Education Services
Course Catalog
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Contact us

Contact us online at education.dell.com/content/contactus

Multiple Delivery Methods

To fit learners’ schedules, we strive to use multiple delivery methods where possible. Here are the learning modalities offered:

- Traditional Classroom – In-person classroom training delivered by an instructor, with students in the same facility/room.
- Virtual Classroom – Live online instruction delivered by an instructor using Adobe Connect, Skype, video conference or other remote connection methods.
- Private Classroom – Contact an Education Account Manager for details.
- On Demand Class – Self-paced online modules on demand, accessible anytime, anyplace.
- On Demand Lab – Self-paced hands-on learning, includes access to the lab environment and materials to support the learning objectives.

Learning Accelerator Program

The Learning Accelerator Program is a comprehensive program that drives individual learning and closes the skills gaps that impede an organization’s ability to adopt new technologies. It is a top-down consultative approach that defines a customer’s learning needs, develops learning goals for each member of an organization, and aligns those learning goals to the organization’s desired business outcomes. Our learning experts use proven methodologies to help customers realize the full value of their investments in both their technology and people. Contact an Education Account Manager or visit our website for more information.
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### CI VxBlock

**VxBlock**

**VxBlock Administration**

This course covers administration and management aspects of the VxBlock System. It includes an overview of the architecture as well as introduces common administrative tasks that are performed using the various system element managers and Dell EMC VxBlock Central. This training is designed to enable participants to successfully complete hands-on activities for common VxBlock System administrative tasks.

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Hours</th>
<th>Catalog Code</th>
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<tbody>
<tr>
<td>Classroom</td>
<td>40</td>
<td>VCE-1LN-EMCVBAM</td>
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</table>

**VxBlock Administration -Online ILT**

This course covers administration and management aspects of the VxBlock System. It includes an overview of the architecture as well as introduces common administrative tasks that are performed using the various system element managers and Dell EMC VxBlock Central. This training is designed to enable participants to successfully complete hands-on activities for common VxBlock System administrative tasks.

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<tbody>
<tr>
<td>On Demand Class</td>
<td>04</td>
<td>ESCPX00919</td>
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</tbody>
</table>

### CI/HCI Flex & Solutions

**CloudLink**

**CloudLink Administration**

This course describes the common tasks performed when administering a CloudLink environment. It details how to manage users, roles, keys, agents, encrypted volumes, machines, and policies. The course also discusses disaster recovery as well as tools for monitoring and troubleshooting.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>On Demand Class</td>
<td>02</td>
<td>MR-1WN-CL60AM</td>
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</tbody>
</table>

**CloudLink Implementation**

This course describes the common tasks performed for implementing CloudLink with various design options align to requirements in a VMware and DellEMC VxFlex environments. It details how to deploy a single CloudLink Center and then go on to learn about deploying a cluster. The course also discusses how to install agents and perform a basic configuration to enable encryption. Finally, it covers the integration of VxFlex Manager with CloudLink.

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<tbody>
<tr>
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<td>02</td>
<td>MR-1WN-CL65P</td>
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### PowerFlex

**PowerFlex 3.6 Administration**

This course provides an overview of PowerFlex 3.6 and managing a PowerFlex System. It includes working with the MDM, SDS, SDC, volumes, adjusting cache, and administering the system. A deeper understanding of the architecture and components will be introduced, demonstrations and lab simulations complete the learning experience.

<table>
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<tr>
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<tbody>
<tr>
<td>On Demand Class</td>
<td>05</td>
<td>ES102CPX01822</td>
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</tbody>
</table>

**PowerFlex 3.6 Implementation**

This course provides a complete view of installing, upgrading, expanding a PowerFlex and Ready Node system. Installation methods for Linux and ESXi environments are introduced and you will perform hands-on expansion and upgrade of a PowerFlex cluster. Simulations and video demonstrations are also provided for a complete learning experience.

<table>
<thead>
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<tbody>
<tr>
<td>On Demand Class</td>
<td>04 Hours 30 Minutes</td>
<td>ES102CPX01821</td>
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</table>

**Powerflex 3.6 Implementation and Administration**

### VxBlock Converged Management Software Implementation

This course provides a complete view of installing, upgrading, expanding a PowerFlex and Ready Node system. Installation methods for Linux and ESXi environments are introduced and you will perform hands-on installation and upgrade of a PowerFlex cluster. It also includes working with the MDM, SDS, SDC, volumes, adjusting cache, and administering the system. A deeper understanding of the architecture and components will be introduced. Labs, simulations, and video demonstrations are also provided for a complete learning experience.

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Hours</th>
<th>Catalog Code</th>
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<tbody>
<tr>
<td>On Demand Class</td>
<td>32</td>
<td>ES102CPX01905</td>
</tr>
</tbody>
</table>

### VxBlock System Administration Using VxBlock Central Workflow Automation

This course presents the administration of the VxBlock System using the VxBlock Central Workflow Automation. It covers post-deployment validation, workflow examples, and basic troubleshooting. The course uses interactive simulation-based activities to provide a step-by-step walkthrough of key administration tasks.

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### CloudLink Implementation

This course describes the common tasks performed for implementing CloudLink with various design options align to requirements in a VMware and DellEMC VxFlex environments. It details how to deploy a single CloudLink Center and then go on to learn about deploying a cluster. The course also discusses how to install agents and perform a basic configuration to enable encryption. Finally, it covers the integration of VxFlex Manager with CloudLink.

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<td>02</td>
<td>MR-1WN-CL65P</td>
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</tbody>
</table>

### PowerFlex appliance

**PowerFlex appliance and PowerFlex Manager 3.7 Administration**

This course provides an overview of the PowerFlex appliance solution and details how PowerFlex Manager is used as a centralized configuration and management tool. Covered topics include a deeper dive into the appliance architecture as well as common tasks used to administer storage, compute, and network resources. Lab demonstrations and simulations are included to reinforce the learning experience.

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Hours 30 Minutes</th>
<th>Catalog Code</th>
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<tbody>
<tr>
<td>On Demand Class</td>
<td>04</td>
<td>ES102CPX01935</td>
</tr>
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</table>

**PowerFlex Manager 3.7 Installation and Implementation**

This course introduces the PowerFlex Manager 3.7 installation and implementation process. The process covers the pre-installation checklist, the install process, the initial software configuration, the getting started implementation process, finalizing the implementation, and upgrading the software and components.

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Hours</th>
<th>Catalog Code</th>
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</thead>
<tbody>
<tr>
<td>On Demand Class</td>
<td>01</td>
<td>ES502CPX01963</td>
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</tbody>
</table>

**PowerFlex rack**

**PowerFlex rack Administration**

This course focuses on PowerFlex rack administration and management tasks. It presents tools and processes for monitoring, configuring, and maintaining the PowerFlex rack system.

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Hours</th>
<th>Catalog Code</th>
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<tbody>
<tr>
<td>Classroom</td>
<td>24</td>
<td>ES114CPX00065</td>
</tr>
</tbody>
</table>

| Virtual Class       | 24     | ES114CPX00065 |

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 4
PowerFlex rack Administration
This course focuses on PowerFlex rack administration and management tasks. It presents tools and processes for monitoring, configuring, and maintaining the PowerFlex rack system.

| On Demand Class | 08 Hours | ES133CPX00069 |

PowerFlex rack RCM Upgrades

Client

Client Systems

Dell Client Systems Deployment and Implementation
Become more efficient in deploying Dell client systems. This course is designed to walk you through pre-deployment procedures, physical device setup, recording asset information, running deployment setup scripts and retired asset management. You will learn procedures such as verifying equipment against the work order and checking the conditions of the equipment. This course along with the Dell Client Support and Troubleshooting course will help you prepare for the Implementing Dell Client System exam.

| On Demand Class | DESNOLT-706-12769 |

Dell Client Systems Deployment and Implementation
Become more efficient in deploying Dell client systems. This course is designed to walk you through pre-deployment procedures, physical device setup, recording asset information, running deployment setup scripts and retired asset management. You will learn procedures such as verifying equipment against the work order and checking the conditions of the equipment. This course along with the Dell Client Support and Troubleshooting course will help you prepare for the Implementing Dell Client System exam.

| On Demand Class | DESNOLT-812-3532 |

New Hire Client

Dell Client Systems Support and Troubleshooting
This course provides you with basic troubleshooting steps to resolve issues when deploying client systems. Topics include troubleshooting hardware, network connectivity, setup, data migration, and data wiping. Recommended along with the Dell Client Systems Deployment and Implementation course, this training helps prepare you for the Implementing Dell Client Systems exam.

| On Demand Class | DESNOLT-812-3533 |

Dell Client Systems Support and Troubleshooting
This course provides you with basic troubleshooting steps to resolve issues when deploying client systems. Topics include troubleshooting hardware, network connectivity, setup, data migration, and data wiping. Recommended along with the Dell Client Systems Deployment and Implementation course, this training helps prepare you for the Implementing Dell Client Systems exam.

| On Demand Class | DESNOLT-706-12770 |

Dell Client Systems Support and Troubleshooting
This course provides you with basic troubleshooting steps to resolve issues when deploying client systems. Topics include troubleshooting hardware, network connectivity, setup, data migration, and data wiping. Recommended along with the Dell Client Systems Deployment and Implementation course, this training helps prepare you for the Implementing Dell Client Systems exam.

| On Demand Class | DESNOLT-812-3534 |

Dell Client Systems Support and Troubleshooting
This course provides you with basic troubleshooting steps to resolve issues when deploying client systems. Topics include troubleshooting hardware, network connectivity, setup, data migration, and data wiping. Recommended along with the Dell Client Systems Deployment and Implementation course, this training helps prepare you for the Implementing Dell Client Systems exam.

| On Demand Class | DESNOLT-706-12776 |

Dell Client Systems Support and Troubleshooting
This course provides you with basic troubleshooting steps to resolve issues when deploying client systems. Topics include troubleshooting hardware, network connectivity, setup, data migration, and data wiping. Recommended along with the Dell Client Systems Deployment and Implementation course, this training helps prepare you for the Implementing Dell Client Systems exam.

| On Demand Class | DESNOLT-812-3535 |
Data Protection

Avamar

**Avamar Administration**
This course explains and demonstrates configuration and use of Avamar. Students learn how to configure Avamar for operation; how to create and manage user accounts; how to configure and initiate backup and restore of data; and how to monitor Avamar operation.

| Classroom | 32 Hours | MR-1LP-AVAM635 |

**Avamar Administration**
This course explains and demonstrates configuration and use of Avamar. Students learn how to configure Avamar for operation; how to create and manage user accounts; how to configure and initiate backup and restore of data; and how to monitor Avamar operation.

| Virtual Class | 32 Hours | MR-1CP-AVAM635 |

**Avamar Implementation**
This course demonstrates the deployment of Avamar. Students learn how to deploy Avamar Virtual Edition; how to upgrade all models of Avamar to the latest release; and how to configure and prepare Avamar for administration.

| On Demand Lab | 24 Hours | ES102DPS01702 |

**Avamar Implementation and Administration**
This course explains and demonstrates the deployment, configuration, and use of Avamar. Students learn how to deploy Avamar Virtual Edition; how to upgrade all models of Avamar to the latest release; how to configure Avamar for operation; how to create and manage user accounts; how to configure and initiate backup and restore of data; and how to monitor Avamar operation. This course includes labs to reinforce these skills through exercises.

| Classroom | 40 Hours | MR-7CP-AVAM633 |

**Avamar Integration**
This course explains and demonstrates the integration of Avamar with different applications, databases, and virtual machine hosts. Students learn operational best practices with a focus on configuring and performing backup and recovery of file systems, applications and databases. This course includes labs to reinforce these skills through exercises.

| Classroom | 40 Hours | MR-1CP-AVAIPM |

**Avamar Integration with Hyper-V**
This course explains and demonstrates the integration of Avamar with Hyper-V. Students learn operational best practices with a focus on configuring and performing backup and recovery of virtual machines.

| On Demand Class | 01 Hours 30 Minutes | ES103DPS01524 |

**Avamar Integration with IBM DB2**
This course explains and demonstrates the integration of Avamar with DB2. Students learn operational best practices with a focus on configuring and performing backup and recovery of logs and databases. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

| On Demand Class | 02 Hours 30 Minutes | ES103DPS01522 |

**Avamar Integration with Microsoft SQL Server**
This course explains and demonstrates the integration of Avamar with Microsoft SQL Server. Students learn operational best practices with a focus on configuring and performing backup and recovery of logs and databases. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

| On Demand Class | 01 Hours 30 Minutes | ES103DPS01510 |

**Avamar Integration with Oracle**
This course explains and demonstrates the integration of Avamar with Oracle. Students learn operational best practices with a focus on configuring and performing backup and recovery of logs and databases. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

| On Demand Class | 01 Hours 30 Minutes | ES103DPS01516 |

**Avamar Integration with SharePoint**
This course explains and demonstrates the integration of Avamar with SharePoint. Students learn operational best practices with a focus on configuring and performing backup and recovery of SharePoint. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

| On Demand Class | 02 Hours | ES103DPS01512 |

**Avamar Integration with VMware**
This course explains and demonstrates the integration of Avamar with VMware. Students learn operational best practices with a focus on configuring and performing backup and recovery of virtual machines. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

| On Demand Class | 02 Hours | ES103DPS01513 |

**Avamar Integration with VMware**
This course explains and demonstrates the integration of Avamar with VMware. Students learn operational best practices with a focus on configuring and performing backup and recovery of virtual machines. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

| On Demand Class | 01 Hours | ES103DPS01518 |

**Avamar Integration with VMware**
This course explains and demonstrates the integration of Avamar with VMware. Students learn operational best practices with a focus on configuring and performing backup and recovery of virtual machines.

<p>| On Demand Class | 01 Hours | ES103DPS01511 |</p>
<table>
<thead>
<tr>
<th>Course Name</th>
<th>Duration</th>
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<td>Avamar Performance</td>
<td>1 Hour 15</td>
<td>ES103DPS01508</td>
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<tr>
<td>Avamar Virtual Edition Overview</td>
<td>01 Hours</td>
<td>ES102DPS01526</td>
</tr>
<tr>
<td>Dell Avamar Administration</td>
<td>02 Hours</td>
<td>ES103DPS01520</td>
</tr>
<tr>
<td>Dell Avamar Virtual Edition Implementation</td>
<td>01 Hours 30 Minutes</td>
<td>ES102DPS01701</td>
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<tr>
<td>Dell Avamar Administration</td>
<td>07 Hours 30 Minutes</td>
<td>ES102DPS01502</td>
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<td>Dell Avamar Administration</td>
<td>03 Hours</td>
<td>MR-1WN-AVAM136</td>
</tr>
<tr>
<td>Dell Avamar Concepts</td>
<td>01 Hours 30 Minutes</td>
<td>MR-1WN-AVAM</td>
</tr>
<tr>
<td>Dell Avamar Implementation and Administration</td>
<td>02 Hours</td>
<td>ES102DPS01503</td>
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<tr>
<td>Dell Avamar Integration with Microsoft Exchange</td>
<td>01 Hours 30 Minutes</td>
<td>ES103DPS01509</td>
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<tr>
<td>Dell Avamar Integration with NDMP</td>
<td>01 Hours 30 Minutes</td>
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<tr>
<td>Dell Avamar Virtual Edition Implementation</td>
<td>08 Hours</td>
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<td>DECS-SA Avamar Administration ILT Training - Package</td>
<td>02 Hours</td>
<td>ES132DPS00487</td>
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<tr>
<td>Cloud Disaster Recovery Data Domain Cloud Disaster Recovery (DDCDR) Administration - On-Demand Course</td>
<td>02 Hours 30 Minutes</td>
<td>ESDPSPD03037</td>
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<tr>
<td>Dell Cloud Disaster Recovery Administration</td>
<td>02 Hours</td>
<td>ES131DPS00485</td>
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<tr>
<td>Dell Cloud Disaster Recovery Administration Concepts</td>
<td>30 Minutes</td>
<td>ES132DPS00487</td>
</tr>
<tr>
<td>Dell Cloud Disaster Recovery Administration - Package</td>
<td>02 Hours</td>
<td>ES131DPS00485</td>
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</table>

This course explains and demonstrates configuration and the use of Avamar with Microsoft Exchange. Students learn how to configure the Avamar Exchange VSS plugin for performing backups and recoveries. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

This course explains and demonstrates the integration of Avamar with NDMP. Students learn operational best practices with a focus on configuring and performing backup and recovery of files and file systems. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

This lab demonstrates the integration of Avamar with NDMP. Students learn operational best practices with a focus on configuring and performing backup and recovery of files and file systems.

This course explains and demonstrates the deployment of Avamar. Students learn how to deploy Avamar Virtual Edition; how to upgrade all models of Avamar to the latest release; and how to configure and prepare Avamar for administration.

This course explains and demonstrates the purpose and use of Avamar. Students identify Avamar system components; describe the deduplication process and integrated products.

This lab demonstrates configuration and use of Avamar. Students learn how to configure Avamar for operation; how to create and manage user accounts; how to configure and initiate backup and restore of data; and how to monitor Avamar operation.

This course explains and demonstrates configuration and use of Avamar. Students learn how to configure Avamar for operation; how to create and manage user accounts; how to configure and initiate backup and restore of data; and how to monitor Avamar operation. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

This course explains the purpose and use of Dell Avamar. Students identify Avamar system components; describe the deduplication process and integrated products.

This course explains and demonstrates the deployment of Avamar. Students learn how to deploy Avamar Virtual Edition; how to upgrade all models of Avamar to the latest release; how to configure Avamar for operation; how to create and manage user accounts; how to configure and initiate backup and restore of data; and how to monitor Avamar operation. This lab includes labs to reinforce these skills through exercises.

This course explains and demonstrates configuration and use of Avamar. Students learn how to configure Avamar for operation; how to create and manage user accounts; how to configure and initiate backup and restore of data; and how to monitor Avamar operation.

This package of training explains and demonstrates configuration and use of Avamar. Students learn how to configure Avamar for operation; how to create and manage user accounts; how to configure and initiate backup and restore of data; and how to monitor Avamar operation. This package does not include a Proven Professional exam voucher, in order to add please search for “Dell Technologies Proven Professional VUE Exam Voucher” or Course ID “MR-1EV-VUEEMCPROV”.

This package includes the following courses:

- Dell Avamar Concepts (On Demand Class, 01 Hours 30 Minutes)
- Dell Avamar Implementation and Administration (Virtual Class, 40 Hours)
- Avamar Administration (Virtual Class, 32 Hours)
- Avamar Administration (Classroom, 32 Hours)

This course provides an understanding of the use and management of Avamar

This course provides an understanding of the use and management of Dell Cloud Disaster Recovery (Cloud DR) administration. The purpose of this course is to describe Cloud DR administrative operations in supported environments.

The Dell Cloud Disaster Recovery Concepts and Features course provides an overview of the Cloud DR product.
Dell EMC Cloud Disaster Recovery Implementation
This course provides a technical overview of Dell EMC Cloud Disaster Recovery (Cloud DR) implementation operations. The purpose of this course is to describe Cloud DR deployment and configuration in supported environments.

On Demand Class

01 Hours 30 Minutes
ES132DPS00486

Cloud Snapshot Manager
PowerProtect Cloud Snapshot Manager Concepts
This course is designed to provide the learners an overview of Dell EMC PowerProtect Cloud Snapshot Manager. The course discusses concepts and capabilities of Cloud Snapshot Manager.

On Demand Class

01 Hours
ES101DPS01714

Cyber Recovery
Cyber Recovery Solution Architectural Concepts
This course is intended for anyone interested in understanding the architecture of the Cyber Recovery solution. High level concepts and an understanding of requirements for implementing the solution will be covered. Additionally different architecture implementations for Data Domain will be explored.

On Demand Class

45 Minutes
MR-7WN-IRsARCH

Dell PowerProtect Cyber Recovery Administration
This course covers management of PowerProtect Cyber Recovery. The course contains the steps to manage storage and applications, policies, copies, and sandboxes. The course also covers recovery operations with Dell PowerProtect Data Manager, Dell NetWorker, and Dell Avamar. Security considerations and additional administrative tasks are also covered.

On Demand Class

03 Hours
ES102DPS01853

Dell PowerProtect Cyber Recovery Concepts
This course demonstrates the problem Cyber Recovery is designed to solve. The concept of data recovery, an overview of the solution and benefits, and basic architecture of Cyber Recovery are also covered. The operation, management tools, and documentation are visited.

On Demand Class

01 Hours 30 Minutes
ES131DPS00253

Dell PowerProtect Cyber Recovery Features
This course provides an understanding of how PowerProtect Cyber Recovery and CyberSense works. This course covers the ways of managing the solution and the cloud platforms to host it. Storage, applications, policies, and copies are described. Security, monitoring, and the concept of Sheltered Harbor are introduced.

On Demand Class

02 Hours
ES131DPS00255

Managing CyberSense Alerts Recorded Knowledge Transfer
This session describes how CyberSense monitors a Cyber Recovery vault and how users should manage the resulting alerts.

On Demand Class

55 Minutes
ESDPSD00261

PowerProtect Cyber Recovery Administration
This on-demand lab explores scenarios based on the Cyber Recovery Administration course. The session provides a lab environment where participants can validate skills and concepts covered in the course. During this lab session participants will explore different Cyber Recovery operations like Sandbox creation, health checks, hardening the environment, multi-factor authentication, and other maintenance activities. In this on-demand lab, participants will also perform backup and restore Cyber Recovery and CyberSense configurations, analyzing copies using CyberSense, configure PPDM and Networker vaults and client recoveries. Access to this On-Demand lab environment will be granted for 36 hours to complete this 6-hours-long lab.

On Demand Lab

06 Hours
ESDPSD03594

PowerProtect Cyber Recovery Design
This course covers design of PowerProtect Cyber Recovery and CyberSense. The course contains important considerations when planning and designing a solution. Different consulting services for Dell Technologies are introduced. Considerations and limitations are also covered. The steps to correctly plan and size a solution, and harden the solution are also covered.

On Demand Class

03 Hours
ES102DPS01855

PowerProtect Cyber Recovery Design and Administration
This course covers the concepts, features, management and design of PowerProtect Cyber Recovery and CyberSense. The course contains the steps to manage storage and applications and policies, copies, and sandboxes. The course also covers recovery operations with PPDM, NetWorker, and Avamar. Security considerations and additional administrative tasks are also covered.

Classroom

16 Hours
ESDPSD03390

Virtual Class

16 Hours
ESDPSD03390

PowerProtect Cyber Recovery Troubleshooting
This course focuses on troubleshooting the Cyber Recovery solution. The course introduces to Cyber Recovery components and features and demonstrates different troubleshooting techniques that help you troubleshoot a Cyber Recovery solution. The course also provides learning experiences covering Cyber Recovery and Cyber Sense problem identification, collecting log files, alerts, main system components issues, cause identification and possible resolutions.

On Demand Class

01 Hours 45 Minutes
ES131DPS00257

PowerProtect Cyber Recovery On-Demand Training - Package
Enhancing your Cyber Recovery posture and ensuring you have a Cyber Recovery skillset is important now more than ever. This package offers knowledge on PowerProtect Cyber Recovery product. Learners will acquire skills to be able to understand PowerProtect Cyber Recovery concepts, features, administration, design, and Troubleshooting. This package also offers knowledge on CyberSense to Learners.

This package includes the following courses:
- Dell PowerProtect Cyber Recovery Administration (On Demand Class, 03 Hours)

Data Domain
Cloud Tier Implementation and Administration
This course provides students with an understanding of how to install, configure, and manage Dell EMC Cloud Tier with PowerProtect DD appliances. Throughout the course, the features and capabilities of Cloud Tier as well as recommended best practices are discussed.

On Demand Class

02 Hours
MR-1WP-DDCTIM

Dell PowerProtect DD Hardware Installation
This course provides the knowledge and skills needed for installing PowerProtect DD appliances. The course provides learning experiences covering hardware installation, cabling and connections, and initial configuration of system software for network connectivity, administrative access, and verification of interoperability with connected devices.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>04 Hours</th>
<th>MR-1WP-DDHINSTL</th>
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</table>

**PowerProtect DD Cloud Enablement Implementation**

This course provides an understanding in how PowerProtect DD can be leveraged in a public or private cloud. The course shows how you can enhance on-premises data protection using cloud resources. It also demonstrates how to design full data protection solutions in a cloud environment or across multiple cloud providers.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>02 Hours 30 Minutes</th>
<th>MR-1WN-DDCLEN</th>
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<tr>
<th>On Demand Lab</th>
<th>06 Hours</th>
<th>MR-1ON-DDSACDL-NA</th>
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</thead>
</table>

**PowerProtect DD Concepts and Features**

The PowerProtect DD Concepts and Features course provides students with basic foundation knowledge of PowerProtect DD products. The course introduces topics covered in greater detail in other PowerProtect DD courses. The course includes the following topics:
- The PowerProtect DD architecture and technology overview
- DD Operating System (DDOS) features and capabilities
- PowerProtect DD Management Overview

<table>
<thead>
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<th>On Demand Class</th>
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<th>MR-1WP-DDFUND</th>
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<tr>
<th>Virtual Class</th>
<th>MR-1WP-DDIAS</th>
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**PowerProtect DD Implementation with Application Software**

PowerProtect DD Implementation with Application Software course provides the knowledge to identify key application software components and terminology, recovery functionalities, and implementation of best practices and tuning. This course includes integration of a PowerProtect DD appliance using CIFS, NFD, DD Boost and VTL to common backup applications.

<table>
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<th>On Demand Class</th>
<th>02 Hours 30 Minutes</th>
<th>MR-1WP-DDIAS</th>
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</table>

**PowerProtect DD System Administration**

The PowerProtect DD System Administration course provides the knowledge and skills needed for configuring and maintaining PowerProtect DD systems. The course provides lectures, instructor demonstrations, hands-on exercises, reviews, knowledge checks, and pointers to further study.

<table>
<thead>
<tr>
<th>Classroom</th>
<th>32 Hours</th>
<th>MR-1CP-DDSAHMP</th>
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<table>
<thead>
<tr>
<th>Virtual Class</th>
<th>MR-1CP-DDSAHMP</th>
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</table>

**PowerProtect DD System Administration Lab**

This on-demand lab explores scenarios based on the PowerProtect DD System Administration course. The session does not cover concepts, but rather provides a lab environment where participants can validate skills and concepts covered in the course. During this lab session, participants will set up and configure a PowerProtect DD system. Also, participants will upgrade a PowerProtect DD system to the latest DDOS version. Participants will be granted for 3 days to complete this 6- hours lab.

<table>
<thead>
<tr>
<th>On Demand Lab</th>
<th>06 Hours</th>
<th>MR-1ON-DDSACDL-NA</th>
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**PowerProtect DD Virtual Edition Implementation**

This course focuses on Dell EMC PowerProtect DD Virtual Edition, both in the Cloud and on-premises. It provides instruction and demonstration explaining DDVE benefits, features, and functionality.

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<thead>
<tr>
<th>On Demand Class</th>
<th>04 Hours</th>
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<tr>
<th>Virtual Class</th>
<th>ES132DPS00179</th>
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**PowerProtect DD3300 Concepts**

The Dell EMC PowerProtect DD3300 Concepts course describes key components, supported features and capabilities, and available options of the DD3300 appliance.

<table>
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<tr>
<th>On Demand Class</th>
<th>01 Hours</th>
<th>MR-1WN-DDS300VR</th>
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</table>

**Data Protection Advisor (DPA)**

**Data Protection Advisor (DPA) Administration for the Backup Operator**

This course explains and demonstrates how to use Data Protection Advisor. Students learn how to generate reports, interpret reports, and how to perform basic customization of dashboards and reports. Optionally, the Data Protection Advisor Administration for the Backup Operator lab is an on-demand lab course that aligns with the content presented here to reinforce these skills through practice in a lab environment.

<table>
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<tr>
<th>On Demand Class</th>
<th>03 Hours</th>
<th>ES101DPS01482</th>
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</table>

**Dell Data Protection Advisor (DPA) Administration - Custom Reports**

This course explains and demonstrates how to create custom reports using Data Protection Advisor. Students learn how to access and use Data Protection Advisor data sources and external data sources, how to apply Data Protection Advisor operators, and use Smart Groups. Additionally, the Dell Data Protection Advisor Administration – Custom Reports lab course aligns with the content to reinforce these skills through practice in a lab environment.

<table>
<thead>
<tr>
<th>Virtual Class</th>
<th>16 Hours</th>
<th>MR-1LN-DPAUCRT</th>
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<table>
<thead>
<tr>
<th>Classroom</th>
<th>MR-1LN-DPAUCRT</th>
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</table>

**Dell Data Protection Advisor (DPA) Administration - Custom Reports**

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 9
This course explains and demonstrates how to create custom reports using Data Protection Advisor. Students learn how to access and use Data Protection Advisor data sources and external data sources, how to apply Data Protection Advisor operators, and use Smart Groups. Additionally, the Dell Data Protection Advisor Administration – Custom Reports lab course aligns with the content to reinforce these skills through practice in a lab environment.

### Dell Data Protection Advisor (DPA) Implementation and Administration
This class explains and demonstrates the purpose, deployment, configuration, and use of Data Protection Advisor. Students learn key terms and concepts, the use cases Data Protection Advisor addresses, and the key features and functionalities of Data Protection Advisor. Students learn how to deploy the Data Protection Advisor components and how to configure Data Protection Advisor for operation. Students learn how to create and manage user accounts, how to configure backup components for reporting purposes and remote data collection configuration, and how to connect data sources to Data Protection Advisor. Students learn how to generate reports, interpret reports, and how to perform basic customization of dashboards and reports.

