Oracle Data Warehousing 11g Essentials – Exam Study Guide

The *Oracle Data Warehousing 11g Essentials (1Z0-515) Exam Study Guide* is designed to provide students with the information that can help them learn more to pass the *Oracle Data Warehousing 11g Essentials Exam (1Z0-515)*.

The exam audience is represented by professionals that are skilled in implementing solutions based using the Oracle Database as a data warehouse. The exam targets the intermediate-level implementation team member. Up-to-date training and field experience are recommended.

The exam objectives are defined by learner or practitioner level of knowledge.

- **Learner-level**: questions require the candidate to recall information to derive the correct answer
- **Practitioner-level**: questions require the candidate to derive the correct answer from an application of their knowledge

For each exam topic there have been identified alternative training options that are available at Oracle. Please note that some of the training recommended can cover multiple exam topics.

The exam covers 11 topics.

**Topic 1: Overview of Data Warehousing**

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the benefits of a data warehouse</td>
<td>Learner</td>
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<tr>
<td>Describe the technical characteristics of a data warehouse</td>
<td>Learner</td>
</tr>
<tr>
<td>Describe the Oracle Database structures used primarily by a data warehouse</td>
<td>Practitioner</td>
</tr>
<tr>
<td>Explain the use of materialized views</td>
<td>Practitioner</td>
</tr>
<tr>
<td>Implement Database Resource Manager to control resource usage</td>
<td>Practitioner</td>
</tr>
<tr>
<td>Identify and explain the benefits provided by standard Oracle Database 11g enhancements for a data warehouse</td>
<td>Practitioner</td>
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</tbody>
</table>

**Training Options**

- **Boot Camp**
  - [Oracle Data Warehousing 11g Implementation Boot Camp](#)
- **Instructor Led Training (delivered by Oracle University)**
  - [Oracle Database 11g: Data Warehousing Fundamentals](#)
- **Online Training**
  - [Data Warehouse Design Tips - Module 1: Data Warehousing Overview](#)

**Topic 2: Parallelism**

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain how the Oracle optimizer determines the degree of parallelism</td>
<td>Practitioner</td>
</tr>
</tbody>
</table>
Configure parallelism
Explain how parallelism and partitioning work together

Training Options

- Boot Camp
  - Oracle Data Warehousing 11g Implementation Boot Camp
- Instructor Led Training (delivered by Oracle University)
  - Oracle Database 11g: Data Warehousing Fundamentals

Topic 3: Partitioning

Objectives
Describe types of partitioning
Describe the benefits of partitioning
Implement partition-wise joins

Training Options

- Boot Camp
  - Oracle Data Warehousing 11g Implementation Boot Camp
- Instructor Led Training (delivered by Oracle University)
  - Oracle Database 11g: Data Warehousing Fundamentals
- Online Training
  - Partitioning in Oracle Database 11g

Topic 4: Result Cache

Objectives
Describe how the SQL Result Cache operates
Identify the scenarios which benefit the most from Result Set Caching

Training Options

- Boot Camp
  - Oracle Data Warehousing 11g Implementation Boot Camp
- Instructor Led Training (delivered by Oracle University)
  - Oracle Database 11g: Data Warehousing Fundamentals

Topic 5: OLAP

Objectives
Explain how Oracle OLAP delivers high performance
Describe how applications can access data stored in Oracle OLAP cubes

Training Options
Topic 6: Advanced Compression

Objectives
- Explain the benefits provided by Advanced Compression
- Explain how Advanced Compression operates
- Describe how Advanced Compression interacts with other Oracle options and utilities

Level
- Practitioner
- Learner

Training Options
- Boot Camp
  - Oracle Data Warehousing 11g Implementation Boot Camp

Topic 7: Data integration

Objectives
- Explain Oracle's overall approach to data integration
- Describe the benefits provided by ODI
- Differentiate the components of ODI
- Create integration data flows with ODI
- Ensure data quality with OWB
- Explain the concept and use of real-time data integration
- Describe the architecture of Oracle's data integration solutions

Level
- Learner
- Practitioner

Training Options
- Boot Camp
  - Oracle Data Warehousing 11g Implementation Boot Camp
- Instructor Led Training (delivered by Oracle University)
  - Oracle Database 11g: Data Warehousing Fundamentals

Topic 8: Data mining and analysis

Objectives
- Describe the components of Oracle's Data Mining option
- Describe the analytical functions provided by Oracle Data Mining
- Identify use cases that can benefit from Oracle Data Mining
- Identify which Oracle products use Oracle Data Mining

Level
- Learner
- Practitioner

Training Options
- Boot Camp
Topic 9: Sizing

Objectives
Properly size all resources to be used in a data warehouse configuration

Level: Practitioner

Training Options
- Boot Camp
  - Oracle Data Warehousing 11g Implementation Boot Camp
- Instructor Led Training (delivered by Oracle University)
  - Oracle Database 11g: Data Warehousing Fundamentals

Topic 10: Exadata

Objectives
- Describe the architecture of the Sun Oracle Database Machine
- Describe configuration options for an Exadata Storage Server
- Explain the advantages provided by the Exadata Storage Server

Level: Learner

Training Options
- Boot Camp
  - Oracle Data Warehousing 11g Implementation Boot Camp
- Instructor Led Training (delivered by Oracle University)
  - Oracle Database 11g: Data Warehousing Fundamentals

Topic 11: Best practices for performance

Objectives
- Employ best practices to load incremental data into a data warehouse
- Employ best practices for using Oracle features to implement high performance data warehouses

Level: Practitioner

Training Options
- Boot Camp
  - Oracle Data Warehousing 11g Implementation Boot Camp
- Instructor Led Training (delivered by Oracle University)
  - Oracle Database 11g: Data Warehousing Fundamentals