

## Specialist - Implementation Engineer, PowerScale Version 3.0

### Certification Description



[Proven Professional Website](#)

[Education Services Community](#)

#### Certification Overview

This certifies a student can install, implement, manage and administer a PowerScale scale-out storage solution in a live datacenter environment.

#### Certification Requirements

To complete the requirements for this certification you must:

1. Achieve one of the following pre-requisite certifications\*
  - Associate - Information Storage and Management Version 2.0
  - Associate - Information Storage and Management Version 3.0
  - Associate - Information Storage and Management Version 4.0
  - Specialist – Implementation Engineer, Isilon Solutions Version 2.0
  - Specialist – Systems Administrator, Isilon Solutions Version 2.0
2. Pass the following Specialist exam on or after July 17, 2020:
  - [DES-1423 Specialist – Implementation Engineer, PowerScale Exam](#)

Note: These details reflect certification requirements as of July 17, 2020.

The Proven Professional Program periodically updates certification requirements. \*Please check the [Proven Professional CertTracker](#) website regularly for the latest information and for other options to meet the Associate level requirement.

#### Other Certification Recommendations

Once you have achieved this Certification you may be interested in:

- [Expert - PowerScale Solutions](#)

**Dell Inc.**  
Hopkinton  
Massachusetts  
01748-9103  
1-508-435-1000  
In North America  
1-866-464-7381

## DES-1423 Specialist - Implementation Engineer, PowerScale Exam

### Exam Description



#### Duration

90 Minutes  
(60 Questions)

Pass Score: 63

#### Practice Test

[DES-1423](#)

#### Dell EMC

Hopkinton  
Massachusetts  
01748-9103  
1-508-435-1000  
In North America  
1-866-464-7381

#### Overview

This exam is a qualifying exam for the **Specialist - Implementation Engineer, PowerScale (DCS-IE)** track.

This exam focuses on the implementation of PowerScale scale-out storage solutions. The related course prepares students to perform PowerScale cluster installation and implementation. Students will be familiar with PowerScale software modules and configuration including authentication, identity management, authorization, SmartConnect, SMB, NFS, S3, data protection/replication, snapshots, replication, deduplication, RBAC, and monitoring.

Dell Technologies provides free practice tests to assess your knowledge in preparation for the exam. Practice tests allow you to become familiar with the topics and question types you will find on the proctored exam. Your results on a practice test offer one indication of how prepared you are for the proctored exam and can highlight topics on which you need to study and train further. A passing score on the practice test does not guarantee a passing score on the certification exam.

#### Products

Products likely to be referred to on this exam include but are not limited to:

- OneFS v8.2
- InsightIQ 3.0
- Isilon Generation 6 Nodes
- PowerScale Generation 6.5 Nodes

#### Exam Topics

Topics likely to be covered on this exam include:

##### **NAS, PowerScale, and OneFS (13%)**

- Describe PowerScale storage concepts such as scale out versus scale up, architecture, and OneFS details
- Describe PowerScale hardware components and intended use cases, for both Gen 5 and Gen 6 hardware
- Describe how an administrator accesses a PowerScale cluster and conducts common operations
- Describe the OneFS directory structure and configure base directories

##### **Configuring the Foundations for Access (17%)**

- Describe cluster dependencies on NTP, LDAP, Active Directory, and access zones
- Describe basic internal and external network configurations, multi-tenancy, groupnets, subnets, pools, and rules

- Explain network configurations in Gen 5 and Gen 6, including link aggregation, failover LACP, FEC, and Round Robin
- Describe how to integrate SmartConnect, SmartConnect zones, DNS, SSIP, IP address pools, and load balancing

### **Configuring Identity Management and Authorization (10%)**

- Compare and contrast between uses of RBAC and ZRBAC
- Explain the nature and use of user identifiers and ID mapping
- Describe POSIX and ACL permission rubrics

### **Configuring Client Access to Data (13%)**

- Describe OneFS caching levels and use cases
- Configure SMB shares with SMB3 Continuous Availability (CA) and Server-Side Copy with protocol auditing and file filtering
- Configure NFS exports with NFSv4 Continuous Availability (CA)
- Configure S3 Buckets

### **Foundations of Data Protection and Layout (12%)**

- Identify FEC data protection levels, file striping, and Reed-Solomon protection definitions
- Differentiate between requested, suggested, and actual protection levels and verify with isi get commands
- Differentiate concurrent and streaming data layout models, use cases, and performance impacts
- Explain storage pools, policies, neighborhoods, global namespace, spillover, and VHS

### **Configuring Storage Pools (13%)**

- Differentiate between SmartPools, storage pools, SSD usage, and file pool policies
- Describe how file pool policies are created
- Describe the SmartPools features
- Describe the function and value of CloudPools

### **Configuring Data Services (15%)**

- Describe the File Filtering and Smart Quotas features
- Describe how SmartLock and SmartDedupe are configured
- Identify SnapshotIQ features, CoW and RoW mechanics, and scheduling
- Describe how to prepare the cluster for SyncIQ disaster recovery

### **Monitoring Tools (7%)**

- Describe how to schedule and run a HealthCheck
- Describe DataIQ features
- Describe the installation of InsightIQ monitoring and reporting, and the use of isi statistics commands

The percentages after each topic above reflects the approximate distribution of the total question set across the exam.

## [Recommended Training](#)



The following curriculum is recommended for candidates preparing to take this exam.

**Please complete all of the following courses**

Course Title	Course Number	Mode	Available
PowerScale Concepts	ES131STG01028	On-Demand	6/16/20

**Please complete one of the following courses**

Course Title	Course Number	Mode	Available
PowerScale Administration	MR-1CP-ISIAM	Classroom	6/16/20
PowerScale Administration	MR-1LP-ISIAM	Virtual Classroom	6/16/20
PowerScale Administration	MR-1TP-ISIAM-0608	On-Demand	6/16/20

Note: These exam description details reflect contents as of **July 17, 2020**.

The Proven Professional Program periodically updates exams to reflect technical currency and relevance. Please check the Proven Professional website regularly for the latest information.

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