<table>
<thead>
<tr>
<th>Classroom</th>
<th>16 Hours</th>
<th>MR-1CN-DPACRPT</th>
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</thead>
</table>

### Dell Data Protection Advisor Administration – Custom Reports
This course explains and demonstrates how to create custom reports using Data Protection Advisor. Students learn how to access and use Data Protection Advisor data sources and external data sources, how to apply Data Protection Advisor operators, and use Smart Groups. Advanced topics include the use cases Data Protection Advisor addresses; the key terms and concepts; the use cases Data Protection Advisor addresses; and the key features and functionalities of Data Protection Advisor. Students learn how to deploy the Data Protection Advisor components and how to configure Data Protection Advisor for operation. Students learn how to create and manage user accounts, how to configure backup components for reporting purposes and remote data collection configuration, and how to connect data sources to Data Protection Advisor. Students learn how to generate reports, interpret reports, and how to perform basic customization of dashboards and reports.

<table>
<thead>
<tr>
<th>On Demand Lab</th>
<th>04 Hours</th>
<th>ES101DPS01483</th>
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</table>

### Dell Data Protection Advisor Administration for the Sys Admin
This course explains and demonstrates how to configure Data Protection Advisor (DPA). Students learn how to create and manage user accounts; how to configure backup components for reporting purposes and remote data collection configuration; and how to connect data sources to DPA. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>05 Hours</th>
<th>ES102DPS01484</th>
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</table>

### Dell Data Protection Advisor Concepts
This course explains and demonstrates the purpose and use of Data Protection Advisor. Students learn key terms and concepts; the use cases Data Protection Advisor addresses; and the key features and functionalities of Data Protection Advisor.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>01 Hours 30 Minutes</th>
<th>MR-1WP-EBAFUN</th>
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</table>

### Dell Data Protection Advisor Implementation
This course explains and demonstrates the deployment of Data Protection Advisor (DPA). Students learn how to deploy the DPA components; how to upgrade DPA to the latest release; and how to configure DPA for operation. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

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<tr>
<th>On Demand Class</th>
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### Dell Data Protection Advisor Implementation - Lab
This lab demonstrates the deployment of Data Protection Advisor. Students learn how to deploy the Data Protection Advisor components; how to upgrade Data Protection Advisor to the latest release; and how to configure Data Protection Advisor for operation. Access to this On-Demand Lab will be granted for 72 hours to complete this 4hour lab.

<table>
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<tr>
<th>On Demand Lab</th>
<th>02 Hours</th>
<th>ES102DPS01704</th>
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### Data Protection Advisor ILT Training - Package
This package includes the on-demand version of Data Protection Advisor Concepts as well as the live online versions of the Data Protection Advisor Implementation and Administration and the Data Protection Advisor Administration – Custom Reports course. It is recommended that students consume the training in this same order

This package includes the following courses:

- Dell Data Protection Advisor (DPA) Implementation and Administration(Classroom, 24 Hours)
- Dell Data Protection Advisor (DPA) Implementation and Administration(Virtual Class, 24 Hours)
- Dell Data Protection Advisor Administration - Custom Reports(Classroom, 16 Hours)
- Dell Data Protection Advisor Administration - Custom Reports(Virtual Class, 16 Hours)
- Dell Data Protection Advisor Administration - Custom Reports(On Demand Class, 01 Hours 30 Minutes)
- Dell Data Protection Advisor Administration - Custom Reports(On Demand Class, 16 Hours)

### Data Protection Advisor On-Demand Training - Package

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 10
This package includes the on-demand versions of Data Protection Advisor Concepts, Data Protection Advisor Administration - Sys Admin and lab, Data Protection Advisor Implementation and lab, and the Data Protection Advisor Administration - Custom Reports course and lab. Further, it is recommended that students consume the courses in this same order.

This package includes the following courses:

- **Data Protection Central (DPC) Administration**
  This course explains and demonstrates the purpose and use of Data Protection Central (DPC). Students learn how DPC Single Sign-On (SSO) simplifies access to Avamar, NetWorker, Data Domain, Data Protection Advisor, and Search through a single interface; how use DPC to schedule, run, search, and restore backups; and how to use and customize the DPC dashboards to monitor and report on backup operations and performance. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

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<tr>
<th>On Demand Class</th>
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- **Data Protection Central (DPC) Implementation**
  This course explains and demonstrates the deployment of Data Protection Central (DPC). Students learn how to deploy the DPC application OVA; how to upgrade DPC to the latest release; and how to configure and manage DPC Single Sign-On (SSO), passwords, and internal and external user authentication. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

<table>
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<tr>
<th>On Demand Class</th>
<th>02 Hours 30 Minutes</th>
<th>ES132DPS00609</th>
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</table>

- **Search Implementation**
  This course explains and demonstrates the purpose and use of (Data Protection) Search. Students learn how to perform different types of searches and filter results; how to index backups; how to monitor and troubleshoot search operations and performance; and how to configure Search replication for Disaster Recovery. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

<table>
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<tr>
<th>On Demand Class</th>
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</table>

- **Search Administration**
  This lab demonstrates the purpose and use of (Data Protection) Search. Students learn how to perform different types of searches and filter results; how to index backups; how to monitor and troubleshoot search operations and performance; and how to configure Search replication for Disaster Recovery. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

<table>
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<tr>
<th>On Demand Lab</th>
<th>02 Hours</th>
<th>ES102DPS01480</th>
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</table>

- **Data Protection Search (DPS) Implementation**
  This course explains and demonstrates the deployment of (Data Protection) Search. Students learn how to deploy the Search application OVA; how to upgrade Search to the latest release; and how to configure Search for operation. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

<table>
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<tr>
<th>On Demand Class</th>
<th>45 Minutes</th>
<th>ES132DPS00326</th>
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</table>

- **Dell Data Protection Search (DPS) Administration**
  This course explains and demonstrates the deployment of (Data Protection) Search. Students learn how to deploy the Search application OVA; how to upgrade Search to the latest release; and how to configure Search for operation. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

<table>
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<tr>
<th>On Demand Lab</th>
<th>02 Hours</th>
<th>ES102DPS01481</th>
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</table>

- **Dell Data Protection Search (DPS) Concepts**
  This course explains and demonstrates the deployment of (Data Protection) Search. Students learn how to deploy the Search application OVA; how to upgrade Search to the latest release; and how to configure Search replication for Disaster Recovery. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

<table>
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<tr>
<th>On Demand Class</th>
<th>01 Hours 30 Minutes</th>
<th>ES102DPS01479</th>
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- **Dell Data Protection Concepts**
  This course provides an understanding of the Dell Data Protection portfolio. The purpose of this course is to familiarize learners with the different Dell Data Protection products aligned with the Dell Data Protection strategy.

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<tr>
<th>On Demand Class</th>
<th>45 Minutes</th>
<th>ES132DPS03687</th>
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- **Dell Data Protection Solution Design Concepts**
  This course provides an understanding for designing solutions using Dell Data Protection products. The course describes how to analyze a target environment as well as provides discussion on best practices and considerations regarding sizing, capacity, and tuning for Dell Data Protection products.

<table>
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<tr>
<th>On Demand Class</th>
<th>01 Hours</th>
<th>ES132DPS03688</th>
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- **Dell Cloud Data Protection Solutions Design**
  This course describes the best practices, considerations, and limitations pertinent to Dell Cloud Data Protection products, when designing solutions for customer environments.

<table>
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<tr>
<th>On Demand Class</th>
<th>04 Hours</th>
<th>ES132DPS03563</th>
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- **Dell Avamar Solutions Design**
  This course describes the best practices, considerations, and limitations pertinent to Dell Avamar, when designing solutions for customer environments.

<table>
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<tr>
<th>On Demand Class</th>
<th>03 Hours</th>
<th>ES132DPS03580</th>
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- **Dell Data Protection Advisor Implementation**
  This course explains and demonstrates the deployment of Data Protection Advisor. Students learn how DPC Single Sign-On (SSO) simplifies access to Avamar, NetWorker, Data Domain, Data Protection Advisor, and Search through a single interface; how use DPC to schedule, run, search, and restore backups; and how to use and customize the DPC dashboards to monitor and report on backup operations and performance. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>02 Hours 30 Minutes</th>
<th>ES131DPS00608</th>
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</table>

- **Dell Data Protection Advisor Administration**
  This course explains and demonstrates the deployment of Data Protection Advisor. Students learn how to deploy the Data Protection Advisor OVA; how to upgrade Data Protection Advisor to the latest release; and how to configure and manage Data Protection Advisor Single Sign-On (SSO), passwords, and internal and external user authentication. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

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<tr>
<th>On Demand Lab</th>
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</table>

- **Dell Data Protection Advisor Administration for the Sys Admin**
  This course explains and demonstrates the deployment of Data Protection Advisor. Students learn how DPC Single Sign-On (SSO) simplifies access to Avamar, NetWorker, Data Domain, Data Protection Advisor, and Search through a single interface; how use DPC to schedule, run, search, and restore backups; and how to use and customize the DPC dashboards to monitor and report on backup operations and performance. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

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- **Dell Data Protection Advisor Administration - Custom Reports**
  This course explains and demonstrates the deployment of Data Protection Advisor. Students learn how to deploy the Data Protection Advisor OVA; how to upgrade Data Protection Advisor to the latest release; and how to configure and manage Data Protection Advisor Single Sign-On (SSO), passwords, and internal and external user authentication. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

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<tr>
<th>On Demand Lab</th>
<th>02 Hours</th>
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</table>

- **Dell Data Protection Advisor Administration - Lab**
  This course explains and demonstrates the deployment of Data Protection Advisor. Students learn how DPC Single Sign-On (SSO) simplifies access to Avamar, NetWorker, Data Domain, Data Protection Advisor, and Search through a single interface; how use DPC to schedule, run, search, and restore backups; and how to use and customize the DPC dashboards to monitor and report on backup operations and performance. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

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<th>02 Hours</th>
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- **Dell Data Protection Advisor Administration - Custom Reports**
  This course explains and demonstrates the purpose and use of (Data Protection) Search. Students learn how to perform different types of searches and filter results; how to index backups; how to monitor and troubleshoot search operations and performance; and how to configure Search replication for Disaster Recovery. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

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- **Dell Data Protection Advisor Concepts**
  This course describes the best practices, considerations, and limitations pertinent to Dell Data Protection products, when designing solutions for customer environments.

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- **Dell Data Protection Advisor Administration for the Sys Admin**
  This course explains and demonstrates the purpose and use of (Data Protection) Search. Students learn how to perform different types of searches and filter results; how to index backups; how to monitor and troubleshoot search operations and performance; and how to configure Search replication for Disaster Recovery. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

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- **Dell Data Protection Solution Design Concepts**
  This course provides an understanding for designing solutions using Dell Data Protection products. The course describes how to analyze a target environment as well as provides discussion on best practices and considerations regarding sizing, capacity, and tuning for Dell Data Protection products.

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<th>On Demand Class</th>
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</table>
PowerProtect DP Series Appliance Administration

This course explains and demonstrates how to administer and use all features of the PowerProtect DP Series Appliance. The student will learn about each of the models in the PowerProtect DP Series Appliance model family and how to administer and use the PowerProtect DP Series Appliance System Manager, the Backup Server (Avamar), Protection Storage (Data Domain), Reports and Analytics (Data Protection Advisor), and Search. This course includes labs to reinforce these skills through exercises.

- **Classroom**: 40 Hours
- **Virtual Class**: 40 Hours
- **ES111DPS00617**
- **ES111DPS00618**

PowerProtect DP Series Appliance Solutions Design

This course explains and demonstrates how to administer and use all features of the PowerProtect DP Series Appliance. The student will learn about each of the models in the PowerProtect DP Series Appliance model family and how to administer and use the PowerProtect DP Series Appliance System Manager, the Backup Server (Avamar), Protection Storage (Data Domain), Reports and Analytics (Data Protection Advisor), and Search. This course includes labs to reinforce these skills through exercises.

- **Virtual Class**: 40 Hours
- **ES121DPS00618**
- **Classroom**: 40 Hours
- **ES121DPS00618**

PowerProtect DP Series Appliance Administration

In this lab students will familiarize themselves with the Dell EMC PowerProtect DP Series Appliance ACM, and System Manager UIs and their capabilities. The lab covers backups and restores for different clients including Windows, Linux, VMware, and SQL Server. NDMP accelerators, protection storage configuration, and cloud tier are also covered. The lab navigates through search and reporting capabilities, and health monitoring and troubleshooting.

- **On Demand Lab**: 20 Hours
- **Virtual Class**: 40 Hours
- **ES141DPS00621**

NetWorker Administration

This lab demonstrates configuration and use of NetWorker. Students learn how to configure NetWorker for operation; how to create and manage user accounts; how to configure and initiate backup and restore of data; and how to monitor NetWorker operation. Access to this On-Demand Lab will be granted for three (3) days to complete this 8-hours lab.

- **On Demand Lab**: 08 Hours
- **ES102DPS01705**

Dell NetWorker Administration

This course explains and demonstrates how to configure and manage user accounts; how to configure and initiate backup and restore of data; and how to monitor NetWorker operation. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

- **On Demand Class**: 09 Hours 30 Minutes
- **ES102DPS01486**

Integrated Data Protection Appliance (IDPA) - Dell PowerProtect DP Series Appliance Administration

The PowerProtect DP Series Appliance Administration course provides the knowledge and skills for configuring, managing, and maintaining the DP series appliances. Respective backup and restore configurations are created for different production environments. They include VMware virtual machines, application servers, and NAS. The DP series appliance components are explained in detail. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

- **On Demand Class**: 12 Hours
- **ES151DPS00619**

Dell PowerProtect DP Series Appliance Concepts

This course explains the purpose and use of PowerProtect DP series appliances. Students learn key terms and concepts, use cases, and key features and functionalities. The models in the DP series family, the architecture, user interfaces, and references to the documentation are covered.

- **On Demand Class**: 01 Hours
- **MR-1WN-DPAFJLN**
Dell NetWorker Administration - Cloud Enablement
This lab focuses on NetWorker and the ability to enable backups to the cloud. Operational best practices are included with a focus on configuring and performing backup and recovery in a cloud environment. The course provides demonstrations to reinforce the training.
On Demand Lab 08 Hours ES101DPS01728

Dell NetWorker Concepts
This course explains the purpose and use of Dell NetWorker. Students learn key terms and concepts and the key features and functionalities of NetWorker.
On Demand Class 01 Hours MR-1WP-NWFUN

Dell NetWorker Implementation
This lab demonstrates deployment, configuration, and use of NetWorker. Students learn how to deploy the NetWorker components and how to configure and prepare NetWorker for administration.
On Demand Lab 08 Hours ES101DPS01751

Dell NetWorker Implementation and Administration
This course provides participants with the knowledge and basic skills necessary to install, configure, maintain and monitor NetWorker. The course contains lectures, hands-on labs and video demonstrations to provide experience with specific concepts.
Classroom 40 Hours MR-1CP-NWIM
Virtual Class MR-1CP-NWIM

Dell NetWorker Implementation and Administration
This course provides participants with the knowledge and basic skills necessary to install, configure, maintain and monitor NetWorker. The course contains lectures, hands-on labs and video demonstrations to provide experience with specific concepts.
Virtual Class 40 Hours MR-1LP-NWIM
Classroom 40 Hours MR-1LP-NWIM

Dell NetWorker Integration with Microsoft Exchange
This lab demonstrates the integration of NetWorker with Microsoft Exchange. Students learn operational best practices with a focus on configuring and performing backup and recovery of Microsoft Exchange.
On Demand Lab 08 Hours ES103DPS01708

NetWorker Integration
This course focuses on optimizing NetWorker performance and integrating NetWorker with Dell EMC backup products, Microsoft applications, Oracle, SAP, MEDITECH and virtual environments. Operational best practices are included with a focus on configuring and performing backup and recovery of file systems, applications and databases. The course provides hands-on labs to reinforce the training.
Classroom 40 Hours MR-1CN-NWIW

NetWorker Integration
This course explains and demonstrates the integration of NetWorker with different applications, databases, virtual machine hosts, and cloud environments. Students learn operational best practices with a focus on configuring and performing backup and recovery of file systems, applications and databases. This course includes labs to reinforce these skills through exercises.
Virtual Class 40 Hours MR-1LN-NWIW

NetWorker Integration with Hyper-V
This course explains and demonstrates the integration of NetWorker with Hyper-V. Students learn operational best practices with a focus on configuring and performing backup and recovery of virtual machines. A separate on-demand lab aligns with this course to reinforce these skills through exercises.
On Demand Class 02 Hours ES103DPS01488

NetWorker Integration with Hyper-V
This lab demonstrates the integration of NetWorker with Hyper-V. Students learn operational best practices with a focus on configuring and performing backup and recovery of virtual machines.
On Demand Lab 08 Hours ES103DPS01706

NetWorker Integration with MEDITECH
This course explains and demonstrates the integration of NetWorker with MEDITECH for backup and recovery. Students learn operational best practices with a focus on configuring and performing backup and recovery using MEDITECH.
On Demand Class 02 Hours ES103DPS01543

NetWorker Integration with Microsoft Exchange
This course explains and demonstrates the integration of NetWorker with MS-Exchange. Students learn operational best practices with a focus on configuring and performing backup and recovery of MS-Exchange. A separate on-demand lab aligns with this course to reinforce these skills through exercises.
On Demand Class 02 Hours 30 Minutes ES103DPS01489

NetWorker Integration with Microsoft SQL Server
This course explains and demonstrates the integration of NetWorker with MS-SQL. Students learn operational best practices with a focus on configuring and performing backup and recovery of logs and databases. A separate on-demand lab aligns with this course to reinforce these skills through exercises.
On Demand Class 03 Hours ES103DPS01491

NetWorker Integration with Oracle
This lab demonstrates the integration of NetWorker with Oracle. Students learn operational best practices with a focus on configuring and performing backup and recovery of logs and databases.
This package contains all the training necessary to help you prepare for the NetWorker Specialist certification. This package does not include a Proven Professional exam voucher, in order to add please search for “Dell Technologies Proven Professional VUE Exam Voucher” or Course ID “MR-1EV-VUEEMCPROV”.

This package includes the following courses:
- Dell NetWorker Implementation and Administration(Classroom, 40 Hours|Virtual Class)
- Dell NetWorker Implementation and Administration(Virtual Class, 40 Hours|Classroom, 40 Hours)
- Dell NetWorker Administration - Cloud Enablement(On Demand Class, 02 Hours 30 Minutes)

DCS-IE NetWorker Implementation Engineer [On-Demand] - Package

This package contains all the training necessary to help you prepare for the NetWorker Specialist certification. This package does not include a Proven Professional exam voucher, in order to add please search for “Dell Technologies Proven Professional VUE Exam Voucher” or Course ID “MR-1EV-VUEEMCPROV”.

This package includes the following courses:
- Dell NetWorker Concepts(On Demand Class, 01 Hours)
- Dell NetWorker Administration - Cloud Enablement(On Demand Class, 02 Hours 30 Minutes)
- Dell NetWorker Implementation(On Demand Lab, 08 Hours)
- Dell NetWorker Administration(On Demand Class, 04 Hours)
- Dell NetWorker Administration(On Demand Class, 09 Hours 30 Minutes)

PowerProtect Data Manager

Dell PowerProtect Data Manager Concepts

This course introduces the Dell PowerProtect Data Manager and its user interface. This course explains the use cases of Dell PowerProtect Data manager.

On Demand Class 01 Hours ES131DPS00978

Dell PowerProtect Data Manager Features

This course summarizes the Dell PowerProtect Data Manager features and overviews the Dell PowerProtect Data Manager user interface and dashboard. This course also explains the PowerProtect Data Manager options and functionalities.

On Demand Class 01 Hours 30 Minutes ES131DPS00994

Dell PowerProtect Data Manager Implementation

This course explains the steps required to deploy PowerProtect Data Manager on a vCenter using OVA file. Post installation tasks and initial configuration are also covered in this course.

On Demand Class 01 Hours ES131DPS00979

Dell PowerProtect Data Manager Implementation and Administration

This course explains and demonstrates the deployment, configuration, and integration of Dell PowerProtect Data Manager with Microsoft Exchange, Microsoft SQL, Kubernetes, Oracle, SAP HANA, and VMware virtual machines. It describes various databases backup and restore operations with Dell PowerProtect Data Manager. This course includes labs to reinforce these skills through exercises.

Classroom 40 Hours ESPSS02373
Virtual Class 40 Hours ESPSS02373

Dell PowerProtect Data Manager Implementation Lab

This lab demonstrates the PowerProtect Data Manager deployment procedures. Students learn operational best practices with a focus on deploying the PowerProtect Data Manager OVA file and performing the initial configurations. Access to this On-Demand Lab will be granted for 24 hours to complete this 30 minutes lab.

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 14
Dell PowerProtect Data Manager Microsoft SQL Integration
This course explains the Dell PowerProtect Data Manager with Microsoft SQL integration features. The course describes the configuration for Oracle database backup with PowerProtect Data Manager. The course highlights the steps to back up and restore Oracle databases using the PowerProtect Data Manager and Oracle Recovery Manager (RMAN).

On Demand Class 01 Hours 30 Minutes ES131DPS00985

Dell PowerProtect Data Manager Oracle Integration
This course explains the Dell PowerProtect Data Manager with Oracle integration features. The course describes the configuration of Oracle database backup with PowerProtect Data Manager. The course highlights the steps to back up and restore Oracle databases using the PowerProtect Data Manager and Oracle Recovery Manager (RMAN).

On Demand Class 01 Hours 30 Minutes ES141DPS00997

Dell PowerProtect Data Manager SAP HANA Integration
This course explains the Dell PowerProtect Data Manager with SAP HANA integration features. The course describes the configuration of SAP HANA database backup with PowerProtect Data Manager. The course highlights the steps to back up and restore SAP HANA databases using the PowerProtect Data Manager and SAP HANA Studio.

On Demand Class 01 Hours 30 Minutes ES101DPS01685

Dell PowerProtect Data Manager SAP HANA Integration Lab
This lab demonstrates the integration of SAP HANA database with Dell PowerProtect Data Manager. Students learn operational practices with a focus on configuring and performing backups and recovery of the SAP HANA databases with PowerProtect Data Manager. Access to this On-Demand Lab will be granted for 24 hours to complete this 45-minute lab.

On Demand Lab 45 Minutes ES101DPS01686

Dell PowerProtect Data Manager VM Integration
This course covers the integration of virtual machines with PowerProtect Data Manager. This course explains the steps required to add an instance of vCenter, add VM Direct engine and Transparent Snapshot Data Mover, create protection policies for the virtual machines and to restore virtual machines with the PowerProtect Data Manager.

On Demand Class 02 Hours ES131DPS00984

Dell PowerProtect Data Manager VMware Integration Lab
This lab demonstrates the integration of VMware virtual machines with PowerProtect Data Manager. Students learn operational practices with a focus on configuring and performing backups and recovery of the VMware virtual machines with PowerProtect Data Manager. Access to this On-Demand Lab will be granted for 24 hours to complete this 60-minute lab.

On Demand Class 01 Hours ES142DPS00996

Dell vProtect Concepts
This course provides students with basic knowledge of the Dell vProtect product. This course covers vProtect features, use cases, benefits, architecture, and components.

On Demand Class 01 Hours ES101DPS01909

Dell vProtect Implementation and Administration
This course provides the knowledge and skills needed for deploying and managing the vProtect product. This course covers the environment planning and steps required for vProtect installation and post-installation including initial configuration. This course also covers the integration of vProtect with PowerProtect DD and supported virtual machine and cloud platforms. This course covers the steps required to perform backup, recovery, snapshot management, policies and schedules to backup virtual machines, and vProtect upgrades. This course also covers the steps to enable debug mode in vProtect nodes and servers, and the steps to collect vProtect activity logs using web UI or directly from the operating system.

On Demand Class 05 Hours 30 Minutes ES402DPS01913

PowerProtect Data Manager Implementation and Administration
This course explains and demonstrates the deployment, configuration, and integration of Dell EMC PowerProtect Data Manager with Microsoft Exchange, Microsoft SQL, Kubernetes, Oracle, SAP HANA, and VMware virtual machines. It describes various databases backup and restore operations with PowerProtect Data Manager. This course includes labs to reinforce these skills through exercises.

Classroom 32 Hours ESDPSS02372

PowerProtect Data Manager Kubernetes Integration
This course explains the Dell EMC PowerProtect Data Manager with Kubernetes integration features. It describes the configuration of Kubernetes namespaces backup with PowerProtect Data Manager. The steps to back up and restore Kubernetes namespaces using the PowerProtect Data Manager are covered.

On Demand Class 01 Hours 30 Minutes ESDPSD02845

PowerProtect Data Manager Microsoft Exchange Integration
This course explains the PowerProtect Data Manager backup and restore operations. The course describes PowerProtect Data Manager backup requirements and highlights the steps required to update older versions of PowerProtect Data Manager to latest versions.
This course explains the Dell EMC PowerProtect Data Manager with Microsoft Exchange mailbox database integration features. It describes the configuration of Microsoft Exchange mailbox database backup with PowerProtect Data Manager. The steps to back up and restore Microsoft Exchange mailbox database using the PowerProtect Data Manager and the Microsoft Exchange Management Shell are covered.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>02 Hours</th>
<th>ESDPSD02844</th>
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**PowerProtect Data Manager Troubleshooting**

This course contains guidance and recommendations to ensure a successful PowerProtect implementation. In this course, specific recommendations for troubleshooting specific conditions related to PowerProtect Data Manager backup configurations and VM backups are discussed.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>45 Minutes</th>
<th>ES13IDPS00983</th>
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**RecoverPoint Concepts**

**Dell RecoverPoint Administration**

This course introduces the Dell RecoverPoint solution. It presents an overview of the architecture, features, and functionality of RecoverPoint Systems. The learner will be exposed to the unique use cases and the different management options available.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>01 Hours</th>
<th>MR-1WP-RFDP</th>
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**RecoverPoint Administration for Physical Storage Arrays**

This course is designed to prepare personnel to manage RecoverPoint. This course includes coverage of Classic RecoverPoint and RecoverPoint with VNX (formerly known as RecoverPoint/SE). This course covers product concepts and theory as well as available Operations within RecoverPoint including configuring protection, failover and recovery as well as how to manage and maintain a RecoverPoint environment using the tools available. There are hands-on labs covering: Configuration of Consistency Group replication and maintenance tasks such as failover and recovery. The course also addresses troubleshooting of general deployment and implementation issues. This course does not cover RecoverPoint for Virtual Machines. Administration and management of RecoverPoint for Virtual Machines is covered in RecoverPoint for Virtual Machines Administration (On Demand Class, ESDPSD02371) and RecoverPoint for VMs Management - On Demand Lab (On Demand Lab, ES143DPS00237).

<table>
<thead>
<tr>
<th>Classroom</th>
<th>24 Hours</th>
<th>MR-9CN-NSRPOM</th>
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</table>

**RecoverPoint Administration for Physical Storage Arrays**

This course is designed to prepare personnel to manage RecoverPoint. This course includes coverage of Classic RecoverPoint and RecoverPoint with VNX (formerly known as RecoverPoint/SE). This course covers product concepts and theory as well as available Operations within RecoverPoint including configuring protection, failover and recovery as well as how to manage and maintain a RecoverPoint environment using the tools available. There are hands-on labs covering: Configuration of Consistency Group replication and maintenance tasks such as failover and recovery. The course also addresses troubleshooting of general deployment and implementation issues. This course does not cover RecoverPoint for Virtual Machines. Administration and management of RecoverPoint for Virtual Machines is covered in RecoverPoint for Virtual Machines Administration (On Demand Class, ESDPSD02371) and RecoverPoint for VMs Management - On Demand Lab (On Demand Lab, ES143DPS00237).

<table>
<thead>
<tr>
<th>Virtual Class</th>
<th>24 Hours</th>
<th>MR-9LN-NSRPOM</th>
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</table>

**RecoverPoint for Virtual Machines Administration**

This On-Demand lab explores lab scenarios based on the On-Demand course. RecoverPoint for Virtual Machines Administration. This lab guides the student thru the process of protecting Virtual Machines using consistency groups and performing VMs recovery operations. This lab also uses the RecoverPoint for VMs Plug-in to monitor a RecoverPoint for Virtual Machines system. Access to this On-Demand Lab will be granted for 24 hours to complete this three hours lab.

<table>
<thead>
<tr>
<th>On Demand Lab</th>
<th>03 Hours</th>
<th>ES143DPS00237</th>
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<tbody>
<tr>
<td>Virtual Class</td>
<td>ES143DPS00237</td>
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</table>

**RecoverPoint for Virtual Machines Administration**

This On-Demand course explains and demonstrates the administration of RecoverPoint for Virtual Machines.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>02 Hours 30 Minutes</th>
<th>ESDPSD02371</th>
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**RecoverPoint for Virtual Machines Concepts**

This course provides an overview of RecoverPoint for Virtual Machines. It addresses the fundamental concepts, operations, use cases, product architecture and definition of components.

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<tr>
<th>On Demand Class</th>
<th>01 Hours</th>
<th>ES13IDPS00314</th>
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</table>

**RecoverPoint for Virtual Machines Implementation**

This course is intended for individuals who will perform RecoverPoint for Virtual Machines deployment activities including planning, installation, and configuration.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>01 Hours</th>
<th>ES143DPS00234</th>
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</table>

**RecoverPoint for Virtual Machines Implementation**

This On-Demand lab explores lab scenarios based on the On-Demand course, RecoverPoint for Virtual Machines Implementation. The session does not cover concepts, but rather provides a lab environment where participants can validate skills and concepts covered in the On-Demand course. During this online lab session, participants will practice how to deploy, configure, and register RecoverPoint for Virtual Machines. Access to this On-Demand Lab will be granted for 24 hours to complete this three hours lab.

<table>
<thead>
<tr>
<th>On Demand Lab</th>
<th>03 Hours</th>
<th>ES143DPS00236</th>
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</table>

**RecoverPoint for Virtual Machines Implementation and Administration**

This course covers how to implement, manage and monitor a RecoverPoint for Virtual Machines solution. Deployment activities including planning, installation, and configuration are covered in this course. Management activities such as testing images for remote access, creating bookmarks, and failover and production recovery operations are also covered. Finally, this course covers the methods for determining the health of a RecoverPoint for VMs system, methods to troubleshoot vRPA connectivity issues and diagnose RecoverPoint for VMs system performance issues.

