectives is the first step in creating an effective study plan. The 16c certification exam covers the following high  level areas:

### 1. Installation and Configuration

• Installing Oracle Database 16c on various platforms (Windows, Linux, Solaris).\n• Configuring database parameters, memory allocation, and storage options.

### 2. Database Architecture and Design

• Understanding instance architecture, data files, redo logs, and control files.\n• Designing tablespaces, partitioning strategies, and data warehousing solutions.

### 3. SQL and PL/SQL Programming

• Writing efficient SQL queries, using indexes, and optimizing query plans.\n• Developing PL/SQL stored procedures, triggers, and packages.

### 4. Backup and Recovery

• Implementing RMAN, flashback technologies, and point in time recovery.\n• Configuring backup schedules and verifying backup integrity.

### 5. Security and Access Control

• Managing users, roles, and privileges.\n• Implementing Transparent Data Encryption (TDE) and Virtual Private Database (VPD).

### 6. Performance Tuning and Monitoring

• Using AWR, ASH, and Statspack for performance analysis.\n• Tuning memory structures and SQL statements.

### 7. High Availability and Disaster Recovery

• Configuring Data Guard, Real Application Clusters (RAC), and Flashback technologies.\n• Planning for failover, switchover, and disaster recovery scenarios.

### 8. Advanced Features of 16c

• Utilizing In-Memory Column Store for analytics.\n• Leveraging new features such as Automatic Storage Management (ASM) enhancements, and the new *Data Guard* features.

## Study Resources and Preparation Strategies

Preparing for the Oracle API 16c certification requires a mix of theoretical study and hands  on practice. Below are

the most effective resources and strategies to help you succeed.

### Official Oracle Documentation

Oracle's own documentation is the definitive source of truth. Focus on the *Oracle Database 16c Documentation* and the *Oracle Database 16c Installation Guide*. Key sections include:

- Installation and Configuration
- Database Architecture
- SQL Reference
- Backup and Recovery Guide
- Security Guide

### Oracle University Training Courses

Oracle University offers instructor led and online courses specifically tailored to the 16c exam. Popular courses include:

- Oracle Database 16c Administration
- Oracle Database 16c Performance Tuning
- Oracle Database 16c Security

These courses provide structured learning paths and hands on labs that mirror real world scenarios.

### Practice Exams

Practice exams are invaluable for measuring readiness. Look for reputable providers that offer Oracle 16c practice tests with detailed explanations. Some recommended resources include:

- Oracle's own practice exam (available through Oracle University)
- Third party platforms like Udemy, Pluralsight, or ExamTopics

### Hands On Labs

There's no substitute for real world experience. Set up a lab environment using Oracle Database 16c Express Edition or a virtual machine. Key labs to practice include:

- Installing Oracle Database 16c on Linux
- Configuring ASM and setting up tablespaces
- Implementing Data Guard and performing switchover
- Creating and optimizing PL/SQL packages
- Setting up TDE and VPD for security

### Study Groups and Forums

Engaging with peers can accelerate learning. Join communities such as:

- Oracle Technology Network (OTN) forums
- Reddit's r/OracleDB
- LinkedIn Oracle groups
- Discord servers dedicated to Oracle DBAs

These platforms allow you to discuss tricky topics, share study materials, and gain insights from experienced professionals.

## Recommended Study Plan

Below is a 12  week study plan that balances theory, practice, and review. Feel free to adjust the timeline based on your schedule and experience level.

1. Week 1–2: Foundations\n\nRead the Oracle Database 16c installation guide.
2. Set up a lab environment and complete the installation.
3. Review database architecture fundamentals.

- Study Oracle SQL Reference.
- Practice writing queries, joins, and subqueries.
- Develop PL/SQL blocks, procedures, and packages.

- Learn RMAN basics and advanced features.
- Set up backup schedules in your lab.
- Simulate point  in  time recovery scenarios.

- Study Oracle’s security guide.
- Implement user roles, privileges, and authentication methods.
- Configure TDE and VPD.

- Explore AWR and ASH reports.
- Optimize indexes and analyze query plans.
- Practice tuning memory structures.

- Set up Data Guard and RAC in the lab.
- Perform switchover and failover drills.
- Review disaster recovery best practices.

- Take multiple practice exams.
- Identify weak areas and revisit study materials.
- Schedule the official exam.

## Practice Exams and Sample Questions

Testing yourself under timed conditions is one of the best ways to prepare. Here’s a sample question to illustrate the exam style:

**Sample Question:**You have a database with a heavily used OLTP application. Which Oracle 16c feature would most effectively reduce disk I/O and improve query performance?

- A) Transparent Data Encryption (TDE)
- B) In-Memory Column Store
- C) Automatic Storage Management (ASM)
- D) Data Guard

**Answer:**B) In-Memory Column Store. This feature stores data in memory, drastically reducing disk I/O for analytical queries.

## Baca Juga (Artikel Terkait)

- **advanced engineering electromagnetics solution manual edition hardcover by balanis constantine a published by wiley**
  URL: http://djjsearch.com/advanced-engineering-electromagnetics-solution-manual-edition-hardcover-by-balanis-constantine-a-published-by-wiley.pdf
- **advanced engineering electromagnetics solutions manual**
  URL: http://djjsearch.com/advanced-engineering-electromagnetics-solutions-manual.pdf
- **advanced engineering electromagnetics wiley 1989 grading**
  URL: http://djjsearch.com/advanced-engineering-electromagnetics-wiley-1989-grading.pdf
- **advanced engineering fluid mechanics by biswas**
  URL: http://djjsearch.com/advanced-engineering-fluid-mechanics-by-biswas.pdf