The Sun Flash Storage Implementation Specialist exam study guide is designed to assist the learner in passing the Sun Flash Storage Certified Implementation Specialist Exam – 1Z1-552.

The exam audience is senior-level implementation consultants who are using and implementing Flash Storage solutions in the field, and/or have knowledge acquired through alternate training or on-the-job experience.

The objectives for this exam are defined as learner or practitioner levels of knowledge:

- **Learner-level**: questions require candidates 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, alternative training options have been identified that are available at Oracle. Please note that some of the training recommended will cover multiple exam topics.

The exam covers 9 topics:

**Topic 1: Flash Technology Overview**

**Objectives**
- Explain the customer value proposition
- Identify target environments, uses and applications
- Describe the Oracle’s Flash Storage product portfolio, its positioning, and use
- Describe Oracle 11gR2 Database Smart Flash Cache technology
- Describe Solaris ZFS Hybrid Storage Pools

**Level**
- Learner
- Learner
- Learner
- Learner
- Learner

**Training Options**

- Online Training
  - Product Essentials For Sales - Oracle Flash Storage
  - Product Essentials For Sales Consultants - Oracle Flash Storage
  - Flash Storage Target Customer Profile

**Topic 2: Assessing Customer’s Problems and Flash Technology Fit**

**Objectives**
- Explain performance bottlenecks
- Identify bottlenecks using Oracle dB StatPack/SWR
- Identify bottlenecks using Oracle Sun SWAT/Flash Analyzer I/O assessment tool
- Architect and size the solution

**Level**
- Learner
- Practitioner
- Practitioner
- Practitioner
Training Options

- Online Training
  - Optimizing Oracle Databases with Oracle’s Sun FlashFire Technology - Coming soon!

Topic 3: Sun Solid State Drives

Objectives
- Describe the Sun Solid State Drives, their architecture and supported systems
- Describe the target environments for the Sun Solid State Drives
- Install and configure the Sun Solid State Drives in a server

Level
- Learner
- Learner
- Practitioner

Training Options

- Online Training
  - Product Essentials For Sales - Oracle Flash Storage
  - Product Essentials For Sales Consultants - Oracle Flash Storage
  - Flash Storage Target Customer Profile
  - SSD Overview - Coming soon!

Topic 4: Sun Flash Accelerator F20 PCIe Card

Objectives
- Describe Sun Flash Accelerator F20 PCIe Card, its architecture, supported systems
- Describe the target environments for the Sun Flash Accelerator F20 PCIe Card
- Install and configure the Sun Flash Accelerator F20 PCIe Card in a server

Level
- Learner
- Learner
- Practitioner

Training Options

- Online Training
  - Product Essentials For Sales - Oracle Flash Storage
  - Product Essentials For Sales Consultants - Oracle Flash Storage
  - Flash Storage Target Customer Profile

Topic 5: F5100 Flash Array Overview

Objectives
- Explain the core features of the F5100 Flash Array
- Describe the F5100 Flash Array architecture and internal system components
- Describe supported platforms

Level
- Learner
- Learner
- Practitioner

Training Options

- Online Training
  - Product Essentials For Sales - Oracle Flash Storage
  - Product Essentials For Sales Consultants - Oracle Flash Storage
**Topic 6: F5100 Deployment Assessment**

**Objectives**
- Use the Performance Improvement Assessment to deploy the F5100 Flash Array
- Use the RAS Requirements Assessment to deploy the F5100 Flash Array
- Use the System Deployment Assessment to deploy the F5100 Flash Array

**Level**
- Practitioner
- Practitioner
- Practitioner

**Training Options**
- Online Training
  - WZC-SLX-216: F5100/Lightning Flash Technical Update and Use Cases
  - Using Assessment Tools with Flash Deployments - *Coming soon!*

**Topic 7: F5100 Physical Installation**

**Objectives**
- Install the Sun Storage F5100 Flash Array, including HBAs and drivers
- Install the latest HBA drivers
- Install the latest Common Array Manager (CAM) software

**Level**
- Learner
- Learner
- Learner

**Training Options**
- Online Training
  - WZI-NWS-6829: Sun Storage F5100 Flash Array Service Training
  - Common Array Manager Documentation Site (latest release)
  - Sun Storage F510 Installation Guide - *Coming soon!*

**Topic 8: F5100 Configuration**

**Objectives**
- Configure the F51000 using the Common Array Manager (CAM)
- Perform zoning and provisioning of individual Flash modules
- Configure Flash in single and multi-host environments
- Configure Flash Modules and HBAs for maximum performance or capacity
- Configure Flash for high availability (mirroring)
- Configure Flash as Database Smart Flash Cache

**Level**
- Practitioner
- Practitioner
- Practitioner
- Practitioner
- Practitioner

**Training Options**
- Online Training
  - WZI-NWS-6829: Sun Storage F5100 Flash Array Service Training
  - Common Array Manager Documentation Site (latest release)
  - Sun Storage F5100 Installation Guide
Topic 9: Optimization, Tuning, and Testing

Objectives

- Use the Oracle Sun Storage Workload Analysis Tool (SWAT)/Flash Analyzer to optimize customer environments
- Use the Oracle Stats-Pack/SWR and ORION to optimize customer environments
- Describe key F5100 key deployment models and strategies
- Describe key F20 key deployment models and strategies
- Deploy the F5100 with Oracle Database environments
- Deploy the F20 with Oracle Database environments
- Deploy the F5100 as Oracle 11gR2 Database Smart Flash Cache
- Deploy the F20 as Oracle 11gR2 Database Smart Flash Cache
- Pin indices and hot files to appropriate Flash pools
- Optimize flash implementations in different environments and using different file systems
- Set up Solaris with 4K block alignment
- Set up ZFS
- Configure for high availability through host mirroring
- Describe key steps and best practices for testing implementations

Level

- Practitioner

Training Options

- Online Training
  - Accelerating OLTP with Flash
  - Oracle Instance Tuning Guide – Chapter 10
  - Accelerating Databases with the F5100 White Paper
  - Sun Storage F5100 Installation Guide