<table>
<thead>
<tr>
<th>Classroom</th>
<th>16 Hours</th>
<th>ESDPS003215</th>
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<tbody>
<tr>
<td>Virtual Class</td>
<td>16 Hours</td>
<td>ESDPS003215</td>
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</table>

**RecoverPoint for Virtual Machines Troubleshooting**

This course focuses on issue discovery and resolution for a RecoverPoint for VMs environment. The course includes definition of potential faults, common configuration errors, and connectivity requirements. Instruction on troubleshooting techniques, tools and procedures, and performance considerations are also covered.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>02 Hours</th>
<th>ES50IDPS00632</th>
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</table>

**RecoverPoint Management - Video ILT**

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 16
This course is designed to prepare personnel to manage RecoverPoint. This course includes coverage of Classic RecoverPoint and RecoverPoint with VNX (formerly known as RecoverPoint/SE). This course covers product concepts and theory as well as available Operations within RecoverPoint including configuring protection, failover and recovery as well as how to manage and maintain a RecoverPoint environment using the tools available. There are hands-on labs covering: Configuration of Consistency Groups and replication and maintenance tasks such as failover and recovery. The course also addresses troubleshooting of general deployment and implementation issues.

<table>
<thead>
<tr>
<th>Course</th>
<th>Duration</th>
<th>Code</th>
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<tbody>
<tr>
<td>RecoverPoint with VNX Cluster Installation</td>
<td>02 Hours</td>
<td>MR-1WP-RPVVNXX</td>
</tr>
<tr>
<td>RecoverPoint with VNX Implementation - Video ILT</td>
<td>24 Hours</td>
<td>MR-1TP-RPVVNXIMP-1510</td>
</tr>
<tr>
<td>RecoverPoint for Virtual Machines On-Demand Training - Package</td>
<td>On Demand Class</td>
<td>On Demand Class</td>
</tr>
<tr>
<td>RecoverPoint Systems Administrator - Package</td>
<td>02 Hours</td>
<td>On Demand Class</td>
</tr>
</tbody>
</table>

This package includes the following courses:

- Dell RecoverPoint Concepts (On Demand Class, 01 Hours)
- Dell RecoverPoint Management - Video ILT (On Demand Class, 24 Hours)

**RecoverPoint Systems Administrator ILT Training - Package**

This package is aligned to and supports the E20-575 Specialist - System Administrator, RecoverPoint certification. This package focuses on developing the knowledge and skills to demonstrate management, configuration and administration of RecoverPoint systems. This package includes the RecoverPoint Fundamentals on demand course and the student can choose between live in-person or live online instruction for RecoverPoint Management course.

This package includes the following courses:

- RecoverPoint Administration for Physical Storage Arrays (Classroom, 24 Hours)
- RecoverPoint Administration for Physical Storage Arrays (Virtual Class, 24 Hours)
- Dell RecoverPoint Concepts (On Demand Class, 01 Hours)
- Dell Technologies Proven Professional VUE Exam Voucher (On Demand Class)

**SourceOne**

**SourceOne Archiving Family Concepts**

This course provides an overview of the products in the EMC SourceOne family. Students will learn about the benefits, concepts and terminology, and components of EMC SourceOne.

<table>
<thead>
<tr>
<th>Course</th>
<th>Duration</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>SourceOne Discovery Manager Management</td>
<td>01 Hours</td>
<td>On Demand Class</td>
</tr>
<tr>
<td>SourceOne Email Management Administration for Exchange - Video ILT</td>
<td>40 Hours</td>
<td>On Demand Class</td>
</tr>
<tr>
<td>SourceOne Email Supervisor Management</td>
<td>02 Hours</td>
<td>On Demand Class</td>
</tr>
<tr>
<td>SourceOne Video ValuePak - Package</td>
<td></td>
<td>On Demand Class</td>
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</table>

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 17
This course builds on skills developed in the Data Science and Big Data Analytics course. The main focus areas cover Hadoop (including Pig, Hive, and HBase), Natural Language Processing, Social Network Analysis, Simulation, Random Forests, Multinomial Logistic Regression, and Data Visualization. Taking an open or technology-neutral approach, this course utilizes several open-source tools to address big data challenges.

### Advanced Methods in Data Science and Big Data Analytics - Online ILT

This course builds on skills developed in the Data Science and Big Data Analytics course. The main focus areas cover Hadoop (including Pig, Hive, and HBase), Natural Language Processing, Social Network Analysis, Simulation, Random Forests, Multinomial Logistic Regression, and Data Visualization. Taking an "Open" or technology-neutral approach, this course utilizes several open-source tools to address big data challenges.

### On Demand Class

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Duration</th>
<th>Code</th>
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<tbody>
<tr>
<td>Artificial Intelligence and Machine Learning</td>
<td>04 Hours</td>
<td>MR-1CN-INTDATSCLBIGDAT</td>
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</table>

#### Artificial Intelligence and Machine Learning

This course covers broad range of emerging AI techniques and supporting technologies such as: ML, neural networks, deep reinforcement learning, and AI Infrastructure. The course provides a detailed description about the technical and operational aspect of AI and ML and helps the learners to understand the concepts of AI, ML, neural network, reinforcement learning, NLP and artificial ecosystem. The course also provides a detailed description about the need of AI ready infrastructure, AI and ML frameworks, and also know about the implemented machine learning models, and use cases across the industry. The offering is an engaging mix of key technologies, hands-on labs, case examples, and business insights.

### Artificial Intelligence and Machine Learning - On Demand Course

This course covers broad range of emerging AI techniques and supporting technologies such as: ML, neural networks, deep reinforcement learning, and AI Infrastructure. The course provides a detailed description about the technical and operational aspect of AI and ML and helps the learners to understand the concepts of AI, ML, neural network, reinforcement learning, NLP and artificial ecosystem. The course also provides a detailed description about the need of AI ready infrastructure, AI and ML frameworks, and also know about the implemented machine learning models, and use cases across the industry. The offering is an engaging mix of key technologies, hands-on labs, case examples, and business insights.

### AI and ML Software Frameworks - On-Demand Course

This course provides a background on need and significance of AI and ML frameworks. It explains in detail about various existing frameworks, their features and limitations. The course details out building NN models in PyTorch, Tensorflow and Caffe2. Later part of course compares the pros and cons of various AI/ML frameworks. The need and significance of Automated ML frameworks and major Auto ML frameworks is highlighted. Finally, workflow and high-level programming of PyTorch, TensorFlow and Caffe2 frameworks is discussed. A separate on-demand lab aligns with this course to reinforce these skills through exercises.

### Building an AI Ecosystem - On-Demand Course

This course describes the concept of building AI ecosystem. The course provides a detailed description of how AI is implemented in a business model and helps to understand the impact of AI in business. The course also provides an overview of ethics in AI, various ethical issues principles, different types of biases and their impacts and what culture should be developed to reduce bias and increase the trust of humans over machines.

### Building an Enterprise-Wide Artificial Intelligence Infrastructure - On-Demand Course

This course describes artificial intelligence and machine learning workflow and its significance. The offering helps to understand the need of planning and designing AI infrastructure. The course provides a detailed description about need of AI infrastructure and helps to understand various infrastructure components and their role in building AI across organization. The course also offers hands-on labs demonstrating hosting of ml models using Docker.
Building an Enterprise-Wide Artificial Intelligence Infrastructure - On-Demand Lab
The lab helps to understand the basic Docker operations and provides information about how to perform operations on a tensorflow serving image.

Data Engineering Workshop - Virtual Classroom
For over 10 years, there has been an intense focus by companies to extract business value from their data. Out of this activity, a role called the data scientist emerged. However, it quickly became obvious that a majority of a data scientist’s time was spent on data preparation or moving analytical models into production environments. Thus, the data engineer has emerged as a highly desirable and indispensable member of an analytics project team. This instructor-led workshop covers the content and hands-on lab exercises provided in the following five courses: Data Warehousing with SQL and NoSQL, ETL Offload with Hadoop and Spark, Processing Streaming and IoT Data, Building Data Pipelines with Python, and Data Governance, Security and Privacy for Big Data. This training prepares the learner for a major portion of the Dell Technologies Proven Professional data engineering specialist-level certification exam (DES-7DE1). Review the exam description document to understand all the related data engineering training and consumption options.

Data Governance, Security and Privacy for Big Data - On-Demand Course
This course introduces data governance and data management approaches applicable to a wide range of use cases. Focusing on the various governance roles and models, this course prepares the learner to implement and maintain a successful data governance program. Additionally, the course covers several Apache tools: Atlas, Ranger, and Knox, that enable the management and control of an organization’s data in Big Data environments such as Hadoop. The on-demand coursework includes recorded lab exercises demonstrating these Apache tools. This course prepares the learner for a key portion of the Dell Technologies Proven Professional data engineering specialist-level certification exam (DES-7DE1). Review the exam description document to understand all the related data engineering training and consumption options.

Data Governance, Security and Privacy for Big Data - On-Demand Lab
This on-demand lab provides access to the lab environment provided in the Data Governance, Security, and Privacy for Big Data course which covers data governance and data management principles and approaches. The guided lab exercises provide hands-on experience with the following Apache tools: Atlas, Ranger, and Knox. These tools enable the management and control of an organization’s datasets in Big Data environments such as Hadoop. This on-demand lab supplements the training that prepares the learner for a key portion of the Dell Technologies Proven Professional data engineering specialist-level certification exam (DES-7DE1). Review the exam description document to understand all the related data engineering training and consumption options.

Data Science and Big Data Analytics for Business Transformation
Businesses are increasingly looking to take advantage of Big Data to be competitive. In addition to Data Scientists, organizations need data-savvy business leaders who can identify opportunities to solve business problems using advanced analytics and who have the expertise to lead an analytical team. This course gives business leaders the skills and knowledge to better manage such analytical efforts. It describes how to get started and what is required to effectively run projects which leverage Big Data analytics. Specifically, it addresses: deriving business value from Big Data, leading Data Science projects using adata analytics lifecycle, developing Data Science teams, and driving innovation using analytics.

Data Science and Big Data Analytics for Business Transformation - Video ILT
Businesses are increasingly looking to take advantage of Big Data to be competitive. In addition to Data Scientists, organizations need data-savvy business leaders who can identify opportunities to solve business problems using advanced analytics and who have the expertise to lead an analytical team. This course gives business leaders the skills and knowledge to better manage such analytical efforts. It describes how to get started and what is required to effectively run projects which leverage Big Data analytics. Specifically, it addresses: deriving business value from Big Data, leading Data Science projects using a data analytics lifecycle, developing Data Science teams, and driving innovation using analytics.

Data Science and Big Data Analytics v2 - On-Demand Course
This course provides practical foundation level training that enables immediate and effective participation in Big Data and other analytics projects. It includes an introduction to Big Data and the Data Analytics Lifecycle to address business challenges that leverage big data. The course provides grounding in basic and advanced analytic methods and an introduction to big data analytics technology and tools, including MapReduce and Hadoop. Labs offer opportunities for students to understand how these methods and tools may be applied to real world business challenges by a practicing data scientist. The course takes an open, or technology-neutral approach, and includes a final lab which addresses a big data analytics challenge by applying the concepts taught in the course in the context of the Data Analytics Lifecycle. The course prepares the student for the Dell EMC Proven Professional Data Scientist Associate certification exam.

Data Science and Big Data Analytics v2 - On-Demand Lab
This on-demand lab provides access to the lab environment provided in the Data Science and Big Data Analytics course which covers data governance and data management principles and approaches. The guided lab exercises provide hands-on experience with the following Apache tools: Atlas, Ranger, and Knox. These tools enable the management and control of an organization’s datasets in Big Data environments such as Hadoop. This on-demand lab supplements the training that prepares the learner for a key portion of the Dell Technologies Proven Professional data engineering specialist-level certification exam (DES-7DE1). Review the exam description document to understand all the related data engineering training and consumption options.

Data Science and Big Data Analytics v2 - Virtual Classroom

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 19
This course provides practical foundation level training that enables immediate and effective participation in big data and other analytics projects. It includes an introduction to big data and the Data Analytics Lifecycle to address business challenges that leverage big data. The course provides grounding in basic and advanced analytic methods and an introduction to big data analytics technology and tools, including MapReduce and Hadoop. Labs offer opportunities for students to understand how these methods and tools may be applied to real-world business challenges by practicing data scientists. The course takes an OpenSourcing technology-neutral approach, and includes a final lab which addresses a big data analytics challenge by applying the concepts taught in the context of the Data Analytics Lifecycle. The course prepares the student for the Dell EMC Proven Professional Data Scientist Associate certification exam.

**Data Science and Big Data Analytics v2 On-Demand Lab - Europe**

This on-demand lab provides access to the lab environment provided in the Data Science and Big Data Analytics v2 courses. The guided lab exercises provide hands-on experience with the Greenplum database, the R Programming Language, and the Hadoop ecosystem, including Pig, Hive, and Spark. These tools are applied to analytical techniques such as K-mean clustering, association rules, linear regression, logistic regression, decision trees, naive Bayes classification, text analysis, and time series analysis.

**On Demand Lab** 216 Hours ES742OCMDSALE

**Data Science and Big Data Analytics v2 On-Demand Lab - North America**

This on-demand lab provides access to the lab environment provided in the Data Science and Big Data Analytics v2 courses. The guided lab exercises provide hands-on experience with the Greenplum database, the R Programming Language, and the Hadoop ecosystem, including Pig, Hive, and Spark. These tools are applied to analytical techniques such as K-mean clustering, association rules, linear regression, logistic regression, decision trees, naive Bayes classification, text analysis, and time series analysis.

**On Demand Lab** 216 Hours ES742OCMDSALN

**Data Warehousing with SQL and NoSQL - On-Demand Course**

With the rapid growth in the volume of data, organizations continue to be challenged with how to transact and later analyze this data in a timely manner. This course covers traditional data warehousing with SQL and NoSQL approaches such as data lakes and NoSQL tools. Provide a mixture of theory and practical considerations, the on-demand course includes recorded lab exercise demonstrations of the Greenplum Database, Redis, Apache Cassandra, and Apache CouchDB. This course prepares the learner for a key portion of the Dell Technologies Proven Professional data engineering specialist-level certification exam (DES-7DE1). Review the exam description document to understand all the related data engineering training and consumption options.

**On Demand Class** 08 Hours ES7320CMETLHS

**Data Warehousing with SQL and NoSQL - On-Demand Lab**

This on-demand lab provides access to the lab environment provided in the Data Warehousing with SQL and NoSQL course that covers traditional data warehousing with SQL and newer approaches such as data lakes and NoSQL tools. The guided lab exercises provide hands-on experience with the following: Greenplum Database, Redis, Apache Cassandra, and Apache CouchDB. This on-demand lab supplements the training that prepares the learner for a key portion of the Dell Technologies Proven Professional data engineering specialist-level certification exam (DES-7DE1). Review the exam description document to understand all the related data engineering training and consumption options.

**On Demand Lab** 08 Hours ES7420CMDATAW

**Deep Reinforcement Learning Strategies, Algorithms, and Techniques - On-Demand Course**

This course describes the concept of deep reinforcement learning, reinforcement learning, neural networks and natural language processing. The course details about the usage of bellman equations, Monte Carlo, and Q learning algorithms. The course also provides a detailed description about the types and process of training a neural network and approaches of NLP and outlines their application areas. This course includes a separate on-demand lab demonstrating concepts of reinforcement learning, neural network, and NLP process using Python and evaluates and predicts different dataset models.

**On Demand Class** 05 Hours 45 Minutes ESOCMD02258

**Deep Reinforcement Learning Strategies, Algorithms, and Techniques - On-Demand Lab**

The lab helps to build neural networks such as LSTM and CNN and helps to understand the Markov process, Monte Carlo and Q learning techniques. The lab implements NLP and provides information about how to build a conversational bot.

**On Demand Lab** 30 Minutes ESOCMD02265

**ETL Offload with Hadoop and Spark - On-Demand Course**

As data volumes continue to grow, more and more demands are placed on data warehousing resources to not only host an organization’s data but also merge and prepare the data for end-user consumption. This course covers how off-loading the Extract-Transform-Load (ETL) processes from an on-premise data warehouse can improve delivery times and enable the inclusion of new sources of data. This on-demand course includes recorded lab exercise demonstrations of several Apache Hadoop ecosystem tools: Hadoop Distributed File System (HDFS), Spark, Flume, Sqoop, and Oozie. This course prepares the learner for a key portion of the Dell Technologies Proven Professional Data Engineering Specialist-level certification exam (DES-7DE1). Review the exam description document to understand all the related data engineering training and consumption options.

**On Demand Class** 08 Hours ES7320CMETLHS

**ETL Offload with Hadoop and Spark - On-Demand Lab**

This on-demand lab provides access to the lab environment provided in the ETL Offload with Hadoop and Spark course that covers how off-loading the Extract-Transform-Load (ETL) processes from a data warehouse can improve delivery times and enable the inclusion of new sources of data. The guided lab exercises provide hands-on experience with the following Apache Hadoop ecosystem tools: Hadoop Distributed File System (HDFS), Spark, Flume, Sqoop, and Oozie. This on-demand lab supplements the training that prepares the learner for a key portion of the Dell Technologies Proven Professional Data Engineeringspecialist-level certification exam (DES-7DE1). Review the exam description document to understand all the related data engineering training and consumption options.

**On Demand Lab** 08 Hours ES7420CMETLHS

**Implementing AI and ML in the Enterprise - On-Demand Course**

This course describes the concept of AI and ML. The course provides a detailed description about the scope and need of AI and helps to understand the impact of AI in enabling human progress and transforming business. The course provides information about various application areas across the business and outlines the importance of building an AI team and helps to understand different roles in the team. The course also offers hands-on labs that help to understand the concepts of Python and its importance in AI and ML.

**On Demand Class** 01 Hours 30 Minutes ESOCMD02245

**Implementing AI and ML in the Enterprise - On-Demand Lab**

The lab provides information about Python programming and explains syntax and libraries used.
Introducing Data Science and Big Data Analytics for Business Transformation

Businesses are increasingly looking to take advantage of Big Data to be competitive. To do this, organizations need data-savvy business leaders who can identify opportunities to solve business problems using advanced analytics. This course provides business leaders with a baseline understanding of Data Science and Big Data. Specifically, it addresses: illustrative examples of Data Science and Big Data Analytics in three industry verticals, deriving business value from Big Data, characteristics of Big Data, and key elements to consider for driving the change toward Big Data projects.

Introduction to Data Engineering

For over 10 years, there has been an intense focus by companies to extract business value from their data. Out of this activity, a role called the data scientist emerged. However, it quickly became obvious that a majority of a data scientist’s time was spent on data preparation or moving analytical models into production environments. Thus, the data engineer has emerged as a highly desirable and indispensable member of an analytics project team. The course covers the data analytics life cycle, the role of the data engineer, and the skill set of a successful data engineer. This course prepares the learner for a key portion of the Dell Technologies Proven Professional data engineering specialist-level certification exam (DES-7DE1). Review the exam description document to understand all the related data engineering training and consumption options.

Machine Learning Models and Use Cases - On-Demand Course

The field of Machine Learning and AI is so far reaching that it has had an impact on pretty much every field of study and pretty much every industry. Some of the use cases of Machine Learning also have profound impact on the way we consume data and share information in the modern world. This course gives an introduction to application of Machine Learning models in multiple industries and modes of data.

Cloud

Cloud Infrastructure and Services v3 - On-Demand Course

Due to the proliferation of smart devices and the growing need for real-time analysis, the legacy batch processing approaches are insufficient to support modern applications such as credit card fraud detection, cybersecurity protection, and automobile navigation. This course introduces such use cases and the approaches to process streaming data generated by the Internet of Things (IoT). To process and analyze IoT data, this course covers several Apache tools: Storm, Kafka, Spark Streaming, and Flink. Additionally, Pravega, a new storage paradigm, is covered as well as emerging IoT projects, Project Nautlius and EdgeX Foundry. The on-demand course includes recorded lab exercise demonstrations of the Apache tools.

Processing Streaming and IoT Data - On-Demand Lab

This on-demand lab provides access to the lab environment provided in the Processing Streaming and IoT Data course which covers approaches to process streaming data generated by the Internet of Things (IoT). The guided lab exercises provide hands-on experience with the following Apache tools: Storm, Kafka, Spark Streaming, and Flink. These tools enable the processing and analysis of streaming data sets. This on-demand lab supplements the training that prepares the learner for the training portion of the Dell Technologies Proven Professional data engineering specialist-level certification exam (DES-7DE1). Review the exam description document to understand all the related data engineering training and consumption options.

Understanding the Concepts of AI and ML

This course describes the concept of AI and ML. The course provides a detailed description about the scope and need of AI and helps to understand the impact of AI in enabling human progress and transforming business. The course explains the concepts of artificial intelligence, machine learning, and deep learning.

Cloud Infrastructure and Services v3 - On-Demand Lab

Digital transformation is a priority for all businesses. Emerging technology trends such as mobile, big data analytics and social media are driving organizations to optimize and innovate business models. As businesses adopt a digital mindset they need to innovate faster or be left behind in an increasingly digital market. This course provides an overview of digital transformation, role of Cloud to help organizations address the current IT challenges to meet their overall digital transformation objectives. This course covers the concepts of AI and introduces the role of Cloud in helping companies to transform their businesses using AI and machine learning technologies. This course covers the concepts of AI and introduces the role of Cloud in helping companies to transform their businesses using AI and machine learning technologies. This course also provides an overview of digital transformation, role of Cloud to help organizations address the current IT challenges to meet their overall digital transformation objectives. This course covers the concepts of AI and introduces the role of Cloud in helping companies to transform their businesses using AI and machine learning technologies.
Cloud Infrastructure and Services v3 - Online ILT

Digital transformation is a priority for all businesses. Emerging technology trends such as mobile, big data analytics and social media are driving organizations to optimize and innovate business models. As businesses adopt a digital mindset they need to innovate faster or be left behind in an increasingly digital market. This course provides an overview of digital transformation role of Cloud to help organizations address the current IT challenges to meet their overall digital transformation objectives. This cloud fundamentals course will help to gain the knowledge of design choices, processes, and mechanisms required to build a cloud infrastructure. This course takes an open approach, and uses the Cloud Reference Architecture to describe the concepts and technologies related to cloud computing, which is further illustrated and reinforced with DELL EMC product examples.

Cloud Infrastructure Planning and Design v2 - Classroom

This course presents the knowledge and skills to successfully design a cloud infrastructure that supports multiple types of services. The course takes an "open" approach and outlines infrastructure, application platform, and cloud management platform as the fundamental layers in a cloud. It explores the business needs and challenges that have led the organization to adopt a cloud solution. This course highlights the benefits, challenges, and considerations of design choices and emphasizes the importance of proper requirements gathering in the design process. Additionally, students are provided with opportunities to practice these new skills while performing exercises and labs. This course prepares the student for the Dell Technologies Proven Professional Cloud Architect Specialist level certification exam.

Cloud Infrastructure Planning and Design v2 - On-Demand Course

This course presents the knowledge and skills to successfully design a cloud infrastructure that supports multiple types of services. The course takes an "open" approach and outlines infrastructure, application platform, and cloud management platform as the fundamental layers in a cloud. It explores the business needs and challenges that have led the organization to adopt a cloud solution. This course highlights the benefits, challenges, and considerations of design choices and emphasizes the importance of proper requirements gathering in the design process. Additionally, students are provided with opportunities to practice these new skills while performing exercises and labs. This course prepares the student for the Dell Technologies Proven Professional Cloud Architect Specialist level certification exam.

Cloud Services Management

This course provides technical professionals the knowledge and skills necessary to plan and design for robust cloud services. The course focuses on the governance, organizational, financial, and technology aspects as well as the management and operation of cloud services. The seven key areas covered in this course are: 1) Cloud Services Lifecycle and Management, 2) Workforce Transformation for Cloud Services, 3) Multi-Cloud Strategy for Cloud Services, 4) Cloud Services Operating Model, 5) Cloud-Native Application Development, and 6) Business Resiliency for Cloud Services.

Data Protection

Data Protection and Management (DPM) is a unique course that provides a comprehensive understanding of various data protection and availability solutions for modern data protection wherever data lives including Cloud, data center or edge devices. It enables participants to make informed decisions on data protection architecture and technologies in an increasingly complex IT environment, which is fast changing with the adoption of software-defined data center (SDDC) and Cloud, Big Data, Social, and Edge. This course provides a strong understanding of fault-tolerant IT infrastructure, data backup, data deduplication, data replication, data archiving, and data migration and prepares participants for advanced data protection concepts, technologies, and processes. Participants will learn cloud-based data protection technologies, SDDC-specific data protection, and solutions for protecting Big Data, cloud and mobile device data. Moreover, the course covers the highly critical areas of data sec urity including ransomware protection, cyber r

Data Protection and Management

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Instructor Session

Automation with PowerStore - Instructor Session

Instructor Sessions is a 4-hour interactive live learn digital experience led by Global Lead Instructors, each session focuses on transformation themes and technologies; automation, simplified workloads, emerging tech. Learners will be provided with specialist content, use cases, bonus material, access to lead instructors. This session will enable you to leverage PowerStore Management REST API’s that enables interactive, scripted, and programmatic management control of the PowerStore cluster. You’ll explore Ansible modules to quickly deploy new devices, change network configurations and audit running network device configurations to manage storage requirements and learn how PowerStore Manager CLI is used to write commands in scripts for automating routine tasks.

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<th>Classroom</th>
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Automation with VxRail - Instructor Session

Instructor Sessions is a 4-hour interactive live learn digital experience led by Global Lead Instructors, each session focuses on transformation themes and technologies; automation, simplified workloads, emerging tech. Learners will be provided with specialist content, use cases, bonus material, access to lead instructors. During the session you will:• Learn about the VxRail ecosystem and leverage its automation capabilities• Elevate performance of automated VxRail operations using the latest tools• Experience live demonstrations of customer use cases and apply these examples to your environment• Increase your knowledge of VxRail API tools such as PowerShell and Ansible modules• Receive bonus material to support you in your automation journey

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Data Protection Solutions - The Vault - Instructor Session

Instructor Sessions is a 4-hour interactive live learn digital experience led by Global Lead Instructors, each session focuses on transformation themes and technologies; automation, simplified workloads, emerging tech. Learners will be provided with specialist content, use cases, bonus material, access to lead instructors. During the session you will:• Explore how the threat landscape and its actors continue to evolve • Discuss the role of the attacker, risks, and the impact of data breaches through a simulated attack • Discover how operating cyber recovery vault processes equip your organization with the highest level of data protection and integrity • View a demonstration of how PowerProtect Cyber Recovery goes beyond the ability to back up and restore data• Gain confidence using methods that protect vital data from cyber-attacks using proven modern data protection solutions

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Discover DevSecOps - Instructor Session

Instructor Sessions is a 4-hour interactive live learn digital experience led by Global Lead Instructors, each session focuses on transformation themes and technologies; automation, simplified workloads, emerging tech. Learners will be provided with specialist content, use cases, bonus material, access to lead instructors. DevSecOps is the incorporation of security into the software development lifecycle, alongside development and operations. Enterprises that embrace DevSecOps are more likely to catch design flaws and vulnerabilities early, resulting in more secure product releases, while still shrinking development cycles. This session focuses on principles, processes, and technical skills needed to elevate security and risk profiling to a front-end priority: embracing a “quality first” mindset.

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ISM

Information Storage and Management v5

This unique course provides a comprehensive mastery of the various storage infrastructure components and options in a modern data center environment. Participants will learn to apply storage-related technologies in a fast changing and complex IT environment due to the adoption of new technologies such as cloud, edge computing, Big Data, IoT, AI/ML, and 5G). This course covers intelligent storage systems, networking technologies business continuity solutions, information security, and storage infrastructure management. The course content takes an open-approach to describe all the concepts and technologies, which are further illustrated and reinforced with Dell product examples. The training prepares the learner for the Dell Technologies Proven Professional Information and Storage and Management Version 5.0 associate-level certification exam (DEA-17T5) to be available in February 2022.

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ITIL

ITIL 4 Foundation Certification Course

This course prepares the learner to take the ITIL® 4 Foundation Certificate exam in IT Service Management. The course will introduce the learner to the key elements, concepts and terminology used in the ITIL® 4 Certification Scheme. The ITIL® 4 Foundation exam is always included with the successful completion of this course. Please view the attached Course Description for the full course and exam details. ITIL® is a registered trademark of AXELOS Limited, used under permission of AXELOS Limited. All rights reserved.

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<th>Virtual Class</th>
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ITIL 4 Foundation Certification Course - On Demand

This course prepares the student to take the ITIL® 4 Foundation Certificate exam in IT Service Management. The course will introduce the student to the key elements, concepts and terminology used in the ITIL® 4 Certification Scheme. The ITIL® 4 Foundation exam is included with this on demand course. Please view the attached Course Description for the full course and exam details. ITIL® is a registered trademark of AXELOS Limited, used under permission of AXELOS Limited. All rights reserved.

| On Demand Class | 24 Hours | ESQTFD03640 |

Open Curriculum

Cybersecurity On-Demand Training Package - Package
This package includes the following courses:

- Dell PowerProtect Cyber Recovery Administration (On Demand Class, 03 Hours)

### Security

#### Implementing the NIST Cybersecurity Framework

This course covers the NIST Cybersecurity Framework and shows how it can be used to promote security in a company's infrastructure. At the completion of this course, students will understand details of the framework and gain insight to underlying process and practices used to integrate NIST principals and begin improving their organizations Cybersecurity Resiliency.

**On Demand Class** 05 Hours  ES132DSY00786

### Enterprise Storage

**AppSync**

#### AppSync Concepts

The course provides an overview of AppSync, its features, capabilities, and key use cases. An overview of common management tasks, supported applications, and support storage environments are also covered. An overview of common management tasks, supported applications, and support storage environments are also covered.

**On Demand Class** 02 Hours 30 Minutes  ESSTGD03131

#### AppSync Installation, Upgrade and Implementation

This course covers AppSync installation, upgrade and implementation procedures.

**On Demand Class** 03 Hours  ESSTGD03130

#### AppSync Integration with MS Exchange

The AppSync Integration with MS Exchange course is designed to highlight the major considerations when providing data protection to MS Exchange using Dell EMC AppSync.

**On Demand Class** 03 Hours  MR-1WN-APPSYNC-EXCH

#### AppSync Integration with MS SQL

The AppSync Integration with MS SQL course is designed to highlight the major considerations when providing data protection to MS SQL databases using Dell EMC AppSync.

**On Demand Class** 03 Hours  MR-1WN-APPSYNC-SQL

#### AppSync Integration with Oracle

The AppSync Integration with Oracle course is designed to highlight the major considerations when providing data protection to Oracle database using Dell EMC AppSync.

**On Demand Class** 03 Hours  MR-1WN-APPSYNC-ORCL

#### AppSync Integration with SAP HANA

The course covers AppSync integration with SAP HANA.

**On Demand Class** 01 Hours 30 Minutes  ESSTGD03222

#### AppSync Integration with VMware vSphere

This course covers the product version requirements and prerequisite configurations needed for a working solution while using AppSync to protect VMware environments. This course also provides a demonstration of the steps required to configure AppSync Service Plans, mount and unmount datastore copies and address the considerations and options when restoring either datastores and/or virtual machines.

**On Demand Class** 02 Hours  MR-1WN-APPSYNC-VMW

### AppSync Administration and Integration - Package

This ValuePack provides a set of AppSync courses that introduce learners to the automation of data protection tasks. This package is a complete set of overviews, installation and configuration steps that minimize deployment efforts.

This package includes the following courses:

- AppSync Integration with MS Exchange(On Demand Class, 03 Hours)
- AppSync Integration with MS SQL(On Demand Class, 03 Hours)
- AppSync Integration with Oracle(On Demand Class, 03 Hours)
- AppSync Integration with VMware vSphere(On Demand Class, 02 Hours)
- Getting Started with AppSync(On Demand Class, 02 Hours)
- AppSync Concepts(On Demand Class, 02 Hours 30 Minutes)
- AppSync Installation, Upgrade and Implementation(On Demand Class, 03 Hours)
- AppSync Integration with SAP HANA(On Demand Class, 01 Hours 30 Minutes)

### Disk Library for Mainframe

#### Disk Library for mainframe (DLm) Fundamentals

This course provides an overview of DLm Gen 3, Gen 4 and Gen 5 products infrastructure components. The course also covers the Command Processors scripts, GENSTATS for reporting and describes the DLm replication capabilities. The course reviews the remote management tools and support tools used with the DLm.

**On Demand Class** 01 Hours 30 Minutes  MR-1WN-DLFND

#### Disk Library for mainframe (DLm) Management

**Assessment** 05 Minutes  MR-1ZN-DLMM

#### Disk Library for mainframe (DLm) Replication Considerations

This course covers Disk Library for mainframe DLm (Gen5) management software. The student will learn about the software that is loaded, formanagement purposes, on the DLm main system bay, the Virtual TapeEmulation Controller (VTEC). An introduction to management software thatis available for Data Domain storage is also presented.

**On Demand Class** 02 Hours  ES132STG00449

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To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 24
### PowerMax and VMAX All Flash Multi-Site SRDF Solutions
This course covers PowerMax and VMAX All Flash multi-site SRDF solutions comprising Concurrent SRDF, Cascaded SRDF, and SRDF/Star in Open Systems environments. Underlying SRDF technologies used to implement SRDF/Star are discussed in detail. SRDF/Star in both concurrent and cascaded modes is covered. SRDF/Star operations under normal and fault conditions including the procedures for moving a production workload to another site are described.

| On Demand Class | 06 Hours | ESSTGD02754 |

### PowerMax and VMAX All Flash Non-Disruptive Migration (NDM)
This course presents Non-Disruptive Migration (NDM) administration and management using Unisphere and Solutions Enabler. The course includes an overview of Metro-based and Pass-through modes and Non-Disruptive Migrations using Unisphere for PowerMax 9.2 and Solutions Enabler 9.2.

| On Demand Class | 03 Hours | ES132STG00364 |

### PowerMax and VMAX All Flash Performance
This workshop introduces the methodology for analyzing the performance of PowerMax and VMAX All Flash storage arrays. Metrics that are relevant for analysis of each of the components in the arrays are presented. Participants will learn to identify bottlenecks for performance and provide recommendations to remedy the problem. Hands-on lab exercises using performance archives reinforce the concepts and methodology presented in the lectures.

| Classroom | 24 Hours | ESSTGD02754 |
| Virtual Class | 24 Hours | ESSTGD02754 |

### PowerMax and VMAX All Flash Security Concepts
This Specialist level course provides participants with an understanding of potential security exposure and how these vulnerabilities are addressed within the PowerMax and VMAX All Flash family. The course begins with a discussion of potential system vulnerabilities and how each are addressed. For environments with stringent financial or regulatory requirements and for reputation protection, the PowerMax and VMAX All Flash has additional techniques that can be implemented to further secure the system. This course focuses on the security design of the system and how to plan, implement, and manage these advanced security features.

| On Demand Class | 03 Hours | ESSTGD02753 |

### PowerMax and VMAX All Flash SRDF Metro Solutions
This course covers the SRDF/Metro solution for PowerMax and VMAX All Flash arrays with PowerMaxOS and HYPERMAX OS. SRDF/Metro overview, benefits, theory of operations, configuration details, and best practices are covered. Implementation with bias, witness and vWitness is included, as well as administration and management using Unisphere for PowerMax and Solutions Enabler.

| On Demand Class | 01 Hours | ESSTGD02755 |

### PowerMax and VMAX Family Configuration and Business Continuity Administration

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### Disk Library for mainframe(DLm) z/OS Administration
This course covers Disk Library for mainframe DLm (Gen5) management and configuration from the z/OS perspective. The student will learn about the DLm z/OS software that is available, view sample JCL decks, and be presented with requirements and considerations to take into account for using DLm in the z/OS environment.

| On Demand Class | 01 Hours 30 Minutes | ES132STG00310 |

### DLm2500 System Manager User Interface Concepts
This course covers the new System Manager (SM) UI which is used with DLm2500. Each section of the SM main menu is looked at in detail. This course is intended for personnel who install and Manage DLm products, and those who perform maintenance functions on the DLm2500.

| On Demand Class | 45 Minutes | ES101STG02010 |

### DLm8500 System Manager User Interface Concepts
This course covers the new System Manager (SM) UI which is used with DLm8500. Each section of the SM main menu is looked at in detail. This course is intended for personnel who install and manage DLm products and those who perform maintenance functions on the DLm8500.

| On Demand Class | 01 Hours | ESSTGD02421 |

### Disk Library for mainframe(DLm) Implementation ValuePak - Package
This package focuses on the implementation of a Disk Library for mainframe(DLm) solution. It includes the benefits, the business and technical requirements, its architecture and key components, as well as key features and capabilities. Also included is an introduction to the DLm management software, DLm z/OS administration and DLm Replication considerations.

This package includes the following courses:

- **Disk Library for mainframe (DLm) Fundamentals** (On Demand Class, 01 Hours 30 Minutes)
- **Disk Library for mainframe (DLm) Management** (On Demand Class, 02 Hours)
- **Disk Library for mainframe(DLm) z/OS Administration** (On Demand Class, 01 Hours 30 Minutes)
- **Disk Library for mainframe (DLm) Replication Considerations** (On Demand Class, 02 Hours)
- **DLm2500 System Manager User Interface Concepts** (On Demand Class, 45 Minutes)
- **DLm8500 System Manager User Interface Concepts** (On Demand Class, 01 Hours)

### Metro node Concepts
This course provides the learner with a basic understanding of the concepts for metro node. Both software and hardware concepts are discussed.

| On Demand Class | 30 Minutes | ESDPSD02670 |

### Metro node Features
This course provides the learner with a basic understanding of the features for metro node.

| On Demand Class | 01 Hours | ESDPSD02671 |

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Dell Technologies Education Services Course Catalog

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 25
This Specialist level course provides participants with an in-depth understanding of configuration tasks on PowerMax and VMAX family arrays. It also provides the knowledge required to deploy and manage PowerMax and VMAX family array-based local and remote replication solutions for business continuity needs. Key features and functions of the arrays are covered in detail. Topics include storage provisioning concepts, virtual provisioning, device creation and port management, and service level-base d storage allocation to hosts. Operational details and implementation considerations for Dell EMC TimeFinder SnapVX and Symmetrix Remote Data Facility (SRDF) are covered. Participants will use Unisphere for PowerMax/VMAX and Solutions Enabler (SYMCLI) to manage configuration changes on the arrays.

### PowerMax and VMAX Family Configuration and Business Continuity Administration

This Specialist level course provides participants with an in-depth understanding of configuration tasks on PowerMax and VMAX All Flash arrays. It also provides the knowledge required to deploy and manage PowerMax and VMAX All Flash array-based local and remote replication solutions for business continuity needs. Key features and functions of the arrays are covered in detail. Topics include storage provisioning concepts, virtual provisioning, device creation and port management, and service level-base d storage allocation to hosts. Operational details and implementation considerations for Dell EMC TimeFinder SnapVX and Symmetrix Remote Data Facility (SRDF) are covered. Participants will use Unisphere for PowerMax/VMAX and Solutions Enabler (SYMCLI) to manage configuration changes on the arrays. Hands-on lab exercises using Symmetrix Command Line Interface (SYMCLI) and Unisphere for PowerMax will be performed on Open Systems hosts attached to PowerMax and VMAX arrays.

### PowerMax and VMAX All Flash Concepts and Features

This course provides an introduction to PowerMax arrays. It includes an overview of the architecture, configuration options, software options and use cases.

### Solutions Enabler Implementation

This course provides an overview of the installation of Solutions Enabler on Windows and UNIX platforms. It covers the usage of commonly used options and environment variables that govern the behavior of Solutions Enabler. It discusses gatekeeper management and the functions of various Solutions Enabler daemons. License management is also covered.

### DCE - PowerMax and VMAX All Flash Solutions [Classroom] - Package

This learning path focusses on the knowledge and skills required to analyze and understand the performance of PowerMax and VMAX All Flash arrays, articulate PowerMax and VMAX All Flash Security Concepts, use SRDF for three-site remote replication and Metro solutions and perform non-disruptive migrations to PowerMax and VMAX All Flash Arrays. This package includes the following courses:

- PowerMax and VMAX All Flash Non-Disruptive Migration (NDM)(On Demand Class, 03 Hours)
- PowerMax and VMAX All Flash SRDF Metro Solutions(On Demand Class, 01 Hours)
- PowerMax and VMAX All Flash Performance(On Demand Class, 24 Hours)
- PowerMax and VMAX All Flash Multi-Site SRDF Solutions(On Demand Class, 06 Hours)
- PowerMax and VMAX All Flash Security Concepts(On Demand Class, 03 Hours)

### PowerMax Storage Administrator ValuePak - Package

This package does not include a Proven Professional exam voucher, in order to add please search for "Dell Technologies Proven Professional VUE Exam Voucher" or Course ID "MR-1EV-VUEEMCPROV".

This package includes the following courses:

- PowerMax and VMAX All Flash Non-Disruptive Migration (NDM)(On Demand Class, 03 Hours)
- PowerMax Concepts and Features(On Demand Class, 01 Hours)
- PowerMax and VMAX Family Local Replication Concepts(On Demand Class, 01 Hours 30 Minutes)
- PowerMax and VMAX Family Remote Replication Concepts(On Demand Class, 02 Hours)
- Solutions Enabler Implementation(On Demand Class, 02 Hours)
- Unisphere for PowerMax Implementation and Administration(On Demand Class, 02 Hours)
- PowerMax and VMAX Family Configuration and Business Continuity Administration(Virtual Class, 40 Hours)
- PowerMax and VMAX Family Configuration and Business Continuity Administration(Virtual Class, 40 Hours)
- PowerMax and VMAX All Flash 10 Differences for Customers(On Demand Class, 30 Minutes)
- PowerMax and VMAX All Flash 10 Concepts and Features(On Demand Class, 30 Minutes)
- Solutions Enabler 10.0 Implementation Differences(On Demand Class, 30 Minutes)
- PowerMaxOS 10 Local and Remote Replication Concepts Differences(On Demand Class, 15 Minutes)
- Unisphere for PowerMax 10 Implementation and Administration Differences(On Demand Class, 30 Minutes)
- PowerMaxOS 10 Configuration Administration and Business Continuity Administration Differences(On Demand Class, 01 Hours)

### PowerMax Concepts and Features

This course provides an introduction to PowerMax arrays. It includes an overview of the architecture, configuration options, software options and use cases.

### PowerMax and VMAX Family Local Replication Concepts

This course provides an introduction to local replication offerings for PowerMax, VMAX All Flash, and VMAX3 arrays. It includes an overview of the TimeFinder SnapVX architecture, features, and functionality. This course also provides a basic understanding of TimeFinder disaster recovery concepts and terminology.

### PowerMax and VMAX Family Remote Replication Concepts

This course covers an introduction to Remote Replication. It includes an overview of the PowerMax and VMAX Family Remote Replication architecture, features, and functionality. This course also provides a basic understanding of Symmetrix Remote Data Facility (SRDF) modes of operations, disaster recovery concepts and terminology.

### PowerMax Storage Administrator Video ValuePak - Package

This package does not include a Proven Professional exam voucher, in order to add please search for "Dell Technologies Proven Professional VUE Exam Voucher" or Course ID "MR-1EV-VUEEMCPROV".
This course provides the learner with an in-depth understanding of how to manage, monitor and maintain a functional VPLEX system. Operational aspects of VPLEX (Local and Metro) using Unisphere for VPLEX and the VPLEX CLI are covered. Provisioning virtualized storage from VPLEX to hosts and performing mobility and mirroring operations on live virtual volumes is emphasized. Integration of VPLEX into existing data centers with live production data and interoperability considerations are included.

| On Demand Class | 11 Hours | ESDPSD02667 |

**VPLEX Concepts and Features**

This course provides an introduction to the VPLEX family of products. It includes an overview of VPLEX, its use cases, architecture, features, and management options.

| On Demand Class | 01 Hours | MR-1WP-VPLEXFD |

**VPLEX Performance**

This course focuses on the measurement of performance in VPLEX environments. It provides instruction on VPLEX monitoring operations, definition of potential performance issues, and bottlenecking. It also offers instruction on performance optimization techniques, tools, and procedures. There are recorded lab videos for further understanding of VPLEX Performance measurement techniques.

| On Demand Class | 01 Hours 30 Minutes | MR-1WN-VPLEXPERF |

**VPLEX Troubleshooting - Video I LT**

This course focuses on issue discovery and resolution in VPLEX environments. The course includes coverage of VPLEX operations, definition of potential faults, common miss-configurations, and connectivity requirements. Instruction on troubleshooting techniques, tools, and procedures will be used to support lab activities. Scripted exercises and scenario labs will be provided with remote lab access to apply the techniques learned during the course. This course covers version 5.2.

| On Demand Class | 24 Hours | MR-1TN-VPLEXTS-0792 |

**VPLEX Systems Administration On-Demand Training - Package**

This package path focuses on management of VPLEX systems including product and technology details, VPLEX architecture, theory of operations, configuration requirements, and monitoring. This package does not include a Proven Professional exam voucher, in order to add please search for “Dell Technologies Proven Professional VUE Exam Voucher” or Course ID “MR-REV-VUEEMCPROV”.

This package includes the following courses:

- VPLEX Concepts and Features(On Demand Class, 01 Hours)
- VPLEX Administration(On Demand Class, 11 Hours)

**VPLEX Systems Administration Instructor Led Training - Package**

This package focuses on management of VPLEX systems including product and technology details, VPLEX architecture, theory of operations, configuration requirements, and monitoring. This package does not include a Proven Professional exam voucher, in order to add please search for “Dell Technologies Proven Professional VUE Exam Voucher” or Course ID “MR-REV-VUEEMCPROV”.

This package includes the following courses:

- VPLEX Concepts and Features(On Demand Class, 01 Hours)
- VPLEX Administration(On Demand Class, 11 Hours)

**XtremIO**

**Optimizing Storage Services for Applications with XtremIO - Video ILT**

| Classroom | 24 Hours | MR-1CN-VPLEXXMGMT |
This course goes beyond simple administration and provides an in-depth understanding of how to leverage and optimize XtremIO features and capabilities in specific application areas. The course begins with providing coverage of operational aspects of the XtremIO and X2 environments, and then leads to XtremIO X2 features and performance optimization. Lastly, this course focuses on considerations and best practices for system integration with specific application use cases and industry leading data protection solutions such as RecoverPoint and VPLEX.

Optimizing Storage Services for Applications with XtremIO and X2
This course goes beyond simple administration, providing an in-depth understanding of how to leverage and optimize XtremIO X2 features and capabilities in specific application areas. The course begins by providing hands-on coverage of operational aspects of the XtremIO X2 environment and then leads into features and performance optimization. Lastly, this course focuses on considerations and best practices for system integration with specific application use cases and industry leading data protection solutions such as RecoverPoint, RecoverPoint, VPLEX, and AppSync.

Optimizing Storage Services for Applications with XtremIO and X2 - Online ILT
This in-class, Instructor-Led course goes beyond simple administration and provides in-depth understanding of how to leverage and optimize XtremIO X2 features and capabilities in specific application areas. The course begins with providing hands-on coverage of operational aspects of the XtremIO and X2 environments, and then leads to new XtremIO X2 features and performance optimization. Lastly, this course focuses on considerations and best practices for system integration with specific application use cases and industry leading data protection solutions such as RecoverPoint, VPLEX, and AppSync.

Virtual Class 24 Hours MR-1LP-XIO4APPS

Optimizing Storage Services for Applications with XtremIO and X2 VILT
This recorded Instructor-Led course goes beyond simple administration and provides in-depth understanding of how to leverage and optimize XtremIO X2 features and capabilities in specific application areas. The course begins with providing hands-on coverage of operational aspects of the XtremIO X2 environment, and then leads to new XtremIO X2 features and performance optimization. Lastly, this course focuses on considerations and best practices for system integration with specific application use cases and industry leading data protection solutions such as RecoverPoint, VPLEX, and AppSync.

On Demand Class 24 Hours MR-1TP-XIO4APPS-1512

Optimizing Storage Services for Applications with XtremIO X2 and VDI Best Practices
This course introduces the methods and the best practices during integration of an XtremIO and X2 storage arrays with a VDI environment. A brief overview of the XtremIO X2 cluster and its management is followed by an overview of the VDI environment. The workload profile and storage challenges associated with VDI environments are also presented and analyzed.

On Demand Class 01 Hours 30 Minutes MR-1WN-XIOVDIBP

XtremIO Fundamentals
This course provides an introduction to the EMC XtremIO product. It includes an overview of XtremIO architecture, features, functionality and management options.

On Demand Class 01 Hours 30 Minutes MR-1WP-XIOFUND

XtremIO X2 Administration
This course provides an overview of and demonstration of some of the XtremIO X2 management and monitoring options.

On Demand Class 01 Hours ES132STG00576

XtremIO X2 Architecture
This course provides an introduction to the XtremIO X2 hardware, architecture, use cases, and new features of XIOS 6.2.

On Demand Class 01 Hours ES132STG00572

XtremIO X2 Concepts
This course provides an overview of XtremIO X2 hardwe, architecture, use cases, and new features of XIOS 6.2

On Demand Class 01 Hours ES132STG00573

XtremIO X2 Features
This course focuses on the key features of thin storage array, data protection, and scale-up.

On Demand Class 01 Hours ES132STG00574

XtremIO X2 Fundamentals
This course provides an introduction to the EMC XtremIO X2 product. It includes an overview of XtremIO X2 architecture, features, functionality and management options.

On Demand Class 02 Hours MR-1WP-XIO2FUND

XtremIO X2 Fundamentals - Japanese
N/A no active classes available

On Demand Class 02 Hours MR-1WP-XIO2FUND-JP

XtremIO X2 Integration
This course provides an overview of the XtremIO X2 integration with Dell EMC eco-system products.

On Demand Class 45 Minutes ES132STG00575

XtremIO and X2 Integration with VDI Best Practices

Entry and Midrange Storage
Apex
APEX Data Storage Services: Block - Data Virtualization

The APEX Data Storage Services Element Manager allows you to adjust the configuration of your data storage service. This course will step through tasks you can do to configure storage services. Capacity management and access topics in this course cover VASA integration, vVols, virtual machine migration, and storage container operations for virtualized VMware environments.
This course is intended for individuals who will implement and manage a SAN environment using PowerPath as a Multi-pathing platform. This course goes into detail on the commands used to display and manipulate the PowerPath configuration as well as troubleshooting of problems within a SAN.

**PowerPath Fundamentals**
This course is intended for professionals who will be positioning, designing, deploying, managing and supporting a solution using PowerPath. It is also suitable for anyone seeking to learn the basics of PowerPath.

**PowerPath Migration Enabler Implementation**
This Course is designed for anyone involved with deploying and upgrading PowerPath Migration Enabler into EMC environments. The integral parts of the course include: overall positioning of the product; product architecture and operations; data migration planning and Migration Enabler procedures with regards to supported integrated products (Open Replicator, and Host-Based Logical Volume Manager). This course currently supports PowerPath version 6.0.

**PowerPath Troubleshooting**
This course provides the learner with a deeper understanding of how to approach troubleshooting for issues related to PowerPath environments. Examples are provided to help identify when issues are not related to PowerPath, such as host issues, SAN configuration issues and storage array issues. Common PowerPath issues are discussed such as installation issues, boot issues, connectivity issues, and configuration issues. Examples are given of common issues and solutions in Unix, Windows and VMware environments. Learners are also shown how to find existing documented solutions to common PowerPath issues.

**PowerPath/VE Implementation and Configuration**
This course focuses on the details for implementing and managing PowerPath/VE in a Virtual environment using PowerPath/VE. It details the steps to install PowerPath/VE as well as commands used to display and manipulate the PowerPath configuration. This course currently supports PowerPath/VE version 6.0.

**PowerStore**
**PowerStore 3.0 - Instructor Hours**
This course provides a 1.5 hour slot for learners to ask questions of instructors on current technology and deeper discussion on the training material, learning paths and labs aligned to the following on demand courses: ESSTGD04768 - PowerStore 3.0 Concepts and Features, ESSTGD04638 - PowerStore 3.0 T Implementation, ESSTGD04639 - PowerStore 3.0 X Implementation, ESSTGD04450 - PowerStore 3.0 System Administration, ESSTGD04641 - PowerStore 3.0 Administration: File Provisioning, ESSTGD04642 - PowerStore 3.0 Administration: VMware Provisioning, ESSTGD04643 - PowerStore 3.0 Administration: Replication, ESSTGD04756 - PowerStore 3.0 Migration: Import External Storage, ESSTGD04321 - PowerStore 3.0 Technical Differences - Customers. Sessions will be scheduled and aligned with class deliveries, based on strategic and learner/stakeholder.

**PowerStore Administration: Troubleshooting**
This course provides an introduction and basic understanding of the EMC Cloud Tiering Appliance (CTA) for a policy-based file archival or migration solution. It provides a general overview of CTA terminology, features, functions, and architecture.

### Cloud Tiering Appliance
**Cloud Tiering Appliance Fundamentals**
This course provides an introduction and basic understanding of the EMC Cloud Tiering Appliance (CTA) for a policy-based file archival or migration solution. It provides a general overview of CTA terminology, features, functions, and architecture.

**Connectrix**
**Connectrix B-Series Architecture and Management Overview**
This course provides an introduction of Connectrix B-Series products. It includes an overview of hardware components, software configurations, most common features and management options. This course also includes an overview of B-Series FCoE hardware, including FCoE features and deployment considerations.

**PowerPath**
**PowerPath Configuration and Administration**
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**PowerStore Administration: Troubleshooting**
This course provides an introduction and basic understanding of the EMC Cloud Tiering Appliance (CTA) for a policy-based file archival or migration solution. It provides a general overview of CTA terminology, features, functions, and architecture.
The course provides instruction for system troubleshooting, including data collection, managing alerts and events, identifying system components, and downloading support information from a PowerStore system. Troubleshooting tools covered include PowerStore Manager GUI, PowerStore CLI (PTCLI), and Service Console CLI.

PowerStore Concepts and Features
The course provides introductory technical knowledge of the PowerStore platform, the available models, its features, and functions.

PowerStore Concepts, Features and Migration
This course provides an overview of PowerStore array concepts and explains product features. This course also explains how to migrate from an external storage array to a PowerStore array.

PowerStore Implementation
The course provides instruction for system implementation, including configuring switches for PowerStore T and PowerStore X, running the Initial Configuration Wizard for PowerStore T and PowerStore X, and applying anPowerStore license.

PowerStore Implementation and Administration
This 5-day course provides instruction for the implementation and administration of PowerStore systems. It includes a PowerStore system portfolio and feature introduction along with practice opportunities to achieve a functional production storage state. Day-to-day PowerStore administrative tasks for block, file, and VMware storage resources and services are also provided as well as basic troubleshooting.

PowerVault
PowerVault ME4 Series Features – On Demand
This 16 hours self-paced e-learning course introduces the participants to the Dell EMC PowerVault ME4 Series Storage System products. The training content includes how to identify, remove and install hardware components, how to deploy, configure and manage a ME4 solution with the management tools and how to troubleshoot a ME4 Series solution. This course also includes videos and simulations to enhance the learning experience.

SC Series
Dell EMC SC Series Concepts
This 90 minutes self-paced e-learning training provide an introduction to the hardware, features and basic administration used on the Dell EMC Storage SC Series.

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PowerStore Installation; Supplemental Guide for Customers
This customer-focused instruction is limited to PowerStore single-node cluster system activation, including configuring switches for PowerStore T and PowerStore X models, running the Initial Configuration Wizard for PowerStore T and PowerStore X models, and applying a PowerStore license. Instructions for multi-node cluster deployments are not within the scope of this course. This course is a supplementary resource to enable customers who choose to install their PowerStore systems. This does not qualify for the Implementation Engineer (IE) training.
Dell EMC SC Series Concepts
This 90 minutes self paced e-learning training provide an introduction to the hardware, features and basic administration used on the Dell EMC Storage SC Series.

| On Demand Class       | 01 Hours 30 Minutes | DESNOLT-828-6617 |

Dell EMC SC Series Implementation and Administration
This 40 hours instructor led course includes a combination of administration, management, and advanced administration coursework. The course concentrates on utilizing Storage Manager to educate Administrators on how to perform key administrative tasks for Storage Center and effectively manage all tools associated with Storage Center operations like volume to server mapping, multipathing, failover, snapshots, replications and troubleshooting. This training also provides the knowledge to successfully install Dell EMC SC Series storage arrays and includes best practices information for the Dell EMC SC Series hardware deployment including Fibre Channel zoning, iSCSI and host attachment. The Dell EMC SC Series Implementation and Administration course is part of the recommended training path of the Dell Technologies Proven Professional SC Series Specialist Implementation Engineer.

| Classroom            | 40 Hours          | DESNOLT-825-3835|
| Virtual Class        | 40 Hours          | DESNOLT-825-3835|

Dell EMC SC Series Implementation and Administration
This 40 hours instructor led course includes a combination of administration, management, and advanced administration coursework. The course concentrates on utilizing Storage Manager to educate Administrators on how to perform key administrative tasks for Storage Center and effectively manage all tools associated with Storage Center operations like volume to server mapping, multipathing, failover, snapshots, replications and troubleshooting. This training also provides the knowledge to successfully install Dell EMC SC Series storage arrays and includes best practices information for the Dell EMC SC Series hardware deployment including Fibre Channel zoning, iSCSI and host attachment. The Dell EMC SC Series Implementation and Administration course is part of the recommended training path of the Dell Technologies Proven Professional SC Series Specialist Implementation Engineer.

| Virtual Class       | 40 Hours          | DESNILT-423-10015|
| Classroom           | 40 Hours          | DESNILT-423-10015|

Dell EMC SC Series Implementation and Administration
This 40 hours instructor led course includes a combination of administration, management, and advanced administration coursework. The course concentrates on utilizing Storage Manager to educate Administrators on how to perform key administrative tasks for Storage Center and effectively manage all tools associated with Storage Center operations like volume to server mapping, multipathing, failover, snapshots, replications and troubleshooting. This training also provides the knowledge to successfully install Dell EMC SC Series storage arrays and includes best practices information for the Dell EMC SC Series hardware deployment including Fibre Channel zoning, iSCSI and host attachment. The Dell EMC SC Series Implementation and Administration course is part of the recommended training path of the Dell Technologies Proven Professional SC Series Specialist Implementation Engineer.

| On Demand Class     | 40 Hours          | DESNOLT-825-3837|

Dell EMC SC Series Implementation and Administration
This 40 hours self paced e-learning course includes a combination of administration, management, and advanced administration coursework. The course concentrates on utilizing Storage Manager to educate Administrators on how to perform key administrative tasks for Storage Center and effectively manage all tools associated with Storage Center operations like volume to server mapping, multipathing, failover, snapshots, replications and troubleshooting. This training also provides the knowledge to successfully install Dell EMC SC Series storage arrays and includes best practices information for the Dell EMC SC Series hardware deployment including Fibre Channel zoning, iSCSI and host attachment. The Dell EMC SC Series Implementation and Administration course is part of the recommended training path of the Dell Technologies Proven Professional SC Series Specialist Implementation Engineer.

| On Demand Class     | 40 Hours          | DESNOLT-806-13751|
| Virtual Class       | 40 Hours          | DESNOLT-806-13751|

Dell EMC SC Series Implementation and Administration
This 40 hours self paced e-learning course includes a combination of administration, management, and advanced administration coursework. The course concentrates on utilizing Storage Manager to educate Administrators on how to perform key administrative tasks for Storage Center and effectively manage all tools associated with Storage Center operations like volume to server mapping, multipathing, failover, snapshots, replications and troubleshooting. This training also provides the knowledge to successfully install Dell EMC SC Series storage arrays and includes best practices information for the Dell EMC SC Series hardware deployment including Fibre Channel zoning, iSCSI and host attachment. The Dell EMC SC Series Implementation and Administration course is part of the recommended training path of the Dell Technologies Proven Professional SC Series Specialist Implementation Engineer.

| On Demand Class     | 40 Hours          | DESNOLT-806-13754|

Dell EMC SC Series Implementation and Administration
This 40 hours self paced e-learning course includes a combination of administration, management, and advanced administration coursework. The course concentrates on utilizing Storage Manager to educate Administrators on how to perform key administrative tasks for Storage Center and effectively manage all tools associated with Storage Center operations like volume to server mapping, multipathing, failover, snapshots, replications and troubleshooting. This training also provides the knowledge to successfully install Dell EMC SC Series storage arrays and includes best practices information for the Dell EMC SC Series hardware deployment including Fibre Channel zoning, iSCSI and host attachment. The Dell EMC SC Series Implementation and Administration course is part of the recommended training path of the Dell Technologies Proven Professional SC Series Specialist Implementation Engineer.

| On Demand Class     | 40 Hours          | DESNOLT-806-13752|

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 31
This 40 hour self paced e-learning course includes a combination of administration, management, and advanced administration coursework. The course concentrates on utilizing Storage Manager to educate Administrators on how to perform key administrative tasks for Storage Center and effectively manage all tools associated with Storage Center operations like volume to server mapping, multipathing, failover, snapshots, replications and troubleshooting. This training also provides the knowledge to successfully install SC Series storage arrays and includes best practices information for the SC Series hardware deployment including Fibre Channel zoning, iSCSI and host attachment. The SC Series Implementation, Configuration and Management course is part of the recommended training path of the Dell Technologies Proven Professional SC Series Specialist Implementation Engineer.

**On Demand Class**

**Dell EMC SC Series Implementation and Administration**

This 40 hour self paced e-learning course includes a combination of administration, management, and advanced administration coursework. The course concentrates on utilizing Storage Manager to educate Administrators on how to perform key administrative tasks for Storage Center and effectively manage all tools associated with Storage Center operations like volume to server mapping, multipathing, failover, snapshots, replications and troubleshooting. This training also provides the knowledge to successfully install SC Series storage arrays and includes best practices information for the SC Series hardware deployment including Fibre Channel zoning, iSCSI and host attachment. The SC Series Implementation, Configuration and Management course is part of the recommended training path of the Dell Technologies Proven Professional SC Series Specialist Implementation Engineer.

**Virtual Class**

**Dell EMC SC Series Implementation and Administration**

This 40 hour self paced e-learning course includes a combination of administration, management, and advanced administration coursework. The course concentrates on utilizing Storage Manager to educate Administrators on how to perform key administrative tasks for Storage Center and effectively manage all tools associated with Storage Center operations like volume to server mapping, multipathing, failover, snapshots, replications and troubleshooting. This training also provides the knowledge to successfully install SC Series storage arrays and includes best practices information for the SC Series hardware deployment including Fibre Channel zoning, iSCSI and host attachment. The SC Series Implementation, Configuration and Management course is part of the recommended training path of the Dell Technologies Proven Professional SC Series Specialist Implementation Engineer.

**On Demand Class**

**Dell EMC Unity Concepts and Features**

This course provides an overview and illustrates the Dell EMC Unity architecture, platforms, and provides detailed insight to its component hardware.

**Virtual Class**

**Dell EMC Unity Implementation and Administration - On Demand**

This course covers the knowledge necessary to understand the features and functionality and key use cases of a Unity storage system. Topics include system administration, storage provisioning, storage resource access, scalability and performance features, storage efficiency features, data protection features and data mobility features.

**On Demand Class**

**Dell EMC Unity Installation and Service**

This course is intended for professionals responsible for the installing and servicing a Dell EMC Unity XT storage system. The course covers the knowledge necessary to install, initialize, identify, and replace CRU’s on a Dell EMC Unity XT storage system.

**Virtual Class**

**Dell EMC Unity NAS Server Advanced Network Features - On Demand**

This specialist-level e-learning course covers advanced network features supported by Dell EMC Unity NAS Servers. Topics include the implementation capabilities enabled by the LACP and FSN support. Additionally, the course explores the file server support for multi-tenant environments, and client-server network traffic control with advanced static routing and IP packet reflect.

**On Demand Class**

**Dell EMC Unity XT 5.2 Technical Differences**

This course presents updates for the Dell EMC Unity OE 5.2 release. This course contains new concepts, features, video content, and simulations.

**On Demand Class**

**Dell EMC Unity XT Hardware Concepts and Features**

This course provides an overview and illustrates the Dell EMC Unity XT hardware architecture, platforms, and provides detailed insight to its component hardware.

**On Demand Class**

**Tech Exchange - Unity Technical Differences**

This session explains the benefits and differences between Unity Models. It discusses key elements of the Unity XT system, including hardware components, asynchronous replication topologies, features and functionalities, and improvements to deduplication algorithm.
Dell Technologies Education Services Course Catalog

**Dell EMC Unity XT Basics On-Demand Training - Package**

This package of training provides an introductory technical knowledge of the Dell EMC Unity storage system, its features, available models and its functions. This package includes the following courses:

- Dell EMC Unity Concepts and Features (On Demand Class, 03 Hours 30 Minutes)
- Dell EMC Unity Installation and Service (On Demand Class, 02 Hours 20 Minutes)
- Dell EMC Unity XT Hardware Concepts and Features (On Demand Class, 02 Hours)

**Dell EMC Unity XT Implementation and Administration ILT Training - Package**

This package of training covers the knowledge necessary to understand the features and functionality and key use cases of a Dell EMC Unity storage system. Topics include system administration, storage provisioning, storage resource access, scalability and performance features, storage efficiency features, data protection features and data mobility features. This package does not include a Proven Professional exam voucher, in order to add please search for “Dell Technologies Proven Professional VUE Exam Voucher” or Course ID “MR-1EV-VUEEMCPROV”

**HCI VxRail**

**VCF on VxRail**

**VCF 4.2 on VxRail Administration**

This course enables an administrator to manage a VMware Cloud Foundation (VCF) on VxRail solution. It covers reviewing the management interfaces, managing users, roles, and passwords, managing certificates and licenses, managing the workload domains, deploying NSX-T Edge cluster, performing lifecycle management, configuring multi-instance management, and exploring troubleshooting and support options. Hands on labs and simulated interactions are included in the course to provide a walk-through of the key steps involved in the administration of a VCF on VxRail solution.

| Classroom | 16 Hours | ESCPX02410 |
| Virtual Class | 16 Hours | ESCPX02410 |

**VxRail**

**VxRail 7.0.132 Administration**

This course presents the skills necessary to administer and manage a VxRail cluster. Key topics include management interfaces, managing cluster configurations, resource provisioning and expansion, monitoring, managing availability, and basic troubleshooting. Interactive simulations and video demonstrations are included in the course to provide a step-by-step walkthrough of the key procedures to manage the cluster.

| On Demand Class | 16 Hours | ESCPX03296 |

**VxRail 7.0.XXX Feature - REST API**

**Multi Domain**

**Telecom BMO**

**Dell Technologies Bare Metal Orchestrator Administration 1.1 Lab**

This lab provides relevant practice for topics dealing with the day to day administration of Bare Metal Orchestrator. Specific labs cover monitoring and configuration of BMO resources.

| On Demand Lab | 02 Hours | ESCPX04219 |

**Dell Technologies Bare Metal Orchestrator Concepts**

At the completion of this course, students will be able to describe hardware, software and environmental requirements of the Bare Metal Orchestrator solution. The course will provide insight to the benefits and capabilities of BMO as well as deployment configurations, and tools used to configure and manage the solution.

| On Demand Class | 01 Hours 30 Minutes | ESCPX03704 |
Networking

Dell EMC PowerSwitch Campus Implementation and Administration

This course provides the student with an understanding of the Dell EMC Networking Operating System 6 (DNOS 6) in the following areas:

- Classroom: 40 Hours (ES102NET00233)
- Virtual Class: 40 Hours (ES102NET00233)

Data Center

Dell EMC PowerSwitch Data Center Implementation and Administration

The Dell EMC PowerSwitch Data Center Implementation and Administration course is part of the certification training path leading to Dell EMC Certified Specialist, Networking. This course is On Demand with hands-on activities.

- On Demand Class: 40 Hours (ESNETD02182)

Networking

Dell EMC PowerSwitch Data Center Implementation and Administration

The Dell EMC Networking – Data Center Configuration and Administration course is part of the certification training path leading to Dell EMC Certified Specialist, Networking. This course assists you to successfully configure, manage, and troubleshoot Dell EMC Data Center Networking products using best-practice information. This course is delivered through instructor-led training and hands-on activities.

- Classroom: 40 Hours (ES102NET00232)
- Virtual Class: 40 Hours (ES102NET00232)

SmartFabric

PowerSwitch SmartFabric OS10 BGP EVPN Concepts

This on-demand course provides an overview of BGP EVPN, a data center control plane that addresses multi-tenancy, scalability and workload mobility requirements for modern data centers. It provides an understanding of the components that comprise a BGP EVPN VXLAN solution. Also provided is an overview of how the components interact to forward network traffic from one virtual entity of a tenant, through the data center, to a destination entity for that customer system.

- On Demand Class: 40 Hours (ESNETD02404)

Voucher

Dell Technologies Proven Professional VUE Exam Voucher

Exam vouchers may ONLY be used as payment for any Dell Technologies Proven Professional exam delivered by Pearson VUE, the sole testing provider of Dell Technologies Proven Professional exams. For a complete list of exams this voucher can be used for go to: www.pearsonvue.com/dell/exams. After purchase, your vouchers will be emailed to you within 3 business days. Important: Vouchers are valid for 365 days after the date of order and must be used during this time period. These vouchers may not be resold or redeemed for cash, credit, or refunded.

Security and Systems Management

OpenManage

OpenManage Enterprise CloudIQ Features Implementation Administration

The CloudIQ plugin for OpenManage Enterprise enables the monitoring and managing of OpenManage Enterprise devices by the CloudIQ web service. This course focuses on the functions and features of the CloudIQ plugin for OpenManage Enterprise.

- On Demand Class: 30 Minutes (ESSSM03613)

OpenManage Enterprise Fundamentals Features Implementation Administration

- On Demand Class: 05 Hours (ESSSM02638)

PowerSwitch SmartFabric OS10 Private Virtual LAN Concepts

This module will explain what a PVLAN is and the difference between PVLAN and VLAN. Also covered will be the architecture and components of PVLAN along with the uses and limitations.

- On Demand Class: 30 Minutes (ESNETD02623)

PowerSwitch SmartFabric OS10 Private Virtual LAN Implementation

This on-demand course provides the necessary steps to Implement Private VLAN.

- On Demand Class: 01 Hours (ESNETD02688)

PowerSwitch SmartFabric OS10 REST API Implementation and Lab

The PowerSwitch SmartFabric OS10 REST API Implementation on-demand course provides an introduction and basic understanding of Software Defined Networking via REST API. SmartFabric OS10 REST API, and SmartFabric Services. The course is presented using a range of mediums, from animations to video demonstrations, and is associated with a lab exercise. It prepares the learner to configure switches, translate OS10 CLI commands into REST API requests, and run them using Postman.

- On Demand Class: 03 Hours (ESNETD02718)

Exam Voucher

MR-1EV-VUEEMCPROV

On Demand Class

MR-1EV-VUEEMCPROV
OpenManage Enterprise Fundamentals Features Implementation Administration

The OpenManage Enterprise course is a baseline course that provides a learner with a good understanding of the functions and features of OpenManage Enterprise. Lecture and lab activities cover the following topics for students: Installation/Configuration, navigating/using the web interface, describe and use the Discovery and Inventory process, manage devices, and perform tasks using OpenManage Enterprise. Students learn about and use profiles and configuration templates. The course covers the integration of OME adapters with SupportAssist Enterprise and Secure Connect Gateway. Checklists have been incorporated to students with a "what to look for" when issues arise.

| Classroom | 16 Hours | ESSSMS03596 |
| Virtual Class | 16 Hours | ESSSMS03596 |

OpenManage Enterprise Power Manager Features Implementation Administration

The Power Manager plugin for OpenManage Enterprise enables the monitoring of environmental data, including power and thermal data from Dell EMC devices. Power Manager contains physical hardware resource management and policy management for power and thermal events. This course focuses on the functions and features of the Power Manager plugin for OpenManage Enterprise.

Server

Modular Dell EMC PowerEdge MX Modular Platform Installation, Implementation and Administration

This Dell EMC PowerEdge MX7000 installation, Implementation and Administration course assists the learner to successfully configure, manage and troubleshoot Dell EMC PowerEdge MX7000 systems providing best practice information. This three-day training focuses on the MX7000 chassis as well as installed compute and storage sleds.

| Classroom | 24 Hours | ES1815VR00151 |
| Virtual Class | 24 Hours | ES1815VR00151 |

Dell EMC PowerEdge MX Modular Platform Installation, Implementation and Administration

This on-demand Dell EMC PowerEdge MX Modular Platform Installation, Implementation and Administration training assists the learner to successfully configure, manage and troubleshoot Dell EMC PowerEdge MX systems providing best practice information. This training focuses on the MX7000 chassis as well as installed compute and storage sleds. This course is part of the recommended training path leading to the Dell Technologies Specialist - Implementation Engineer, PowerEdge MX Modular certification. This package does not include a Proven Professional exam voucher, in order to add please search for "Dell Technologies Proven Professional VUE Exam Voucher" or Course ID "MR-1EV-VUEEMCPROV".

| On Demand Class | 12 Hours | ES1025VR01827 |

PowerEdge

Dell EMC PowerEdge Installation Administration and Troubleshooting

Third Party

00 Third Party Untagged DP-100 Designing and Implementing a Data Science Solution on Azure

Learn how to operate machine learning solutions at cloud scale using Azure Machine Learning. This course teaches you to leverage your existing knowledge of Python and machine learning to manage data ingestion and preparation, model training and deployment, and machine learning solution monitoring in Microsoft Azure.

| Virtual Class | 24 Hours | ESTPYS03278 |

Amazon AWS

Advanced Architecting on AWS

In this three-day course, you will be building on concepts introduced in Architecting on AWS. Advanced Architecting on AWS is intended for individuals who are experienced with designing scalable and elastic applications on the AWS platform. In this course, you will cover how to build complex solutions that incorporate data services, governance, and security on AWS. You will get an introduction to specialized AWS services, including AWS Direct Connect and AWS Storage Gateway to support hybrid architecture. You will also cover designing best practices for building scalable, elastic, secure, and highly available applications on AWS.
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Architcting on AWS</td>
<td>3 Days</td>
<td>DESILT-822-4965</td>
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<tr>
<td>Developing on AWS</td>
<td>3 Days</td>
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<tr>
<td>System Operations on AWS</td>
<td>3 Days</td>
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<tr>
<td>Big Data on AWS</td>
<td>3 Days</td>
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</tr>
<tr>
<td>CompTIA A+ Certification</td>
<td>24 Hours</td>
<td>DESILT-822-4965</td>
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</tbody>
</table>

### Architcting on AWS
In three days of intensive learning, you will design and build an AWS Cloud Network. Learn to create a scalable, secure, and reliable AWS Cloud network in the Amazon Web Services (AWS) environment. You will also learn about DNS and VPC subnets, route tables, and security groups. This course is designed to help you prepare for the AWS Certified Solutions Architect Associate certification exam. (Certification exam not included)

**On Demand Class**

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### Developing on AWS
In this three-day course, you will learn how to code and deploy a scalable application on the AWS platform. This course will teach you how to architect, design, and manage your applications on AWS. You will learn about AWS services such as S3, EC2, RDS, and VPC. This course is designed to help you prepare for the AWS Certified Solutions Architect Certified certification exam. (Certification exam not included)

**On Demand Class**

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### System Operations on AWS
In this three-day course, you will learn how to configure, deploy, and manage operations on the AWS platform by building upon your existing knowledge of systems administration, cloud computing, and networking protocols such as TCP/IP or HTTP. This course will teach you how to utilize AWS tools and capabilities throughout the network management process. You will also learn how to configure and manage your AWS operation skills with hands-on exercises. This course is designed to help you prepare for the AWS Certified Solutions Architect Certified certification exam. (Certification exam not included)

**On Demand Class**

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### Big Data on AWS
In this three-day course, you will learn about cloud-based big data solutions such as Amazon Redshift, Amazon Kinesis, and the rest of the AWS big data platform. You will learn how to use Amazon EMR to process data using the broad ecosystem of Apache Hadoop tools like Hive and Hue. Additionally, you will learn how to use big data environments, work with Amazon DynamoDB, Amazon Redshift, and Amazon Kinesis, and leverage best practices to design big data environments for a secure and cost-effective AWS Cloud environment.

**On Demand Class**

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### CompTIA Advanced Security Practitioner (CASP)
This online collection provides 12 months access to CompTIA accredited self-paced eLearning to help prepare for the CompTIA Advanced Security Practitioner (CASP) CAS-002 exam. This online course covers the most up-to-date industry knowledge and best practices in the field of enterprise security. It provides in-depth knowledge about how to interact with AWS using code and covers key concepts, best practices, and troubleshooting tips.

**On Demand Class**

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### CompTIA Cloud+ Certification
The CompTIA Cloud+ certification is a vendor-neutral certification that validates the knowledge and best practices required of IT practitioners working in cloud computing environments. This program explores learning objectives to prepare students for the CompTIA Cloud+ CV0-001 Certification exam. This online course provides 12 months access to CompTIA Cloud+ certification eLearning to help prepare for the CompTIA Cloud+ certification exam. (Certification exam not included)

**On Demand Class**

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### CompTIA Linux+ Certification
A CompTIA Linux+ certification validates technical competency and indicates a broad awareness of Linux operating systems. Those holding CompTIA Linux+ certification demonstrate critical knowledge of installation, operation, administration, and troubleshooting Linux systems. This online course provides 12 months access to CompTIA Linux+ certification eLearning to help prepare for the CompTIA Linux+ certification exam. (Certification exam not included)

**On Demand Class**

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### CompTIA Network+ Certification
This online course helps prepare for the CompTIA Network+ certification exam. This online course provides 12 months access to CompTIA Network+ certification eLearning to help prepare for the CompTIA Network+ certification exam. (Certification exam not included)

**On Demand Class**

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### CompTIA Security+ Certification
CompTIA created their Security+ Certification as a vendor neutral credential that is an internationally recognized way of earning validation of foundation-level security skills and knowledge. This online course helps prepare for the CompTIA Security+ certification exam. CompTIA Security+ certification establishes the test candidate’s ability to install, configure, diagnose and troubleshoot server hardware and network operating systems. (Certification exam not included)

**On Demand Class**

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Google Cloud

Architecting with Google Cloud Platform: Design and Process

This two-day instructor-led class equips you to build highly reliable and efficient solutions on Google Cloud Platform. It is a continuation of the Architecting with Google Cloud Platform: Infrastructure course and assumes hands-on experience with the technologies covered in that course. Through a combination of presentations, demos, and hands-on labs, you will learn to design GCP deployments that are highly reliable and secure as well as how to operate GCP deployments in a highly available and cost-effective manner.

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Hours</th>
<th>Course Code</th>
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<tbody>
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<tr>
<td>Virtual Class</td>
<td>16</td>
<td>DESILT-822-4971</td>
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</table>

Data Engineering on Google Cloud Platform

This four-day instructor-led class provides you with a hands-on introduction to designing and building data processing systems on Google Cloud Platform. Through a combination of presentations, demos, and hands-on labs, you will learn how to design data processing systems, build end-to-end data pipelines, analyze data and carry out machine learning. The course covers structured, unstructured, and streaming data.

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<tr>
<th>Course Type</th>
<th>Hours</th>
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<tbody>
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<tr>
<td>Virtual Class</td>
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<td>DESILT-822-4970</td>
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</table>

Google Cloud Fundamentals: Big Data and Machine Learning

This one-day instructor-led course introduces participants to the big data capabilities of Google Cloud Platform. Through a combination of presentations, demos, and hands-on labs, you will get an overview of the Google Cloud Platform and a detailed view of the data processing and machine learning capabilities. This course showcases the ease, flexibility, and power of big data solutions on Google Cloud Platform.

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<tr>
<th>Course Type</th>
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<tr>
<td>Virtual Class</td>
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Google Cloud Fundamentals: Core Infrastructure

This one-day instructor-led class provides an overview of Google Cloud Platform products and services. Through a combination of presentations, demos, and hands-on labs, you will learn the value of Google Cloud Platform and how to incorporate cloud-based solutions into business strategies.

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<th>Course Type</th>
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<tr>
<td>Virtual Class</td>
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Microsoft Azure

AZ-104T00 Microsoft Azure Administrator

This course teaches IT Professionals how to manage their Azure subscriptions, secure identities, administer the infrastructure, configure virtual networking, connect Azure and on-premises sites, manage network traffic, implement storage solutions, create and scale virtual machines, implement web apps and containers, back up and share data, and monitor your solution

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<thead>
<tr>
<th>Course Type</th>
<th>Hours</th>
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<tr>
<td>Virtual Class</td>
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AZ-204T00 Developing Solutions For Microsoft Azure

Students will learn how to implement Azure compute solutions, create Azure Functions, implement and manage web apps, develop solutions utilizing Azure storage, implement authentication and authorization, and secure their solutions by using KeyVault and Managed Identities. Students will also learn how to connect to and consume Azure services and third party services, and include event and message-based models in their solutions.

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AZ-303T00 Microsoft Azure Architect Technologies

Lessons include virtualization, automation, networking, storage, identity, security, data platform, and application infrastructure. This course outlines how decisions in each of these areas affect an overall solution.

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<th>Course Code</th>
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<tr>
<td>Virtual Class</td>
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AZ-304T00 Microsoft Azure Architect Design

This course teaches Solutions Architects how to translate business requirements into secure, scalable and reliable designs recommendations. Lessons include monitoring, automation, data storage, and infrastructure. This course outlines how decisions in each of these areas influences an overall design solution.

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<th>Course Type</th>
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<tr>
<td>Virtual Class</td>
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Microsoft office 365

MS-100T00 Microsoft 365 Identity and Services

This course covers three central elements of Microsoft 365 enterprise administration – Microsoft 365 tenant and service management, Office 365 management, and Microsoft 365 identity management.

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<th>Course Type</th>
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<td>Virtual Class</td>
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MS-101T00 Microsoft 365 Mobility and Security

This course covers three central elements of Microsoft 365 enterprise administration – Microsoft 365 security management, Microsoft 365 compliance management, and Microsoft 365 device management.

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MS-203T00 Microsoft 365 Messaging

This course examines the key elements of Microsoft 365 messaging administration, including message transport and mail flow, messaging security, hygiene, and compliance, messaging infrastructure, and hybrid messaging.

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<tr>
<td>Virtual Class</td>
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Microsoft Windows Client

Microsoft Windows 10 and Office 365 Subscription

This online training program is a comprehensive, low-cost, easy access solution that helps users effectively adopt Microsoft products and realize the greatest return on their technology investments.

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<th>Course Type</th>
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<tbody>
<tr>
<td>On Demand Class</td>
<td>ESTPYD03351</td>
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Microsoft Windows Server

WS-011T00 Windows Server 2019 Administration

This course is designed for professionals who will be responsible for managing identity, networking, storage and compute by using Windows Server 2019, and who need to understand the scenarios, requirements, and options that are available and applicable to Windows Server 2019. The course teaches IT professionals the fundamental administration skills required to deploy and support Windows Server 2019 in most organizations.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Virtual Class</td>
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<td>ESTPYD03277</td>
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</table>
VMware Dell Technologies Unified Workspace 2020

The Dell Technologies Unified Workspace 2020 is co-skilled badge program aimed at providing IT technical professionals an opportunity to demonstrate proficiency on Dell Technologies Unified Workspace, including technical knowledge of VMware Workspace ONE, Dell Factory Provisioning of VMware Workspace ONE, Dell Client Command Suite, Dell Power Manager, Intel vPro out-of-band management, warranty management, intelligent support with SupportAssist Insights and TechDirect, and the integration points of these capabilities. It also enables badge earners to demonstrate proficiency in Unified Workspace approach to security, including technical details on features such as SafeBIOS (off-host BIOS verification), SafeID (hardware-based trusted device security), and SafeData (AI-enabled TrustedData technology), as well as threat management powered by telemetry, utilizing Artificial Intelligence and Machine Learning for efficient and effective responses to cyber incidents. The program will add to skill sets acquired from the VMware Certified.

Virtual Class 24 Hours ESTPS03323

Dell Technologies Unified Workspace 2020

The Dell Technologies Unified Workspace 2020 is co-skilled badge program aimed at providing IT technical professionals an opportunity to demonstrate proficiency on Dell Technologies Unified Workspace, including technical knowledge of VMware Workspace ONE, Dell Factory Provisioning of VMware Workspace ONE, Dell Client Command Suite, Dell Power Manager, Intel vPro out-of-band management, warranty management, intelligent support with SupportAssist Insights and TechDirect, and the integration points of these capabilities. It also enables badge earners to demonstrate proficiency in Unified Workspace approach to security, including technical details on features such as SafeBIOS (off-host BIOS verification), SafeID (hardware-based trusted device security), and SafeData (AI-enabled TrustedData technology), as well as threat management powered by telemetry, utilizing Artificial Intelligence and Machine Learning for efficient and effective responses to cyber incidents. The program will add to skill sets acquired from the VMware Certified.

On Demand Class 06 Hours 30 Minutes DESNOLT-833-6133

Dell Technologies Unified Workspace 2020

The Dell Technologies Unified Workspace 2020 is co-skilled badge program aimed at providing IT technical professionals an opportunity to demonstrate proficiency on Dell Technologies Unified Workspace, including technical knowledge of VMware Workspace ONE, Dell Factory Provisioning of VMware Workspace ONE, Dell Client Command Suite, Dell Power Manager, Intel vPro out-of-band management, warranty management, intelligent support with SupportAssist Insights and TechDirect, and the integration points of these capabilities. It also enables badge earners to demonstrate proficiency in Unified Workspace approach to security, including technical details on features such as SafeBIOS (off-host BIOS verification), SafeID (hardware-based trusted device security), and SafeData (AI-enabled TrustedData technology), as well as threat management powered by telemetry, utilizing Artificial Intelligence and Machine Learning for efficient and effective responses to cyber incidents. The program will add to skill sets acquired from the VMware Certified.

On Demand Class 06 Hours 30 Minutes DESNOLT-806-13805

Troubleshooting VMware vRealize Operations [V8.x]

This two-day course gives VMware vRealize® Operations™ administrators the skills to perform basic troubleshooting tasks. The course also gives administrators the skills to ensure that the vRealize Operations instance meets its use-case objectives of continuous performance optimization, app-aware intelligent remediation, and integrated compliance. The hands-on training provides an overview of the tools and processes available to ensure a vRealize Operations deployment is running in a healthy state.

Classroom 16 Hours MR-1CN-VMTVR08

Troubleshooting VMware vRealize Operations [V8.x] - Virtual Class

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG
This two-day course gives VMware vRealize® Operations™ administrators the skills to perform basic troubleshooting tasks. The course also gives administrators the skills to ensure that their vRealize Operations instance meets its use-case objectives of continuous performance optimization, app-aware intelligent remediation, and integrated compliance. The hands-on training provides an overview of the tools and processes available to ensure a vRealize Operations deployment is running in a healthy state.

<table>
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<th>Virtual Class</th>
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**VMware App Volumes and Dynamic Environment Manager**

This three-day course builds your skills in application management using VMware App Volumes™ and VMware Dynamic Environment Manager™. You will learn how to use App Volumes to deliver applications and data to desktops and users, and at scale. You will gain skills in managing application lifecycles from installation to update and replacement. You will also learn how to use Dynamic Environment Manager to provide personalized and dynamic policy configuration across virtual, physical, and cloud-based environments to simplify end-user profile management.

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<th>Classroom</th>
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**VMware App Volumes and Dynamic Environment Manager - Virtual Class**

This three-day course builds your skills in application management using VMware App Volumes™ and VMware Dynamic Environment Manager™. You will learn how to use App Volumes to deliver applications and data to desktops and users, and at scale. You will gain skills in managing application lifecycles from installation to update and replacement. You will also learn how to use Dynamic Environment Manager to provide personalized and dynamic policy configuration across virtual, physical, and cloud-based environments to simplify end-user profile management.

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**VMware Carbon Black App Control Administrator**

This one-day course teaches you how to use the VMware Carbon Black® App Control™ product and leverage its capabilities to configure and maintain the system according to your organization’s security posture and organizational policies. This course provides an in-depth, technical understanding of the Carbon Black App Control product through comprehensive coursework and hands-on scenario-based labs.

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<th>Classroom</th>
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**VMware Carbon Black App Control Administrator - Virtual Class**

This one-day course teaches you how to use the VMware Carbon Black® App Control™ product and leverage its capabilities to configure and maintain the system according to your organization’s security posture and organizational policies. This course provides an in-depth, technical understanding of the Carbon Black App Control product through comprehensive coursework and hands-on scenario-based labs.

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**VMware Carbon Black App Control Advanced Administrator**

This one-day course teaches you how to configure and scope the rules within VMware Carbon Black® App Control™ product to maintain the system according to your organization’s security posture and organizational policies. Additionally, this course covers troubleshooting both the server and the agent for Carbon Black App Control and how to identify issues that impact normal operations. This course provides an in-depth, technical understanding of the Carbon Black App Control product through comprehensive coursework and hands-on scenario-based labs.

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**VMware Carbon Black App Control Advanced Administrator - Virtual Class**

This one-day course teaches you how to configure and scope the rules within VMware Carbon Black® App Control™ product to maintain the system according to your organization’s security posture and organizational policies. Additionally, this course covers troubleshooting both the server and the agent for Carbon Black App Control and how to identify issues that impact normal operations. This course provides an in-depth, technical understanding of the Carbon Black App Control product through comprehensive coursework and hands-on scenario-based labs.

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<th>Virtual Class</th>
<th>08 Hours</th>
<th>MR-1LN-VMVCBCEDR</th>
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**VMware Carbon Black Cloud Audit and Remediation - Virtual**

This one-day course teaches you how to use the VMware Carbon Black® Cloud Audit and Remediation™ product to build queries for IT hygiene, incident response, and vulnerability assessment to support your organization’s security posture and policies. This course provides an in-depth, technical understanding of the product through comprehensive coursework and hands-on scenario-based labs.

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<th>Virtual Class</th>
<th>08 Hours</th>
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**VMware Carbon Black Cloud Audit and Remediation Standard - Virtual**

This one-day course teaches you how to use the VMware Carbon Black® Cloud Audit and Remediation™ Standard product and leverage the capabilities to configure and maintain the system according to your organization’s security posture and policies. This course provides an in-depth, technical understanding of the product through comprehensive coursework and hands-on scenario-based labs.

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<th>Virtual Class</th>
<th>08 Hours</th>
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**VMware Carbon Black Cloud Enterprise EDR - Virtual**

This one-day course teaches you how to use the VMware Carbon Black® Cloud Endpoint EDR™ product and leverage its capabilities to configure and maintain the system according to your organization’s security posture and policies. This course provides an in-depth, technical understanding of the product through comprehensive coursework and hands-on scenario-based labs.

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<th>Virtual Class</th>
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<th>MR-1LN-VMVCBCEDR</th>
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**VMware Carbon Black EDR Administrator**

This one-day course teaches you how to use the VMware Carbon Black® EDR™ product and leverage its capabilities to configure and maintain the system according to your organization’s security posture and policies. This course provides an in-depth, technical understanding of the product through comprehensive coursework and hands-on scenario-based labs.

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<th>Classroom</th>
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<th>MR-1CN-VMVCBEDRA</th>
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**VMware Carbon Black EDR Administrator - Virtual Class**

This one-day course teaches you how to use the VMware Carbon Black® EDR™ product and leverage its capabilities to configure and maintain the system according to your organization’s security posture and policies. This course provides an in-depth, technical understanding of the product through comprehensive coursework and hands-on scenario-based labs.

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<th>Virtual Class</th>
<th>08 Hours</th>
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</table>
VMware Carbon Black EDR Advanced Administrator
This one-day course teaches you how to use the advanced features of the VMware Carbon Black® EDR™ product. This usage includes gaining access to the Linux server for management and troubleshooting in addition to configuring integrations and using the API. This course provides an in-depth, technical understanding of the Carbon Black EDR product through comprehensive coursework and hands-on scenario-based labs. This class focuses exclusively on advanced technical topics related to the technical back-end configuration and maintenance.

Virtual Class 08 Hours MR-1CN-VM/CBEDRAA

VMware Carbon Black EDR Advanced Administrator - Virtual Class
This one-day course teaches you how to use the advanced features of the VMware Carbon Black® EDR™ product. This usage includes gaining access to the Linux server for management and troubleshooting in addition to configuring integrations and using the API. This course provides an in-depth, technical understanding of the Carbon Black EDR product through comprehensive coursework and hands-on scenario-based labs. This class focuses exclusively on advanced technical topics related to the technical back-end configuration and maintenance.

Virtual Class 08 Hours MR-1LN-VM/CBEDRAA

VMware Carbon Black EDR Advanced Analyst
This one-day course teaches you how to use the VMware Carbon Black® EDR™ product during incident response. Using the SANS PIERCERL framework, you will configure the server and perform an investigation on a possible incident. This course provides guidance on using Carbon Black EDR capabilities throughout an incident with an in-depth, hands-on, scenario-based lab.

Virtual Class 08 Hours MR-1CN-VM/CBEDRAAAN

VMware Carbon Black Advanced Analyst - Virtual Class
This one-day course teaches you how to use the VMware Carbon Black® EDR™ product during incident response. Using the SANS PIERCERL framework, you will configure the server and perform an investigation on a possible incident. This course provides guidance on using Carbon Black EDR capabilities throughout an incident with an in-depth, hands-on, scenario-based lab.

Virtual Class 08 Hours MR-1LN-VM/CBEDRAAAN

VMware Carbon Black Portfolio: Configure and Manage - Virtual Class
This 5-day course teaches you how to install, configure, and manage the VMware Carbon Black® Portfolio suite of products, which includes VMware Carbon Black® App Control™ Administrator, VMware Carbon Black® Cloud Endpoint™ Standard, VMware Carbon Black® Cloud Audit and Remediation, VMware Carbon Black® Cloud Enterprise EDR™. You learn how to use the capabilities of the products according to the organization’s security posture and organizational policies. This course provides an in-depth, technical understanding of the Carbon Black Portfolio through comprehensive coursework, hands-on labs, and scenario-based exercises.

Virtual Class 40 Hours MR-1LN-VM/CBCM

VMware Cloud Director: Advanced Networking with NSX-T Data Center [V10.2]
In this five-day course, you focus on deploying, configuring, integrating, designing, and managing VMware Cloud Director™ 10.x network objects with VMware NSX-T Data Center. This course also focuses on designing, integrating, configuring, and managing VMware Cloud Director™ 10.x with VMware NSX® Advanced Load Balancer™. This course also focuses on the VMware Cloud Director Migration tool, using which the system administrator can perform the actual migration by migrating the workload and network objects of the organization VDC supported by VMware NSX® DataCenter for vSphere® to the organization VDC supported by NSX-T Data Center in the same organization. This course also showcases how to monitor VMware Cloud Director networking objects using VMware vRealize® Operations™ and VMware vRealize® Operations Tenant App.

Virtual Class 40 Hours MR-1LN-VMCDANNSXT

VMware Cloud Director: Advanced Workshop [V10.2]
This five-day, hands-on training course provides you with the advanced knowledge, skills, and tools to design and utilize a cloud solution based on VMware Cloud Director™. Besides learning about an advanced cloud architecture, you learn about the integration of VMware Cloud Director with the products VMware Cloud Director Availability™, VMware vRealize® Operations™ (including the Tenant App), VMware NSX-T® Data Center and VMware NSX® Advanced Load Balancer™ (Avi N etworks). This course covers the migration from VMware NSX® for vSphere® (NSX-V) to VMware NSX-T® Data Center in a VMware Cloud Director environment. You learn about how the NSX Advanced Load Balancer can be used and integrated in an active provider environment and how to configure the load balancing services using VMware NSX-T Data Center. Besides the advanced know-how of the vRealize Operations Tenant App and Cloud Availability, the course also discusses the extensibility and orchestration of workflows in Cloud Director. For all the topics covered.

Virtual Class 40 Hours MR-1CN-VMCDAW102

VMware Cloud Director: Advanced Workshop [V10.2] - Virtual Class
This five-day, hands-on training course provides you with the advanced knowledge, skills, and tools to design and utilize a cloud solution based on VMware Cloud Director™. Besides learning about an advanced cloud architecture, you learn about the integration of VMware Cloud Director with the products VMware Cloud Director Availability™, VMware vRealize® Operations™ (including the Tenant App), VMware NSX-T® Data Center and VMware NSX® Advanced Load Balancer™ (Avi N etworks). This course covers the migration from VMware NSX® for vSphere® (NSX-V) to VMware NSX-T® Data Center in a VMware Cloud Director environment. You learn about how the NSX Advanced Load Balancer can be used and integrated in an active provider environment and how to configure the load balancing services using VMware NSX-T Data Center. Besides the advanced know-how of the vRealize Operations Tenant App and Cloud Availability, the course also discusses the extensibility and orchestration of workflows in Cloud Director. For all the topics covered.
Virtual Class | 40 Hours | MR-1LN-VMVCDAW102

VMware Cloud Director: Install, Configure, Manage [V10.1] - Virtual
In this five-day course, you focus on installing, configuring, and managing VMware Cloud Director™ 10.x. You learn about workload provisioning, the creation of organizations, virtual data centers (VDCs), catalog services that include predefined virtual machines, and on-demand VMware NSX® networks. This course also covers interfacing VMware Cloud Director with other systems and the integration and use of VMware Cloud Director Availability. You also learn how to manage multitenant, cross-VDC network king, and configuring Central Point of Management (CPOM) to define a Software-defined Data Center (SDDC) for a tenant and provider users of VMware Cloud Director. This course also discusses how to monitor various VMware Cloud Director objects using VMware Realize® Operations Tenant AppTM.

Classroom | 40 Hours | MR-1CN-VMVCDICM101

VMware Cloud Foundation: Planning, Management, Operations [V4.0] - Virtual
This three-day course includes instruction on the capabilities of VMware Cloud Foundation™ to manage and operate hybrid and cloud infrastructures, which includes customization and management. The course explains the architecture of VMware Cloud Foundation and explains licensing, certificates, and storage and network management. The course also covers workload domains, availability, life cycle management, and troubleshooting. In general, you learn how to use and configure VMware Cloud Foundation 4.0.1.

Classroom | 24 Hours | MR-1CN-VMVCFPMO43

VMware Cloud on AWS: Deploy, Configure, Manage 2021
This four-day, hands-on training course provides you with the knowledge, skills, and tools for deploying and managing VMware Cloud on AWS infrastructure. You explore the common use cases of the VMware Cloud on AWS infrastructure that allows you to modernize, protect, and scale applications based on VMware vSphere® that leverage AWS. In this course, you are introduced to various rapid and easy migration options for workloads based on vSphere to VMware Cloud on AWS. In addition, you are presented with VMware Cloud Disaster Recovery, which is a DisasterRecovery as-a-service (DRaaS) solution, with fast recovery capabilities, that can be used to cost-effectively protect your virtualized applications.

Virtual Class | 24 Hours | MR-1LN-VMVCFPMO43

VMware Cloud Foundation: Plan and Deploy [V4.0] - Virtual
This two-day course introduces the concepts and architecture of VMware Cloud Foundation™ to prepare students for a successful deployment. This course explains how to design and size your infrastructure for the management components for workload domains in preparing for VMware Cloud Foundation deployment. This course provides instruction on planning and designing the physical network, a key preparatory step for VMware Cloud Foundation. This course describes how to plan for, and execute, the VMware Cloud Foundation bring-up process. This course explains how to use VMware ESXi™ hosts for use in VMware Cloud Foundation using the VMware Imaging Appliance. Live labs provide hands-on experience to help understand key course objectives.

Classroom | 16 Hours | MR-1CN-VMVCFPD4

VMware Cloud Foundation: Plan and Deploy [V4.0] - Virtual
This two-day course introduces the concepts and architecture of VMware Cloud Foundation™ to prepare students for a successful deployment. This course explains how to design and size your infrastructure for the management components for workload domains in preparing for VMware Cloud Foundation deployment. This course provides instruction on planning and designing the physical network, a key preparatory step for VMware Cloud Foundation. This course describes how to plan for, and execute, the VMware Cloud Foundation bring-up process. This course explains how to use VMware ESXi™ hosts for use in VMware Cloud Foundation using the VMware Imaging Appliance. Live labs provide hands-on experience to help understand key course objectives.

Virtual Class | 16 Hours | MR-1LN-VMVCFPD4

VMware Cloud Foundation: Planning, Management, Operations [V4.3]
This five-day course includes instruction on the capabilities of VMware Cloud Foundation™ and how to successfully plan, deploy, manage, and operate hybrid and cloud infrastructures, including customization. The course explains the architecture of VMware Cloud Foundation and explains licensing, certificates, and storage and network management. The course also covers workload domains, availability, life cycle management, and troubleshooting.

Virtual Class | 40 Hours | MR-1CN-VMVCFPMO43

VMware Cloud Foundation: Planning, Management, Operations [V4.3] - Virtual
This five-day course includes instruction on the capabilities of VMware Cloud Foundation™ and how to successfully plan, deploy, manage, and operate hybrid and cloud infrastructures, including customization. The course explains the architecture of VMware Cloud Foundation and explains licensing, certificates, and storage and network management. The course also covers workload domains, availability, life cycle management, and troubleshooting.

Virtual Class | 40 Hours | MR-1LN-VMVCFPMO43

VMware Cloud Foundation: Planning, Management, Operations [V4.3] - Virtual
This five-day course includes instruction on the capabilities of VMware Cloud Foundation™ and how to successfully plan, deploy, manage, and operate hybrid and cloud infrastructures, including customization. The course explains the architecture of VMware Cloud Foundation and explains licensing, certificates, and storage and network management. The course also covers workload domains, availability, life cycle management, and troubleshooting.

Virtual Class | 40 Hours | MR-1CN-VMVCFPMO43

VMware Cloud Foundation: Planning, Management, Operations [V4.3]
This five-day course includes instruction on the capabilities of VMware Cloud Foundation™ and how to successfully plan, deploy, manage, and operate hybrid and cloud infrastructures, including customization. The course explains the architecture of VMware Cloud Foundation and explains licensing, certificates, and storage and network management. The course also covers workload domains, availability, life cycle management, and troubleshooting.

Virtual Class | 40 Hours | MR-1LN-VMVCFPMO43

VMware Cloud Foundation: Planning, Management, Operations [V4.0] - Virtual
This five-day course includes instruction on the capabilities of VMware Cloud Foundation™ and how to successfully plan, deploy, manage, and operate hybrid and cloud infrastructures, including customization. The course explains the architecture of VMware Cloud Foundation and explains licensing, certificates, and storage and network management. The course also covers workload domains, availability, life cycle management, and troubleshooting.

Virtual Class | 40 Hours | MR-1CN-VMVCFPMO43

VMware Cloud on AWS: Deploy, Configure, Manage 2021
This four-day, hands-on training course provides you with the knowledge, skills, and tools for deploying and managing VMware Cloud on AWS infrastructure. You explore the common use cases of the VMware Cloud on AWS infrastructure that allows you to modernize, protect, and scale applications based on VMware vSphere® that leverage AWS. In this course, you are introduced to various rapid and easy migration options for workloads based on vSphere to VMware Cloud on AWS. In addition, you are presented with VMware Cloud Disaster Recovery, which is a DisasterRecovery as-a-service (DRaaS) solution, with fast recovery capabilities, that can be used to cost-effectively protect your virtualized applications.

Virtual Class | 32 Hours | MR-1CN-VMAWSDCM2021
### VMware Cloud on AWS: Deploy, Configure, Manage 2021 - Virtual Class
This four-day, hands-on training course provides you with the knowledge, skills, and tools for deploying and managing VMware Cloud™ on AWS infrastructure. You explore the common use cases of the VMware Cloud on AWS infrastructure that allows you to modernize, protect, and scale applications based on VMware vSphere® that leverage AWS. In this course, you are introduced to various rapid and easy migration options for workloads based on vSphere to VMware Cloud on AWS. In addition, you are present ed with VMware Cloud Disaster Recovery™, which is a DisasterRecovery as-a-service (DRaaS) solution, with fast recovery capabilities, that can be used to cost-effectively protect a broad set of your virtualized applications.

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<th>Virtual Class</th>
<th>32 Hours</th>
<th>MR-1LN-VMAWSDCM2021</th>
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### VMware HCX: Management and Operations - Virtual Class
This four-day course gives you knowledge and practical exercises sufficient to manage VMware HCX® and to migrate virtual machines using VMware HCX. The course focuses on configuration and management of VMware HCX. The course equips system administrators with the knowledge, skills, and abilities to achieve competence in migrating virtual machines.

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<th>Virtual Class</th>
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### VMware Horizon 8: Deploy and Manage - Virtual Class
VMware Horizon 8: Deploy and Manage is a five-day combination course of VMware Horizon 8: Skills for Virtual Desktop Management & VMware Horizon 8: Infrastructure Administration. This training collection gives you the hands-on skills to deliver virtual desktops and applications through a single virtual desktop infrastructure platform. You will build on your skills in configuring and managing VMware Horizon® 8 through a combination of lecture and hands-on labs. You learn how to configure and deploy pools of virtual machines and how to provide a customized desktop environment to end-users. Additionally, you will learn how to install and configure a virtual desktop infrastructure platform. You learn how to install and configure VMware Horizon® Connection Server™, VMware Unified Access Gateway™, how to configure a load balancer for use with Horizon, and how to establish Cloud Pod Architecture.

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<th>Virtual Class</th>
<th>40 Hours</th>
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### VMware Data Center Automation with vRealize Orchestration and vSphere PowerCLI - Virtual Classroom
This five-day course teaches experienced VMware vSphere administrators how to use the powerful automation tools that all vSphere customers have access to. Using real-world use cases and examples, you will learn how to automate day-to-day administration tasks with VMware vSphere PowerCLI and VMware vRealize Orchestration. During class, you will use these tools to automate tasks in a realistic lab environment.**Important** This Online ILT Class comes to DellEMC through our training partner, Global Knowledge. Once enrolled in a class, you will receive an email from Global Knowledge providing you with information on materials and access to the class. Do not disregard communication from Global Knowledge, it may affect your ability connect to the class.

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<th>Classroom</th>
<th>40 Hours</th>
<th>MR-1CN-VMDCAROS</th>
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### VMware Data Center Virtualization: Core Technical Skills
This three-day, hands-on training course is an introduction to VMware vSphere®. In this course, you acquire the skills needed to perform Day 2 operational tasks that are typically assigned to the roles of operator or junior administrator in avSphere environment.

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<th>Classroom</th>
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<th>MR-1CN-VMDCVCTS</th>
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### VMware Data Center Virtualization: Core Technical Skills - Virtual Class
This three-day, hands-on training course is an introduction to VMware vSphere®. In this course, you acquire the skills needed to perform Day 2 operational tasks that are typically assigned to the roles of operator or junior administrator in vSphere environment.

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### VMware Horizon 8: Deploy and Manage + App Volumes Fast Track
This five-day accelerated, hands-on training course is a blend of VMware Horizon® 8: Skills for Virtual DesktopManagement, VMware Horizon 8: Infrastructure Administration, and VMware App Volumes™, and VMware DynamicEnvironment Manager™. Eight days of content are taught in five-days of extending learning. This training collection gives you the hands-on skills to deliver virtual desktops and applications through a single virtual desktop infrastructure platform. You build on your skills in configuring and managing VMware Horizon® 8 through a combination of lecture and hands-on labs. You learn how to configure and deploy pools of virtual machines and how to provide a customized desktop environment to end-users. Additionally, you will learn how to install and configure a virtual desktop infrastructure platform. You learn how to install and configure VMware Horizon® Connection Server™, VMware Unified Access Gateway™, how to configure a load balancer for use with Horizon, and how to establish Cloud Pod Architecture.Additionally, you learn how to use the powerful automation tools that all vSphere customers have access to. Using real-world use cases and examples, you will learn how to automate day-to-day administration tasks with VMware vSphere PowerCLI and VMware vRealize Orchestration. During class, you will use these tools to automate tasks in a realistic lab environment.

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<th>Classroom</th>
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### VMware Horizon 8: Deploy and Manage + App Volumes Fast Track - Virtual
This five-day accelerated, hands-on training course is a blend of VMware Horizon® 8: Skills for Virtual DesktopManagement, VMware Horizon 8: Infrastructure Administration, and VMware App Volumes™, and VMware DynamicEnvironment Manager™. Eight days of content are taught in five-days of extending learning. This training collection gives you the hands-on skills to deliver virtual desktops and applications through a single virtual desktop infrastructure platform. You build on your skills in configuring and managing VMware Horizon® 8 through a combination of lecture and hands-on labs. You learn how to configure and deploy pools of virtual machines and how to provide a customized desktop environment to end-users. Additionally, you will learn how to install and configure a virtual desktop infrastructure platform. You learn how to install and configure VMware Horizon® Connection Server™, VMware Unified Access Gateway™, how to configure a load balancer for use with Horizon, and how to establish Cloud Pod Architecture. Additionally, you learn how to use the powerful automation tools that all vSphere customers have access to. Using real-world use cases and examples, you will learn how to automate day-to-day administration tasks with VMware vSphere PowerCLI and VMware vRealize Orchestration. During class, you will use these tools to automate tasks in a realistic lab environment.
This five-day accelerated, hands-on training course is a blend of VMware Horizon® 8: Skills for Virtual Desktop Management, VMware Horizon 8: Infrastructure Administration, and VMware App Volumes™, and VMware Dynamic Environment Manager™. Eight days of content are taught in five-days of extending learning. This training collection gives you the hands-on skills to deliver virtual desktops and applications through a single virtual desktop infrastructure platform. You build on your skills in configuring and managing VMware Horizon 8 through acroboniination of lecture and hands-on labs. You learn how to configure and deploy pools of virtual machines and how to provide a customized desktop environment to end-users. You learn how to install and configure VMware Horizon® Connection Server™ and VMware Unified Access Gateway™. You also learn how to configure a load balancer for use with Horizon and how to establish Cloud Pod Architecture. Additionally, you learn how to use:

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**VMware Horizon 8: Infrastructure Administration**

This two-day, hands-on course gives you the skills to install and configure a virtual desktop infrastructure platform. This course builds your skills in installing and configuring VMware Horizon® through a combination of lecture and hands-on labs. You learn how to install and configure VMware Horizon® Connection Server™, VMware Unified Access Gateway™, how to configure a load balancer for use with Horizon, and how to establish Cloud Pod Architecture.

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**Virtual Class | 16 Hours | MR-1LN-VMHIA8**

**VMware Horizon 8: Infrastructure Administration - Virtual**

This two-day, hands-on course gives you the skills to install and configure a virtual desktop infrastructure platform. This course builds your skills in installing and configuring VMware Horizon® through a combination of lecture and hands-on labs. You learn how to install and configure VMware Horizon® Connection Server™, VMware Unified Access Gateway™, how to configure a load balancer for use with Horizon, and how to establish Cloud Pod Architecture.

**VMware Horizon 8: Infrastructure Administrator and Troubleshooting**

VMware Horizon 8: Infrastructure Administrator and Troubleshooting is a five-day combination course of VMware Horizon® 8: Infrastructure Administration & VMware Horizon 8: Infrastructure Troubleshooting. This 5-day training gives you the skills to install and configure VMware Horizon® through a combination of lecture and hands-on labs. You learn how to install and configure VMware Horizon® Connection Server™, VMware Unified Access Gateway™, how to configure a load balancer for use with Horizon, and how to establish Cloud Pod Architecture. Also, this course provides you with the advanced knowledge, skills, and abilities to troubleshoot VMware Horizon® infrastructure. This workshop teaches the required skill and competence for troubleshooting Horizon Connection Server™, VMware Unified Access Gateway™, protocols, connections, and certificates. This course provides a challenge lab designed to present participants with infrastructure issues that may arise.

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<th>Virtual Class</th>
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**Virtual Class | 40 Hours | MR-1LN-VMHIA8**

**VMware Horizon 8: Infrastructure Troubleshooting**

This three-day, hands-on training provides you with the advanced knowledge, skills, and abilities to troubleshoot VMware Horizon® infrastructure. This workshop teaches the required skill and competence for troubleshooting VMware Horizon® Connection Server™, VMware Unified Access Gateway™, protocols, connections, and certificates. This course provides you with the advanced knowledge, skills, and abilities to troubleshoot VMware Horizon® infrastructure. This workshop teaches the required skill and competence for troubleshooting Horizon Connection Server™, VMware Unified Access Gateway™, protocols, connections, and certificates.

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**Virtual Class | 24 Hours | MR-1LN-VMHIT8**

**VMware Horizon 8: Skills for Virtual Desktop Management**

This three-day, hands-on course gives you the skills to deliver virtual desktops and applications through a single virtual desktop infrastructure platform. This course builds your skills in configuring and managing VMware Horizon® 8 through a combination of lecture and hands-on labs. You learn how to configure and deploy pools of virtual machines and how to provide a customized desktop environment to end-users.

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**Virtual Class | 24 Hours | MR-1LN-VHHSVDM8**

**VMware Horizon 8: Troubleshooting Bootcamp**

This three-day, hands-on course gives you the skills to deliver virtual desktops and applications through a single virtual desktop infrastructure platform. This course builds your skills in configuring and managing VMware Horizon® 8 through a combination of lecture and hands-on labs. You learn how to configure and deploy pools of virtual machines and how to provide a customized desktop environment to end-users.

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**Virtual Class | 24 Hours | MR-1LN-VHHSVDM8**

**VMware Horizon 8: Troubleshooting**

This three-day, hands-on training provides you with the advanced knowledge, skills, and abilities to troubleshoot VMware Horizon® infrastructure. This workshop teaches the required skill and competence for troubleshooting VMware Horizon® Connection Server™, VMware Unified Access Gateway™, protocols, connections, and certificates. This course provides you with the advanced knowledge, skills, and abilities to troubleshoot VMware Horizon® infrastructure. This workshop teaches the required skill and competence for troubleshooting Horizon Connection Server™, VMware Unified Access Gateway™, protocols, connections, and certificates. This course provides a challenge lab designed to present participants with infrastructure issues that may arise.

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**Virtual Class | 40 Hours | MR-1LN-VMHIA8**

**VMware Horizon 8: Infrastructure Troubleshooting - Virtual Class**

This three-day, hands-on training provides you with the advanced knowledge, skills, and abilities to troubleshoot VMware Horizon® infrastructure. This workshop teaches the required skill and competence for troubleshooting VMware Horizon® Connection Server™, VMware Unified Access Gateway™, protocols, connections, and certificates. This course provides you with the advanced knowledge, skills, and abilities to troubleshoot VMware Horizon® infrastructure. This workshop teaches the required skill and competence for troubleshooting Horizon Connection Server™, VMware Unified Access Gateway™, protocols, connections, and certificates. This course provides a challenge lab designed to present participants with infrastructure issues that may arise.

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**Virtual Class | 24 Hours | MR-1LN-VMHIT8**

**VMware Horizon 8: Skills for Virtual Desktop Management - Virtual Class**

This three-day, hands-on course gives you the skills to deliver virtual desktops and applications through a single virtual desktop infrastructure platform. This course builds your skills in configuring and managing VMware Horizon® 8 through a combination of lecture and hands-on labs. You learn how to configure and deploy pools of virtual machines and how to provide a customized desktop environment to end-users.

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**Virtual Class | 24 Hours | MR-1LN-VHHSVDM8**

**VMware Horizon 8: Troubleshooting Bootcamp**

This three-day, hands-on course gives you the skills to deliver virtual desktops and applications through a single virtual desktop infrastructure platform. This course builds your skills in configuring and managing VMware Horizon® 8 through a combination of lecture and hands-on labs. You learn how to configure and deploy pools of virtual machines and how to provide a customized desktop environment to end-users.

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**Virtual Class | 24 Hours | MR-1LN-VHHSVDM8**
This five-day course builds your skills in resolving common issues that occur in a VMware Horizon® environment. You engage in a series of lab exercises to bring existing environment issues to resolution. The exercises mirror real-world troubleshooting use cases. These exercises equip learners with the knowledge and practical skills to manage typical challenges faced by virtual desktop administrators and operators. You provide with the advanced knowledge, skills, and abilities to troubleshoot VMware Horizon® 8 infrastructure related issues. This workshop teaches the required skill and competence for troubleshooting VMware Horizon® Connection Server™, VMware Unified Access Gateway™, protocols, connections, and certificates.

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<tr>
<th>Classroom</th>
<th>40 Hours</th>
<th>MR-1CN-VMHTB8</th>
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VMware Horizon 8: Troubleshooting Bootcamp - Virtual Class

This five-day course builds your skills in resolving common issues that occur in a VMware Horizon® environment. You engage in a series of lab exercises to bring existing environment issues to resolution. The exercises mirror real-world troubleshooting use cases. These exercises equip learners with the knowledge and practical skills to manage typical challenges faced by virtual desktop administrators and operators. You provide with the advanced knowledge, skills, and abilities to troubleshoot VMware Horizon® 8 infrastructure related issues. This workshop teaches the required skill and competence for troubleshooting VMware Horizon® Connection Server™, VMware Unified Access Gateway™, protocols, connections, and certificates.

<table>
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<tr>
<th>Virtual Class</th>
<th>40 Hours</th>
<th>MR-1LN-VMHTB8</th>
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VMware Horizon 8: Virtual Desktop Bootcamp

VMware Horizon® 8: Virtual Desktop Bootcamp is a five-day combination course of VMware Horizon® 8: Skills for Virtual Desktop Management and VMware Horizon® 8: Virtual Desktop Troubleshooting. This training combination gives you the skills to deliver virtual desktops and applications through a single virtual desktop infrastructure platform. You build skills in configuring and managing VMware Horizon 8 through a combination of lecture and hands-on labs. You learn how to configure and deploy pools of virtual machines and how to provide a customized desktop environment to end-users. Additionally, you learn how to configure and deploy pools of virtual machines and how to provide a customized desktop environment to end-users. This workshop teaches the required skill and competence for troubleshooting VMware Horizon® Connection Server™, VMware Unified Access Gateway™, protocols, connections, and certificates.

<table>
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<tr>
<th>Classroom</th>
<th>40 Hours</th>
<th>MR-1CN-VMHDDB8</th>
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VMware Horizon 8: Virtual Desktop Troubleshooting

This two-day course builds your skills in resolving common issues that occur in a VMware Horizon® environment. You engage in a series of lab exercises to bring existing environment issues to resolution. The exercises mirror real-world troubleshooting use cases. These exercises equip learners with the knowledge and practical skills to manage typical challenges faced by virtual desktop administrators and operators.

<table>
<thead>
<tr>
<th>Virtual Class</th>
<th>40 Hours</th>
<th>MR-1LN-VMHDDB8</th>
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</table>

VMware Horizon 8: Virtual Desktop Troubleshooting - Virtual Class

This two-day course builds your skills in resolving common issues that occur in a VMware Horizon® environment. You engage in a series of lab exercises to bring existing environment issues to resolution. The exercises mirror real-world troubleshooting use cases. These exercises equip learners with the knowledge and practical skills to manage typical challenges faced by virtual desktop administrators and operators.

<table>
<thead>
<tr>
<th>Virtual Class</th>
<th>16 Hours</th>
<th>MR-1LN-VMHVD8</th>
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VMware Horizon Cloud Service: Deploy and Manage on Microsoft Azure

This five-day, hands-on training provides you with the knowledge, skills, and abilities to achieve competence in deploying and managing VMware Horizon® Cloud Service™ on Microsoft Azure. This training increases your skills and competence inusing the VMware Horizon® Cloud Administration Console and Microsoft Azure portal. Through a combination of hands-on labs and interactive lectures, you learn how to import and manage images for VDI and RDSH assignments. You also learn how to configure and use the Universal Broker function, VMware App Volumes™, and VMware Dynamic Environment Manager™ in the Horizon Cloud Service on Microsoft Azure deployment.

<table>
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<th>Classroom</th>
<th>40 Hours</th>
<th>MR-1CN-VMHC5ADM3</th>
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</table>
This five-day course provides you with the skills to build a private cloud using VMware® Integrated OpenStack on a proven VMware SDDC. Through a combination of lecture and hands-on labs, this course builds your skills in installing, configuring, and managing VMware Integrated OpenStack. You learn how to offer IaaS and PaaS with advanced networking and security features to end users using VMware Integrated OpenStack.

**VMware Kubernetes Fundamentals and Cluster Operations**
This four-day course is the first step in learning about Containers and Kubernetes Fundamentals and Cluster Operations. Through a series of lectures and lab exercises, the fundamental concepts of containers and Kubernetes are presented and put to practice by containerizing and deploying a two-tier application into Kubernetes.

**VMware NSX Advanced Load Balancer: Global Server Load Balancing Design and Deploy**
This three-day course prepares you to lead VMware NSX Advanced Load Balancer (Avi Networks) Global Server Load Balancing design and deployment projects by providing an understanding of general design processes, frameworks and configurations. You look at the design and deployment considerations for Global Server Load Balancing as part of an overall software-defined data center design. This course covers key NSX Advanced Load Balancer (Avi Networks) Global Server Load Balancing features and functional ities offered in the NSX Advanced Load Balancer 18.2 release. Access to asoftware-defined data center environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

**VMware NSX Advanced Load Balancer: Infrastructure and Application Automation**
This three-day, fast-paced course provides comprehensive training on how to automate infrastructure and application components of VMware NSX Advanced Load Balancer (Avi Networks) solution. This course covers key application delivery features of NSX Advanced Load Balancer (Avi Networks) features and functionality offered in VMware NSX Advanced Load Balancer 18.2 release and focuses on how to plan and implement automation of infrastructure and application components leveraging REST API, SDK or automation solutions such as Ansible, Terraform or similar. Access to a software-defined data center environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

**VMware NSX Advanced Load Balancer: ICM plus Troubleshooting and Operations Fast Track - Virtual Class**
This five-day, fast-paced course provides comprehensive training on how to install, configure, and manage a VMware NSX Advanced Load Balancer (Avi Networks) solution. This course covers key NSX Advanced Load Balancer (Avi Networks) features and functionality offered in the NSX Advanced Load Balancer 18.2 release. The features covered include the overall infrastructure, virtual services and application components, global server load balancing, various cloud connectors. Also covered are application troubleshooting and solution monitoring. You will be presented with various types of technical problems, which you will identify, analyze, and solve through a systematic process. Access to a software-defined data center environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.
VMware NSX Advanced Load Balancer Install, Configure, Manage - Virtual Class

This five-day, fast-paced course provides comprehensive training on how to install, configure, and manage a VMware NSX Advanced Load Balancer™ (Avi Networks) solution. This course covers core NSX Advanced Load Balancer (Avi Networks) features and functionality offered in the NSX Advanced Load Balancer 18.2 release. The features covered include the overall infrastructure, virtual services and application components, global server load balancing, various cloud connectors. Also covered are application layer troubleshooting and solution monitoring. Access to a software-defined datacenter environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

Virtual Class 40 Hours
MR-1LN-VMNSXALBICM

VMware NSX Advanced Load Balancer Troubleshooting and Operations - Virtual Class

This three-day course provides comprehensive training on how to configure, maintain, and troubleshoot the Web Application Firewall component of the VMware NSX Advanced Load Balancer (Avi Networks) solution as well as provide an understanding of additional security related functionality. This course covers key NSX Advanced Load Balancer (Avi Networks) Web Application Firewall features and functionality offered in the NSX Advanced Load Balancer 18.2 release, including the overall infrastructure, virtual services and application components as well as service troubleshooting and solution monitoring. Access to a software-defined datacenter environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

Virtual Class 24 Hours
MR-1LN-VMNSXALBTO

VMware NSX Advanced Load Balancer Web Application Firewall Security

This three-day course provides comprehensive training on how to configure, maintain, and troubleshoot the Web Application Firewall component of the VMware NSX Advanced Load Balancer (Avi Networks) solution as well as provide an understanding of additional security related functionality. This course covers key NSX Advanced Load Balancer (Avi Networks) Web Application Firewall features and functionality offered in the NSX Advanced Load Balancer 18.2 release, including the overall infrastructure, virtual services and application components as well as service troubleshooting and solution monitoring. Access to a software-defined datacenter environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

Virtual Class 24 Hours
MR-1LN-VMNSXALBWAFS

VMware NSX SD-WAN by VeloCloud Deploy and Manage - Online ILT

During this one-day course, you gain an understanding of the architecture and features of VMware SD-WAN by VeloCloudTM. This course provides extensive hands-on labs in which you enable core SD-WAN features, such as ensuring application performance using business policies, traffic redirections, and network service insertion.

Virtual Class 08 Hours
MR-1LN-VMNSXVCDM

VMware NSX-T Data Center for Intrinsic Security [V3.1] - Virtual Class

This five-day, hands-on training course provides you with the knowledge, skills, and tools to achieve competency in configuring, operating, and troubleshooting VMware NSX-T™ Data Center for intrinsic security. In this course, you are introduced to all the security features in NSX-T Data Center, including distributed and gateway firewall, Intrusion Detection and Prevention (IDS/IPS), VMware NSX® Intelligence™, and Network Detection and Response (NDR). In addition, you are presented with common configuration issues and given a methodology to resolve them.

Virtual Class 40 Hours
MR-1LN-VMNSXSTIS31

VMware NSX-T Data Center for Intrinsic Security [V3.1]

This five-day, hands-on training course provides you with the knowledge, skills, and tools to achieve competency in configuring, operating, and troubleshooting VMware NSX-T™ Data Center for intrinsic security. In this course, you are introduced to all the security features in NSX-T Data Center, including distributed and gateway firewall, Intrusion Detection and Prevention (IDS/IPS), VMware NSX® Intelligence™, and Network Detection and Response (NDR). In addition, you are presented with common configuration issues and given a methodology to resolve them.

Virtual Class 40 Hours
MR-1LN-VMNSXSTIS31

VMware NSX-T Data Center: Design [V3.0]

This five-day course provides comprehensive training on considerations and practices to design a VMware NSX-T™ Data Center environment as part of a software-defined data center strategy. This course prepares the student with the skills to lead the design of NSX-T Data Center offered in the NSX-T Data Center 3.0 release, including design principles, processes, and frameworks. The student gains a deeper understanding of NSX-T Data Center architecture and how it can be leveraged to create solutions to address the customer’s business needs.

Virtual Class 40 Hours
MR-1CN-VMNSXTD3

VMware NSX-T Data Center: Design [V3.0] - Virtual Class

This five-day course provides comprehensive training on considerations and practices to design a VMware NSX-T™ Data Center environment as part of a software-defined data center strategy. This course prepares the student with the skills to lead the design of NSX-T Data Center offered in the NSX-T Data Center 3.0 release, including design principles, processes, and frameworks. The student gains a deeper understanding of NSX-T Data Center architecture and how it can be leveraged to create solutions to address the customer’s business needs.

Virtual Class 40 Hours
MR-1LN-VMNSXTD3

Virtual Class 24 Hours
MR-1LN-VMNSXALBWAFS

VMware NSX-T Data Center: Install, Configure, Manage [V2.4]
This five-day, fast-paced course provides comprehensive training on how to install, configure, and manage a VMware NSX-T™ Data Center environment. This course covers key NSX-T Data Center features and functionality offered in the NSX-T Data Center 2.4 release, including the overall infrastructure, logical segments, logical routers, networking and security services, micro-segmentation and firewalls, and so on. Access to a software-defined data center environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Duration</th>
<th>Code</th>
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<tbody>
<tr>
<td>VMware NSX-T Data Center: Install, Configure, Manage V3.0 - Virtual Class</td>
<td>40 Hours</td>
<td>MR-1CN-VMNNSXTICM3</td>
</tr>
<tr>
<td>VMware NSX-T Data Center: Install, Configure, Manage V3.0 - Classroom</td>
<td>40 Hours</td>
<td>MR-1CN-VMNNSXTICM3</td>
</tr>
<tr>
<td>VMware NSX-T Data Center: Troubleshooting and Operations V2.4 - Classroom</td>
<td>40 Hours</td>
<td>MR-1CN-VMNMSDNSXF</td>
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<tr>
<td>VMware NSX-T Data Center: Troubleshooting and Operations V2.4 - Virtual Class</td>
<td>40 Hours</td>
<td>MR-1CN-VMNMSDNSXF</td>
</tr>
<tr>
<td>VMware NSX-T Data Center: Migration from NSX Data Center for vSphere</td>
<td>24 Hours</td>
<td>MR-1CN-VMNNSXTVS</td>
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<tr>
<td>VMware NSX-T Data Center: Migration from NSX Data Center for vSphere - Virtual Class</td>
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<td>MR-1CN-VMNNSXTVS</td>
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<tr>
<td>VMware NSX-T Data Center: Multisite Deployments with Federation</td>
<td>24 Hours</td>
<td>MR-1CN-VMNMSDNSXF</td>
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<tr>
<td>VMware NSX-T Data Center: Multisite Deployments with Federation - Virtual Class</td>
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<td>MR-1CN-VMNMSDNSXF</td>
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<td>24 Hours</td>
<td>MR-1CN-VMNMSDNSXF</td>
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<tr>
<td>VMware NSX-T Data Center: Troubleshooting and Operations V2.4 - Online ILT</td>
<td>40 Hours</td>
<td>MR-1CN-VMNNSXTTO24</td>
</tr>
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</table>

VMware NSX-T Data Center: Migration from NSX Data Center for vSphere
This three-day, hands-on training course provides you with the skills, techniques, and tools required to successfully migrate your current VMware NSX® Data Center for vSphere environment to VMware NSX-T™ Data Center. In this course, you learn to choose between different migration approaches and to perform the type of migration that best suits your current environment. In addition, you are presented with common migration problems and resolutions.

VMware NSX-T Data Center: Migration from NSX Data Center for vSphere - Virtual Class
This three-day, hands-on training course provides you with the skills, techniques, and tools required to successfully migrate your current VMware NSX® Data Center for vSphere environment to VMware NSX-T™ Data Center. In this course, you learn to choose between different migration approaches and to perform the type of migration that best suits your current environment. In addition, you are presented with common migration problems and resolutions.
This five-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competency in operating and troubleshooting the VMware NSX-T Data Center environment. In this course, you are introduced to workflows of various networking and security constructs along with several operational and troubleshooting tools that help managing and troubleshooting your NSX-T Data Center. In addition, you are presented with various types of technical problems, which you will identify, analyze, and solve through a systematic process.

Virtual Class 40 Hours MR-1LN-VMNSXTT024

VMware NSX-T Data Center: Troubleshooting and Operations [V3.0]

This five-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competency in operating and troubleshooting the VMware NSX-T Data Center environment. In this course, you are introduced to workflows of various networking and security constructs along with several operational and troubleshooting tools that help managing and troubleshooting your NSX-T Data Center. In addition, you are presented with various types of technical problems, which you will identify, analyze, and solve through a systematic process.

Classroom 40 Hours MR-1CN-VMNSXSX03.0

VMware NSX-T Data Center: Troubleshooting and Operations [V3.0] - Online ILT

This five-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competency in operating and troubleshooting the VMware NSX-T Data Center environment. In this course, you are introduced to workflows of various networking and security constructs along with several operational and troubleshooting tools that help managing and troubleshooting your NSX-T Data Center. In addition, you are presented with various types of technical problems, which you will identify, analyze, and solve through a systematic process.

Virtual Class 40 Hours MR-1LN-VMNSXTT03.0

VMware NSX-T Data Center: What's New [V3.2]

In this three-day, hands-on training course, you explore the new features and enhancements in VMware NSX-T™ DataCenter 3.2. You will be introduced to all new security features in NSXT-T Data Center 3.2, including the NSX ApplicationPlatform, NSX Malware Prevention, NSX Intrusion Detection and Prevention, URL Filtering, VMware NSX® Intelligence™, and VMware NSX® Network Detection and Response™. This course also discusses the architectural and operational changes introduced in 3.2 and discusses the enhancements to OSPF, VMware NSX® Advanced Load Balancer™, and NSX Federation.

Classroom 24 Hours MR-1CN-VMNSXTWN32

VMware NSX-T Data Center: What's New [V3.2] - Virtual Class

In this three-day, hands-on training course, you explore the new features and enhancements in VMware NSX-T™ DataCenter 3.2. You will be introduced to all new security features in NSXT-T Data Center 3.2, including the NSX ApplicationPlatform, NSX Malware Prevention, NSX Intrusion Detection and Prevention, URL Filtering, VMware NSX® Intelligence™, and VMware NSX® Network Detection and Response™. This course also discusses the architectural and operational changes introduced in 3.2 and discusses the enhancements to OSPF, VMware NSX® Advanced Load Balancer™, and NSX Federation.

Virtual Class 24 Hours MR-1LN-VMNSXTWN32

VMware NSX: Install Configure Manage [V6.4]

This five-day, comprehensive, fast-paced training course presents VMware NSX as a part of the software-defined data center. You will learn how to use logical switching in VMware NSX to virtualize your switching environment. The course also details logical routing to enable you to dynamically route between different virtual environments. You will also learn how to use gateway services, firewall configurations, and security services to help secure and optimize your VMware NSX environment. Access to a software-defined data center environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

Virtual Class 40 Hours MR-1CN-VMWNSXICMV64

VMware NSX: Install Configure Manage [V6.4] - Online ILT

This five-day, comprehensive, fast-paced training course presents VMware NSX as a part of the software-defined data center. You will learn how to use logical switching in VMware NSX to virtualize your switching environment. The course also details logical routing to enable you to dynamically route between different virtual environments. You will also learn how to use gateway services, firewall configurations, and security services to help secure and optimize your VMware NSX environment. Access to a software-defined data center environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

Classroom 40 Hours MR-1CN-VMWNSXICMV64

VMware NSX: Troubleshooting and Operations [V6.4] - Online ILT

This five-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competency in operating and troubleshooting the VMware NSX 6.4 environment. In this course, you will be introduced to several operational, management, and troubleshooting tools. You will be presented with various types of technical problems, which you will identify, analyze, and solve through a systematic process.

Virtual Class 40 Hours MR-1LN-VMWNSXTSOV64

VMware SD-WAN by VeloCloud: Deploy and Manage

During this one-day course, you gain an understanding of the architecture and features of VMware SDWAN by VeloCloudTM. This course provides extensive hands-on labs in which you enable core SD-WAN features, such as ensuring application performance using business policies, traffic redirections, and network service insertion.

Classroom 08 Hours MR-1CN-VMSDWANDM

VMware SD-WAN by VeloCloud: Deploy and Manage - Virtual Class

During this one-day course, you gain an understanding of the architecture and features of VMware SDWAN by VeloCloudTM. This course provides extensive hands-on labs in which you enable core SD-WAN features, such as ensuring application performance using business policies, traffic redirections, and network service insertion.

Virtual Class 08 Hours MR-1LN-VMSDWANDM

VMware SD-WAN by VeloCloud: Design and Deploy [3.x]
Customers demand a scalable, secure, and manageable VMware SD-WAN™ by VeloCloud®. To deliver a successful solution you must understand VMware SD-WAN architecture, know how the features can solve customer use cases, and be able to design a VMware SD-WAN that can be easily deployed, managed, and expanded.

Virtual Class 24 Hours  MR-1CN-VMXNSXVCD3

VMware SD-WAN by VeloCloud: Design and Deploy [3.x] - Virtual Class

Customers demand a scalable, secure, and manageable VMware SD-WAN™ by VeloCloud®. To deliver a successful solution you must understand VMware SD-WAN architecture, know how the features can solve customer use cases, and be able to design a VMware SD-WAN that can be easily deployed, managed, and expanded.

Virtual Class 24 Hours  MR-1CN-VMXNSXVCD3

VMware Site Recovery Manager: Install Configure Manage [V8.2] - Online ILT

This two-day, hands-on training course gives experienced VMware vSphere administrators the knowledge to install, configure, and manage VMware Site Recovery Manager 8.2. This course also shows you how to write and test disaster recovery plans that use Site Recovery Manager.

Virtual Class 16 Hours  MR-1LN-VMNSRMICM82

VMware Spring Boot: Developer - Virtual Class

This 2-day course offers experience with Spring Boot and its major features, including auto-configuration, Actuator, Spring Boot testing framework, and more. On completion, participants will have a foundation for creating enterprise and cloud-ready applications. Please note that this course is a subset of the material in our 4-day Spring: Core Training course - there is no need to take both courses. This course is recommended if you have a good working knowledge of Spring Basics (see Prerequisites) but are new to Spring Boot.

Virtual Class 16 Hours  MR-1LN-VMNSBD

VMware Spring Security

This 2-day course offers hands-on experience with the major features of Spring Security, which includes configuration, authentication, authorization, password handling, testing, protecting against security threats, and the OAuth2 support to secure applications. On completion, participants will have a foundation for securing enterprise and microservices applications.

Classroom 16 Hours  MR-1CN-VMSS

VMware Spring Security - Virtual Class

This 2-day course offers hands-on experience with the major features of Spring Security, which includes configuration, authentication, authorization, password handling, testing, protecting against security threats, and the OAuth2 support to secure applications. On completion, participants will have a foundation for securing enterprise and microservices applications.

Virtual Class 16 Hours  MR-1LN-VMSS

VMware Spring: Core Training - Virtual Class

This 4-day course offers hands-on experience with the major features of Spring and Spring Boot, which includes configuration, data access, REST, AOP, auto-configuration, actuator, security, and Spring testing framework to build enterprise and microservices applications. On completion, participants will have a foundation for creating enterprise and cloud-ready applications. This course prepares students for the Spring Professional certification exam.

Virtual Class 32 Hours  MR-1LN-VMSCT

VMware Tanzu Kubernetes Grid Integrated Edition: Install, Configure, Manage [V1.10]

This four-day, hands-on training course provides you with the knowledge, skills, and tools to install, configure, and manage VMware Tanzu™ Kubernetes Grid™ Integrated Edition (formerly known as VMware Enterprise PKS). In this course, you are introduced to the workflows of Tanzu Kubernetes Grid Integrated Edition to manage Kubernetes clusters using BOSH, and the integration of Tanzu Kubernetes Grid Integrated Edition with other VMware products. In addition, you are presented with various types of technical problems, which you will identify, analyze, and solve through a systematic process.

Virtual Class 32 Hours  MR-1CN-VMTKGIEICM110

VMware Tanzu Kubernetes Grid Integrated Edition: Install, Configure, Manage [V1.10] - Virtual Class

This four-day, hands-on training course provides you with the knowledge, skills, and tools to install, configure, and manage VMware Tanzu™ Kubernetes Grid™ Integrated Edition (formerly known as VMware Enterprise PKS). In this course, you are introduced to the workflows of Tanzu Kubernetes Grid Integrated Edition to manage Kubernetes clusters using BOSH, and the integration of Tanzu Kubernetes Grid Integrated Edition with other VMware products. In addition, you are presented with various types of technical problems, which you will identify, analyze, and solve through a systematic process.

Virtual Class 32 Hours  MR-1LN-VMTKGIEICM110

VMware Tanzu Kubernetes Grid: Install, Configure, Manage [V1.3]

During this three-day course, you focus on installing VMware TanzuTM Kubernetes GridTM on a VMware vSphere® environment and then provisioning and managing Tanzu Kubernetes clusters. The concepts learned in this course should be transferable for users who need to install Tanzu Kubernetes Grid on other supported clouds.

Classroom 24 Hours  MR-1CN-VMTKGICM13

VMware Tanzu Kubernetes Grid: Install, Configure, Manage [V1.3] - Virtual Class

During this three-day course, you focus on installing VMware TanzuTM Kubernetes GridTM on a VMware vSphere® environment and then provisioning and managing Tanzu Kubernetes clusters. The concepts learned in this course should be transferable for users who need to install Tanzu Kubernetes Grid on other supported clouds.

Virtual Class 24 Hours  MR-1LN-VMTKGICM13

VMware Tanzu Mission Control: Management and Operations 2020

During this one-day course, you focus on using VMware TanzuTM Mission ControlTM to provision and manage Kubernetes clusters. The course covers how to manage on-premise and cloud-based Kubernetes clusters and how to apply access, image registry, and network policies to clusters.

Classroom 08 Hours  MR-1CN-VMTMCMO2020

VMware Tanzu Mission Control: Management and Operations 2020 - Virtual Class

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 49
During this one-day course, you focus on using VMware Tanzu Mission ControlTM to provision and manage Kubernetes clusters. The course covers how to manage on-premise and cloud-based Kubernetes clusters and how to access, image registry, network, security, quota, and custom policies to Kubernetes environments. For cluster provisioning and management, the course focuses on deploying, upgrading, backing up, and monitoring Kubernetes clusters on VMware vSphere® with Tanzu. Given the abstractions of VMware Tanzu Mission Control, the learnings should be transferrable to public cloud.

VMware Tanzu Mission Control: Management and Operations [2022] - Virtual Class
During this two-day course, you focus on using VMware Tanzu Mission ControlTM to provision and manage Kubernetes clusters. The course covers how to apply access, image registry, network, security, quota, and custom policies to Kubernetes environments. For cluster provisioning and management, the course focuses on deploying, upgrading, backing up, and monitoring Kubernetes clusters on VMware vSphere® with Tanzu. Given the abstractions of VMware Tanzu Mission Control, the learnings should be transferrable to public cloud.

VMware vCloud Director: Install, Configure, Manage [V9.7] - Online ILT
In this five-day course, you focus on installing, configuring, and managing VMware vCloud Director for Service Providers 9.x. You learn about self-service provisioning, the creation of organizations, virtual datacenters (VDCs), catalog services that include predefined virtual machines, and on-demand VMware NSX networks. This course also covers interfacing VMware vCloud Director with other systems using various APIs and the integration and use of VMware vCloud® Availability for vCloud Director®. You will also understand how to manage multi-site, cross-VDC networking for vCloud Director. You also learn how to use Central Point of Management (CPOM) to define a Software-defined Datacenter (SDDC) for tenant and provider users of vCloud Director. This course also covers how to monitor various vCloud Director objects using VMware vRealize® Operations Manager™.

VMware vCloud NFV with vCloud Director [V9.7] - Virtual Class
This five-day, hands-on training course discusses Network Functions Virtualization (NFV), a network architecture concept that specifies how virtualization technologies can be used to virtualize network service functions. This course covers interfacing VMware vCloud Director® with other systems using various APIs and the integration and use of VMware vCloud® Availability for vCloud Director®. You will understand how to manage multisite, cross-VDC (Virtual Data Center) networking for vCloud Director or. You will also understand how to configure Central Point of Management (CPOM) to define a software-defined datacenter (SDDC) for tenant and provider users of vCloud Director. This course also discusses how to monitor various vCloud Director objects using VMware vRealize® Operations Manager™.

VMware vRealize Automation SaltStack Config: Deploy & Manage [V8.4]
This three-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competency in deploying and using VMware vRealize® Automation SaltStack® Config. SaltStack Config is a powerful software configuration management component available in VMware vRealize® Automation. With SaltStack Config you can easily define optimized, secure software states and enforce them across your entire environment, including virtualized, hybrid, or public cloud systems. In this course, you are introduced to configuration management and how SaltStack Config can install software, maintain systems configurations, change systems immediately with scalable remote execution, and automatically correct configuration problems in deployed virtual applications.

Virtual Class 24 Hours MR-1CN-VMRASSCDM84

VMware vRealize Automation SaltStack Config: Deploy & Manage [V8.4] - Virtual Class
This three-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competency in deploying and using VMware vRealize® Automation SaltStack® Config. SaltStack Config is a powerful software configuration management component available in VMware vRealize® Automation. With SaltStack Config you can easily define optimized, secure software states and enforce them across your entire environment, including virtualized, hybrid, or public cloud systems. In this course, you are introduced to configuration management and how SaltStack Config can install software, maintain systems configurations, change systems immediately with scalable remote execution, and automatically correct configuration problems in deployed virtual applications.

Virtual Class 24 Hours MR-1LN-VMRASSCDM84

VMware vRealize Automation: Advanced Features and Troubleshooting [V8.1] - Virtual
This five-day course is a follow-on to the VMware vRealize® Automation™ Install, Configure, Manage course. In this course you go deeper into the advanced features of vRealize Automation to deploy user systems and interface vRealize Automation with other platforms and you learn how to deploy an enterprise-level cluster environment using LCM. This course relies heavily on hands-on labs.

Virtual Class 40 Hours MR-1LN-VMRRAAFF8

VMware vRealize Automation: Design and Deploy [V7.6]
This five-day course focuses on designing and deploying an enterprise cloud by using a distributed architecture deployment of VMware vRealize® Automation™. This course discusses the benefits and risks of available design alternatives and provides information that helps in making sound design decisions. You follow a proven approach to design and deploy an enterprise cloud that is available, scalable, manageable, secure, and that is built according to VMware best practices. During this class, you apply your new knowledge by working with other participants to design and deploy a vRealize Automation solution for area-world project.

Virtual Class 40 Hours MR-1CN-VMRADD76

VMware vRealize Automation: Design and Deploy [V7.6] - Virtual Class
This five-day course focuses on designing and deploying an enterprise cloud by using a distributed architecture deployment of VMware vRealize® Automation™. This course discusses the benefits and risks of available design alternatives and provides information that helps in making sound design decisions. You follow a proven approach to design and deploy an enterprise cloud that is available, scalable, manageable, secure, and that is built according to VMware best practices. During this class, you apply your new knowledge by working with other participants to design and deploy a vRealize Automation solution for area-world project.

Virtual Class 40 Hours MR-1LN-VMRADD76

VMware vRealize Automation: Install, Configure, Manage [V7.6] - Virtual Classroom
During this five-day course, you focus on installing, configuring, and managing VMware vRealize Automation. You learn about the configuration and use of the vRealize Automation platform, including self-service provisioning and the creation of catalog services that include predefined virtual machines, software components, and on-demand VMware NSX networks. This course also covers interfacing vRealize Automation with other systems using VMware vRealize Orchestrator to leverage SaltStack as a configuration management tool. You will also learn how to use vRealize Automation to manage Kubernetes systems and leverage other systems. The course also covers integrating with Terraform and using SaltStack as a configuration management tool. This course makes heavy use of hands-on labs. Students can run 39 labs during the 5-day course.

Virtual Class 40 Hours MR-1LN-VMRAICM83

VMware vRealize Automation: Orchestration and Extensibility [V7.6] - Virtual Classroom
During this five-day course, you focus on using VMware vRealize® Orchestrator™ to extend the functionality of VMware vRealize Automation™. You learn how to provide XaaS (Anything as a Service) and implement Machine Lifecycle Extensibility using the vRealize Automation Event Broker. You also learn how to create vRealize Orchestrator workflows. Features include basic scripting implementation along with logic processing to implement a variety of functions to use in your environment. This course teaches implementing debugging, loops, conditions, and user interactions in vRealize Orchestrator. The course introduces the new vRealize Orchestrator HTML 5 interface, along with API calls and REST functions, to give the groundwork to implement a variety of plugins and scripts. This course was designed to give you the tools to craft custom solutions in the product.

Virtual Class 40 Hours MR-1LN-VMRAOEV76

VMware vRealize Automation: Orchestration and Extensibility [V8.1]
During this five-day course, you focus on using VMware vRealize® Orchestrator™ to extend the functionality of VMware vRealize Automation™. You learn how to provide XaaS (Anything as a Service) and implement Machine Lifecycle Extensibility using the VMware vRealize® Automation™ Event Broker. You also learn how to create vRealize Orchestrator workflows. Features covered in the course include basic scripting implementation along with logic processing to implement a variety of functions to use in your environment. This course teaches implementing debugging, loops, conditions, and user interactions in vRealize Orchestrator. The course introduces the new vRealize Orchestrator HTML 5 interface, along with API calls and REST functions, to give the groundwork to implement a variety of plugins and scripts. This course is designed to give you the tools to craft custom solutions in the product.
VMware vRealize Automation: Orchestration and Extensibility [V8.1] - Virtual Class
During this five-day course, you focus on using VMware vRealize® Orchestrator™ to extend the functionality of VMware vRealize® Automation™. You learn how to provide XaaS (Anything as a Service) and implement Machine Lifecycle Extensibility using the VMware vRealize® Automation™ Event Broker. You also learn how to create vRealize Orchestrator workflows. Features covered in the course include basic scripting implementation along with logic processing to implement a variety of functions to use in your environment. The course teaches implementing debugging, loops, conditions, and user interactions in vRealize Orchestrator. The course introduces the new vRealize Orchestrator HTML 5 interface, along with API calls and REST functions, to give the groundwork to implement a variety of plugins and scripts. This course is designed to give you the tools to craft custom solutions in the product.

Virtual Class | 40 Hours | MR-1CN-VMVRAOE81

VMware vRealize Log Insight: Deploy and Manage [V4.7] - Online ILT
In this two-day course, you focus on deploying, using, and managing VMware vRealize Log Insight. You learn about the configuration and use of vRealize Log Insight to collect and manage logs from a variety of VMware and third-party products. This course discusses interfacing vRealize Log Insight with other systems to monitor, troubleshoot, and secure a data center.

Virtual Class | 16 Hours | MR-1LN-VMVRLIDM47

VMware vRealize Log Insight: Deploy and Manage [V8.4] - Virtual Class
This two-day course focuses on deploying, using and managing VMware vRealize® Log Insight™ product. It provides you with the knowledge and skills to deploy a vRealize Log Insight cluster that meets the monitoring requirements of your environment. You learn about the configuration and use of vRealize Log Insight to collect and manage logs from a variety of VMware and third-party products. This course discusses interfacing vRealize Log Insight with other systems to monitor, troubleshoot, and secure a data center.

Virtual Class | 16 Hours | MR-1CN-VMVRLIDM84

VMware vRealize Log Insight: Deploy and Manage [V8.4] - Virtual Class
This two-day course focuses on deploying, using and managing VMware vRealize® Log Insight™ product. It provides you with the knowledge and skills to deploy a vRealize Log Insight cluster that meets the monitoring requirements of your environment. You learn about the configuration and use of vRealize Log Insight to collect and manage logs from a variety of VMware and third-party products. This course discusses interfacing vRealize Log Insight with other systems to monitor, troubleshoot, and secure a data center.

Virtual Class | 16 Hours | MR-1LN-VMVRLIDM84

VMware vRealize Network Insight: Install, Configure, Manage [V6.0] - Virtual Class
This two-day, hands-on course gives you the skills to deploy and use VMware vRealize® Network Insight™ to ensure an optimized, highly available, and secure infrastructure for your applications. You will learn the features, components, architecture, and benefits of vRealize Network Insight and how to use it to simplify daily operation and troubleshooting tasks.

Virtual Class | 16 Hours | MR-1LN-VMVRNIICM6

VMware vRealize Network Insight: Install, Configure, Manage [V6.1] - Virtual Class
This two-day, hands-on course gives you the skills to deploy and use VMware vRealize® Network Insight™ to ensure an optimized, highly available, and secure infrastructure for your applications. You will learn the features, components, architecture, and benefits of vRealize Network Insight and how to use it to simplify daily operation and troubleshooting tasks.

Virtual Class | 16 Hours | MR-1CN-VMVRNIICM61

VMware vRealize Network Insight: Deploy and Manage [V8.1] - Virtual Class
This two-day course focuses on deploying, using and managing VMware vRealize® Network Insight™ product. It provides you with the knowledge and skills to deploy a vRealize Network Insight cluster to collect and manage logs from a variety of vRealize Network Insight and how to use it to simplify daily operation and troubleshooting tasks.

Virtual Class | 16 Hours | MR-1LN-VMVRNIICM61

VMware vRealize Operations for Administrators [V7.0] - Online ILT
This two-day course is designed for data center administrators who are responsible for the day-to-day management of a VMware vSphere environment using VMware vRealize Operations. This course will teach you how to use vRealize Operations as a forensic and predictive tool. The course is based on VMware ESXi 6.7, VMware vCenter Server 6.7, and vRealize Operations 7.0. Note: If you have taken the VMware vRealize Operations: Install, Configure, Manage course, duplicate content makes this course unsuitable for you.

Virtual Class | 16 Hours | MR-1LN-VMVROAV7.0

VMware vRealize Operations for Operators [V8.2] - Virtual Class
This two-day course focuses on deploying, using and managing VMware vRealize® Operations product. It provides you with the knowledge and skills to deploy a vRealize Operations cluster that meets the monitoring requirements of your environment. You learn about the configuration and use of vRealize Operations to collect and manage logs from a variety of VMware and third-party products. This course discusses interfacing vRealize Operations with other systems to monitor, troubleshoot, and secure a data center.

Virtual Class | 16 Hours | MR-1CN-VMVROOPSOP82

VMware vRealize Operations for Operators [V8.2] - Virtual Class
This two-day course focuses on deploying, using and managing VMware vRealize® Operations product. It provides you with the knowledge and skills to deploy a vRealize Operations cluster that meets the monitoring requirements of your environment. You learn about the configuration and use of vRealize Operations to collect and manage logs from a variety of VMware and third-party products. This course discusses interfacing vRealize Operations with other systems to monitor, troubleshoot, and secure a data center.

Virtual Class | 16 Hours | MR-1LN-VMVROOPSOP82

VMware vRealize Operations: Advanced Use Cases [V8.x] - Virtual Class
This two-day, hands-on course gives you the skills to deploy and use VMware vRealize® Operations to ensure an optimized, highly available, and secure infrastructure for your applications. You will learn the features, components, architecture, and benefits of vRealize Operations and how to use it to simplify daily operation and troubleshooting tasks.

Virtual Class | 16 Hours | MR-1LN-VMVROAUVC8

VMware vRealize Operations: Day 2 Operations with Cloud [V8.2]
This four-day course is for users of both VMware vRealize® Operations™ on-prem and cloud versions. The course includes how to use advanced capabilities like customizing alerts, views, reports, and dashboards, and it explains the architecture in vRealize Operations. This course explains certificates, capacity concepts, and workload optimization with real-world use cases. This course covers troubleshooting using dashboards and how to manage compliance and configurations. This course also covers several management packs and introduces VMware vRealize® Operations Cloud™. In general, this course explains how to use and configure most of the new features and enhancements in version 8.1 and 8.2.

### VMware vRealize Operations: Day 2 Operations with Cloud [V8.2] - Virtual Class

This four-day course is for users of both VMware vRealize® Operations™ on-prem and cloud versions. The course includes how to use advanced capabilities like customizing alerts, views, reports, and dashboards, and it explains the architecture in vRealize Operations. This course explains certificates, capacity concepts, and workload optimization with real-world use cases. This course covers troubleshooting using dashboards and how to manage compliance and configurations. This course also covers several management packs and introduces VMware vRealize® Operations Cloud™. In general, this course explains how to use and configure most of the new features and enhancements in version 8.1 and 8.2.

### VMware vRealize Operations: Install, Configure, Manage [V7] - Online ILT

This five-day course, designed for experienced VMware vSphere users, teaches you how to use VMware vRealize Operations as a forensic and predictive tool. Based on VMware ESXi 6.7, VMware vCenter Server 6.7, and vRealize Operations 7.0, this course includes instruction on advanced capabilities, including customization and management.

### VMware vRealize Operations: Install, Configure, Manage [V8.2]

This five-day course is for users of both cloud and on-premises versions of the VMware vRealize® Operations™ product. It provides you with the knowledge and skills to deploy a vRealize Operations cluster that meets the monitoring requirements of your environment. This course includes advanced capabilities like customizing alerts, views, reports, and dashboards and explains the architecture in vRealize Operations. This course explains certificates, capacity and cost concepts, and workload optimization with real-world use cases. This course covers troubleshooting using dashboards and how to manage compliance and configurations. This course also covers several management packs and introduces VMware vRealize® Operations Cloud™. In general, this course explains how to use and configure most of the new features and enhancements in version 8.1 and 8.2.

### VMware vRealize Operations: Install, Configure, Manage [V8] - Virtual Classroom

This five-day course includes instruction on advanced capabilities, including customization and management, and explains the architecture of VMware vRealize® and different ways of deploying vRealize operations. This course explains certificates, capacity concepts, and workload optimization with real-world use cases. This course covers troubleshooting using dashboards and how-to managing configurations. This course also covers management packs such as those for or in the SDDC Management Health solution, VMware vRealize® Service Discovery™ Management Pack, and VMware vRealize® Orchestrator™. In general, this course explains how to use and configure most of the new features and enhancements in version 8.0.

### VMware vRealize Suite Lifecycle Manager: Install Configure Manage [V8.0] - Virtual Class

This two-day course features hands-on training that focuses on installing, configuring, and managing VMware vRealize® Suite Lifecycle Manager™, which includes products such as VMware vRealize® Operations™, VMware vRealize® Log Insight™, and VMware vRealize® Automation™. This course prepares you to administer a vRealize infrastructure for an organization.

### VMware vSAN: Deploy and Manage [V6.7]

In this three-day course, you focus on deploying and managing a software-defined storage solution with VMware vSAN™ 6.7. You learn how vSAN functions as an important component in the VMware software-defined data center. You gain practical experience with vSAN concepts through the completion of hands-on lab exercises.

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To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 53

Dell Technologies Education Services Course Catalog
In this three-day course, you focus on deploying and managing a software-defined storage solution with VMware vSAN 6.7. You learn how vSAN functions as an important component in the VMware software-defined data center. You gain practical experience with vSAN concepts through the completion of hands-on lab exercises.

### VMware vSAN: Deploy and Manage 6.7 - Online ILT

In this three-day course, you focus on deploying and managing a software-defined storage solution with VMware vSAN 6.7. You learn how vSAN functions as an important component in the VMware software-defined data center. You gain practical experience with vSAN concepts through the completion of hands-on lab exercises.

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### Virtual Class

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### VMware vSAN: Fast Track [V7]

During this five-day, intensive course, you gain the knowledge, skills, and tools to plan and deploy a VMware vSAN™ cluster. You learn about managing and operating vSAN. This course focuses on building the required skills for common Day-2 vSAN administrator tasks such as vSAN node management, cluster maintenance, security operations, and advanced vSAN cluster operations. You also focus on learning the tools and skills necessary to troubleshoot vSAN implementations and gain practical experience with vSAN troubleshooting concepts through the completion of hands-on lab exercises. This course is a combination of the following courses: VMware vSAN: Plan and Deploy, VMware vSAN: Management and Operations, and VMware vSAN: Troubleshooting.

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### VMware vSAN: Fast Track [V7] - Virtual Class

During this five-day, intensive course, you gain the knowledge, skills, and tools to plan and deploy a VMware vSAN™ cluster. You learn about managing and operating vSAN. This course focuses on building the required skills for common Day-2 vSAN administrator tasks such as vSAN node management, cluster maintenance, security operations, and advanced vSAN cluster operations. You also focus on learning the tools and skills necessary to troubleshoot vSAN implementations and gain practical experience with vSAN troubleshooting concepts through the completion of hands-on lab exercises. This course is a combination of the following courses: VMware vSAN: Plan and Deploy, VMware vSAN: Management and Operations, and VMware vSAN: Troubleshooting.

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### VMware vSAN: Management and Operations [V7]

In this three-day course, you learn about managing and operating VMware vSAN™ 7. This course focuses on building the required skills for common Day-2 vSAN administrator tasks such as vSAN node management, cluster maintenance, security operations, and advanced vSAN cluster operations. You also gain practical experience through the completion of hands-on lab exercises.

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### VMware vSAN: Management and Operations [V7] - Virtual

In this three-day course, you learn about managing and operating VMware vSAN™ 7. This course focuses on building the required skills for common Day-2 vSAN administrator tasks such as vSAN node management, cluster maintenance, security operations, and advanced vSAN cluster operations. You also gain practical experience through the completion of hands-on lab exercises.

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### VMware vSAN: Plan and Deploy [V7]

This two-day, hands-on training course provides you with the knowledge, skills, and tools to plan and deploy a VMware vSAN™ cluster. In this course, you are taught the many considerations that the end vSAN configuration has on the initial planning of the vSAN datastore. You also perform a fully manual configuration of a vSAN cluster.

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### VMware vSAN: Plan and Deploy [V7] - Virtual Class

This two-day, hands-on training course provides you with the knowledge, skills, and tools to plan and deploy a VMware vSAN™ cluster. In this course, you are taught the many considerations that the end vSAN configuration has on the initial planning of the vSAN datastore. You also perform a fully manual configuration of a vSAN cluster.

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### VMware vSAN: Production Operations [V6.7]

In this two-day course, you focus on building skills in configuring and performing common Day 2 administrator and end-user tasks with VMware vSAN 6.7. You gain practical experience with vSAN production operations through the completion of instructor-led activities and hands-on lab exercises.

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### VMware vSAN: Production Operations [V6.7] - Online ILT

In this two-day course, you focus on building skills in configuring and performing common Day 2 administrator and end-user tasks with VMware vSAN 6.7. You gain practical experience with vSAN production operations through the completion of instructor-led activities and hands-on lab exercises.

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### VMware vSAN: Troubleshooting [V7]

In this two-day course, you focus on learning the tools and skills necessary to troubleshoot VMware vSAN™ implementations. You gain practical experience with vSAN troubleshooting concepts through the completion of instructor-led activities and hands-on lab exercises.

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### VMware vSAN: Troubleshooting [V7] - Virtual Class

In this two-day course, you focus on learning the tools and skills necessary to troubleshoot VMware vSAN™ implementations. You gain practical experience with vSAN troubleshooting concepts through the completion of instructor-led activities and hands-on lab exercises.

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### VMware vSphere Advanced Troubleshooting Workshop [V6.7] - Online ILT

In this two-day course, you focus on learning the tools and skills necessary to troubleshoot VMware vSAN™ implementations. You gain practical experience with vSAN troubleshooting concepts through the completion of instructor-led activities and hands-on lab exercises.

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This five-day, intensive hands-on training workshop provides you with advanced knowledge, skills, and abilities to achieve competence in troubleshooting the VMware vSphere 6.7 environment. This workshop is aimed at experienced system administrators and introduces methods and skills that use management command-line interfaces (CLIs) and VMware vSphere ClientTM. This workshop focuses on investigating and resolving problems, analyzing log files to help you recognize log file entries that identify root causes, and configuring specific key vSphere features.

Virtual Class
40 Hours
MR-1LN-VM/ATSWS67

VMware vSphere on Kubernetes: Deploy and Manage [V7]

During this 3-day course, you focus on deploying and managing VMware vSphere® with Kubernetes. You learn about how vSphere with Kubernetes can be used to orchestrate the delivery of Kubernetes clusters and containerized applications in a vSphere environment.

Classroom
24 Hours
MR-1LN-VM/VSKDM7

Virtual Class
24 Hours
MR-1LN-VM/VSKDM7

VMware vSphere with Tanzu: Deploy and Manage [V7]

During this 3-day course, you focus on deploying and managing VMware vSphere® with Tanzu. You learn about how vSphere with Tanzu can be used to orchestrate the delivery of Kubernetes clusters and containerized applications in a vSphere environment.

Classroom
24 Hours
MR-1CN-VM/TDM7

Virtual Class
24 Hours
MR-1LN-VM/TDM7

VMware vSphere: Advanced Administration Workshop [V7]

This five-day course provides hands-on training to equip students with a range of skills, from performing routine VMwarevSphere® administrative tasks to complex vSphere operations and configurations. Through lab-based activities, students are immersed in real-life situations faced by VMBeans, a fictitious company. These situations expose students to real-life scenarios faced by companies that are building and scaling their virtual infrastructure. Approximately 90% of the class is application-focused and taught through labs. The course aligns fully with the VMwareCertified Advanced Professional – Data Center Virtualization Deploy exam objectives.

Virtual Class
40 Hours
MR-1LN-VM/SAAW7

VMware vSphere: Design [V7]

This three-day training course equips you with the knowledge, skills, and abilities to design a VMware vSphere® 7 virtual infrastructure. You follow a proven approach to design a virtualization solution that ensures availability, manageability, performance, recoverability, and security, and that uses VMware best practices. This course discusses the benefits and risks of available design alternatives and provides information to support making sound design decisions. Given a case study, you practice your design skills by working with peers on a design project.

Classroom
24 Hours
MR-1CN-VMVSD7

Virtual Class
24 Hours
MR-1LN-VMVSD7

VMware vSphere: Fast Track [v6.7] - Online ILT

This five-day, intensive course takes you from introductory to advanced VMware vSphere management skills. Building on the installation and configuration content from our best-selling course, you will also develop advanced skills needed to manage and maintain a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, you will install, configure and manage vSphere 6.7. You will explore the features that build a foundation for a truly scalable infrastructure, and discuss when and where these features have the greatest effect. This course prepares you to administer a vSphere infrastructure for an organization of any size using vSphere 6.7, which includes VMware ESXi 6.7 and VMware vCenter Server 6.7.

Virtual Class
50 Hours
MR-1LN-VM/SFT67

VMware vSphere: Fast Track [V7]

This five-day, intensive course takes you from introductory to advanced VMware vSphere® 7 management skills. Building on the installation and configuration content from our best-selling course, you will also develop advanced skills needed to manage and maintain a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, you will install, configure and manage vSphere 7. You will explore the features that build a foundation for a truly scalable infrastructure, and discuss when and where these features have the greatest effect. This course prepares you to administer a vSphere infrastructure for an organization of any size using vSphere 7, which includes VMware ESXi™ 7 and VMware vCenter Server® 7.

Classroom
50 Hours
MR-1CN-VMVST7

Virtual Class
50 Hours
MR-1CN-VMVST7
This five-day, intensive course takes you from introductory to advanced VMware vSphere® 7 management skills. Building on the installation and configuration content from our best-selling course, you will also develop advanced skills needed to manage, and maintain a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, you will install, configure, and manage vSphere® 7. You will explore the features that build a foundation for a truly scalable infrastructure and discuss when and where these features have the greatest effect. This course prepares you to administer vSphere infrastructure for an organization of any size, using vSphere® 7, which includes VMware ESXi™ 7 and VMware vCenter Server® 7.

Virtual Class  
50 Hours  
MR-1LN-VMVSFT7

VMware vSphere: Install, Configure, Manage [V7]  
This five-day course features intensive hands-on training that focuses on installing, configuring, and managing VMwarevSphere® 7, which includes VMware ESXi™ 7 and VMware vCenter Server® 7. This course prepares you to administer vSphere infrastructure for an organization of any size. This course is the foundation for most of the other VMware technologies in the software-defined data center.

Classroom  
40 Hours  
MR-1CN-VMVSICM7

Virtual Class  
MR-1CN-VMVSICM7

VMware vSphere: Install, Configure, Manage [V7] - Virtual Class  
This five-day course features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere® 7, which includes VMware ESXi™ 7 and VMware vCenter Server® 7. This course prepares you to administer vSphere infrastructure for an organization of any size. This course is the foundation for most of the other VMware technologies in the software-defined data center.

Virtual Class  
40 Hours  
MR-1LN-VMVSICM7

Classroom  
MR-1LN-VMVSICM7

VMware vSphere: Instructor Certification Workshop [V7.x] - Virtual Class  
This five-day course teaches you advanced skills for configuring and maintaining a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, you configure and optimize the VMware vSphere® 6.7 features that build a foundation for a truly scalable infrastructure, and you discuss when and where these features have the greatest effect. This course deepens your understanding of vSphere and how its advanced features and controls can benefit your organization.

Classroom  
40 Hours  
MR-1CN-VMVSICW7

VMware vSphere: Optimize and Scale [V6.7]  
This five-day course teaches you advanced skills for configuring and maintaining a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, you configure and optimize the VMware vSphere® 6.7 features that build a foundation for a truly scalable infrastructure, and you discuss when and where these features have the greatest effect. Attend this course to deepen your understanding of vSphere and learn how its advanced features and controls can benefit your organization.

Classroom  
40 Hours  
MR-1CN-VMVSO67

VMware vSphere: Optimize and Scale [V7] - Virtual Class  
This five-day course teaches you advanced skills for configuring and maintaining a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, you configure and optimize the VMware vSphere® 7 features that build a foundation for a truly scalable infrastructure, and you discuss when and where these features have the greatest effect. Attend this course to deepen your understanding of vSphere and learn how its advanced features and controls can benefit your organization.

Virtual Class  
40 Hours  
MR-1LN-VMVSO7

VMware vSphere: Optimize and Scale plus Troubleshooting Fast Track [V7] - Virtual Classroom  
This five-day, accelerated, hands-on training course is a blend of the VMware vSphere: Optimize and Scale and VMware vSphere: Troubleshooting courses. This Fast Track course includes topics from each of these advanced courses to equip experienced VMware administrators with the knowledge and skills to effectively optimize and troubleshoot vSphere at an expert level.

Virtual Class  
40 Hours  
MR-1LN-VMVOSTFT7

VMware vSphere: Practitioner Workshop [V6.7] - Online ILT  
In this three-day workshop, students perform various tasks that a system administrator performs on a regular basis. These tasks include updating and upgrading an existing basic VMware vSphere environment and troubleshooting common problems. Students apply the concepts learned during the VMware vSphere: Install, Configure, Manage [V6.7] course while they increase their skill and competence.

Virtual Class  
24 Hours  
MR-1LN-VMVLCMWS67

VMware vSphere: Troubleshooting [V7]  
This five-day, hands-on training course provides you with the advanced knowledge, skills, and abilities to achieve competence in troubleshooting the VMware vSphere® 7.x environment. This workshop increases your skill and competence in using the command-line interface, VMware vSphere® Client™, log files, and other tools to analyze and solve problems.

Classroom  
40 Hours  
MR-1CN-VMVSTS7

VMware vSphere: Troubleshooting [V7] - Virtual Class  
This five-day, hands-on training course provides you with the advanced knowledge, skills, and abilities to achieve competence in troubleshooting the VMware vSphere® 7.x environment. This workshop increases your skill and competence in using the command-line interface, VMware vSphere® Client™, log files, and other tools to analyze and solve problems.

Virtual Class  
40 Hours  
MR-1LN-VMVSTS7

VMware vSphere: What's New [V6.7 to V7] - Classroom  
In this three-day, hands-on training course, you explore the new features and enhancements in VMware vCenter Server® 7 and VMware ESXi™ 7. Real-world use-case deployment scenarios, hands-on lab exercises, and lectures teach you the skillset you need to effectively implement and configure VMware vSphere® 7. This course is recommended for customers who want to deploy vSphere® 7 in their existing vSphere environment.

Classroom  
24 Hours  
MR-1CN-VMVSWN7

VMware vSphere: What's New [V6.7 to V7] - Virtual Class
In this three-day, hands-on training course, you explore the new features and enhancements in VMware vCenter Server® 7 and VMware ESXi™ 7. Real-world use-case deployment scenarios, hands-on lab exercises, and lectures teach you the skills that you need to effectively implement and configure VMware vSphere® 7. This course is recommended for customers who want to deploy vSphere 7 in their existing vSphere environment.

Virtual Class | 24 Hours | MR-1LN-VMWSV7
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**VMware Workspace ONE: Advanced Integration [V21.x]**
In this five-day course, you build on the foundations learned in VMware Workspace ONE: Deploy & Manage [21.x] to accelerate the advancement of your deployment and management systems with VMware Workspace ONE® UEM and VMware Workspace ONE® Access™. Through a series of hands-on labs, simulations, and interactive lectures, you effectively evaluate your organization’s current practices and discover opportunities to target improvements in identity, authentication, and access management. Additionally, you learn the strategies and techniques necessary to construct an integrated management strategy, utilizing comprehensive set of VMware Workspace ONE® services, including Hub Services, the Unified Catalog, Intelligence, and the API.

Classroom | 40 Hours | MR-1CN-VMWS1AI21
Virtual Class | 40 Hours | MR-1LN-VMWS1AI21
**VMware Workspace ONE: Deploy and Manage [V21.x]**
In this five-day course, you learn how to apply the fundamental techniques for launching and maintaining an intelligence-driven, multi-platform endpoint management solution with VMware Workspace ONE UEM. Through a combination of hands-on labs, simulations, and interactive lectures, you configure and manage the endpoint lifecycle. You will leave with a foundational understanding of how VMware Workspace ONE UEM uses various authentication methods and protocols to determine user access permissions and enable single sign-on. Overall, the course lays out the foundational principles of identity and access management.

Virtual Class | 40 Hours | MR-1LN-VMWS1DM21X

**VMware Workspace ONE: Advanced Integration [V21.x] - Virtual Class**
In this five-day course, you build on the foundations learned in VMware Workspace ONE: Deploy & Manage [21.x] to accelerate the advancement of your deployment and management systems with VMware Workspace ONE® UEM and VMware Workspace ONE® Access™. Through a series of hands-on labs, simulations, and interactive lectures, you effectively evaluate your organization’s current practices and discover opportunities to target improvements in identity, authentication, and access management. Additionally, you learn the strategies and techniques necessary to construct an integrated management strategy, utilizing comprehensive set of VMware Workspace ONE® services, including Hub Services, the Unified Catalog, Intelligence, and the API.

Virtual Class | 40 Hours | MR-1LN-VMWS1AI21

**VMware Workspace ONE: Deploy and Manage [V21.x] - Virtual Class**
In this five-day course, you learn how to apply the fundamental techniques for launching and maintaining an intelligence-driven, multi-platform endpoint management solution with VMware Workspace ONE UEM. Through a combination of hands-on labs, simulations, and interactive lectures, you configure and manage the endpoint lifecycle. You will leave with a foundational understanding of how VMware Workspace ONE UEM uses various authentication methods and protocols to determine user access permissions and enable single sign-on. Overall, the course lays out the foundational principles of identity and access management.

Virtual Class | 50 Hours | MR-1CN-VMWS1DMUEMT21

**VMware Workspace ONE: Troubleshooting Fast Track [V21.x] - Virtual Class**
In this extended five-day course, you learn how to apply the fundamental techniques for launching and maintaining an intelligence-driven, multi-platform endpoint management solution with Workspace ONE UEM. Through a combination of hands-on labs, simulations, and interactive lectures, you configure and manage the endpoint lifecycle. You will leave with a foundational understanding of how Workspace ONE UEM uses various authentication methods and protocols to determine user access permissions and enable single sign-on. Overall, the course lays out the foundational principles of identity and access management.

Virtual Class | 50 Hours | MR-1LN-VMWS1DMUEMT21

**VMware Workspace ONE: Integrating Access with UEM [21.x]**
In this two-day course, you learn how to apply the fundamental techniques for integrating VMware Workspace ONE® Access™ with Workspace ONE UEM to securely distribute business-critical applications from any device and configure access management controls. Through a combination of hands-on labs, simulations, and interactive lectures, you configure Workspace ONE Access, enterprise, and productivity integrations. You will leave with a foundational understanding of how Workspace ONE UEM uses various authentication methods and protocols to determine user access permissions and enable single sign-on. Overall, the course lays out the foundational principles of identity and access management.

Virtual Class | 50 Hours | MR-1CN-VMWS1DMUEMT21

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To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 57
### VMware Workspace ONE: Modern Management for Windows 10 [V21.x] - Virtual Class

In this two-day course, you learn the fundamental techniques for implementing a modern Windows 10 management solution with VMware Workspace ONE. Through a combination of hands-on labs, simulations, and interactive lectures, you investigate various methods for onboarding, securing, enabling, and maintaining Windows 10 with Workspace ONE. Through a detailed evaluation of your options, you will establish the foundation of a modern management strategy that fits your organization’s needs.

<table>
<thead>
<tr>
<th>Classroom</th>
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### VMware Workspace ONE: Modern Management for Windows 10 [V21.x] - Virtual Class

In this two-day course, you learn the fundamental techniques for implementing a modern Windows 10 management solution with VMware Workspace ONE. Through a combination of hands-on labs, simulations, and interactive lectures, you investigate various methods for onboarding, securing, enabling, and maintaining Windows 10 with Workspace ONE. Through a detailed evaluation of your options, you will establish the foundation of a modern management strategy that fits your organization’s needs.

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### VMware Workspace ONE: Skills for UEM [21.x]

In this three-day course, you learn how to apply the fundamental techniques for launching and maintaining an intelligence-driven, multi-platform endpoint management solution with VMware Workspace ONE®. Through a combination of hands-on labs, simulations, and interactive lectures, you will configure and manage the endpoint life cycle. After the three days, you will have the foundational knowledge for effectively implementing VMware Workspace ONE® UEM.

<table>
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<tr>
<th>Classroom</th>
<th>24 Hours</th>
<th>MR-1CN-VMWS1UEM21</th>
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### VMware Workspace ONE: Skills for UEM plus Modern Management for Windows 10 [V21.x] - Virtual Class

In this five-day course, you learn how to apply the fundamental techniques for launching and maintaining an intelligence-driven, multi-platform endpoint management solution and a modern Windows 10 management solution with VMware Workspace ONE®. Through a combination of hands-on labs, simulations, and interactive lectures, you will configure and manage the endpoint life cycle. You will investigate various methods for onboarding, securing, enabling, and maintaining Windows 10 with Workspace ONE. After the five days, you will have the foundational knowledge for effectively implementing VMware Workspace ONE® UEM and establishing the foundation of a modern management strategy.

<table>
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<tr>
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### VMware Workspace ONE: UEM Bootcamp [21.x]

In this five-day course, you learn how to apply the fundamental techniques for launching and maintaining an intelligence-driven, multi-platform endpoint management solution with VMware Workspace ONE®. Through a combination of hands-on labs, simulations, and interactive lectures, you will configure and manage the endpoint life cycle. You will also learn to investigate, analyze, and determine issues that might occur with all the different components of Workspace ONE UEM. Understanding how to effectively troubleshoot product issues enables administrators to understand how product services communicate and function, optimizing service and software health management. After the five days, you will have the foundational knowledge for effectively managing and conducting basic troubleshooting for Workspace ONE UEM.

<table>
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### VMware Workspace ONE: UEM Bootcamp [21.x] - Virtual Class

In this five-day course, you learn how to apply the fundamental techniques for launching and maintaining an intelligence-driven, multi-platform endpoint management solution with VMware Workspace ONE®. Through a combination of hands-on labs, simulations, and interactive lectures, you will configure and manage the endpoint life cycle. You will also learn to investigate, analyze, and determine issues that might occur with all the different components of Workspace ONE UEM. Understanding how to effectively troubleshoot product issues enables administrators to understand how product services communicate and function, optimizing service and software health management. After the five days, you will have the foundational knowledge for effectively managing and conducting basic troubleshooting for Workspace ONE UEM.

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### VMware Workspace ONE: UEM Troubleshooting [21.x]

In this three-day course, you learn how to apply the fundamental techniques for launching and maintaining an intelligence-driven, multi-platform endpoint management solution with VMware Workspace ONE®. Through a combination of hands-on labs, simulations, and interactive lectures, you will configure and manage the endpoint life cycle. After the three days, you will have the foundational knowledge for effectively implementing VMware Workspace ONE® UEM.

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VMware Workspace ONE: UEM Troubleshooting [21.x] - Virtual Class

In this two-day course, you learn to investigate, analyze, and determine issues that might occur with all the different components of VMware Workspace ONE® UEM. Understanding how to effectively troubleshoot product issues enables administrators to understand how product services communicate and function—in turn optimizing service and software health management. Troubleshooting is the backbone of service maintenance and management.

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VMware Telco Cloud

VMware Telco Cloud Automation: Install, Configure, Manage [V1.8] - Virtual Class

This five-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competency in operating and troubleshooting the VMware Telco Cloud Automation™ environment. In this course, you are introduced to VMware Telco Cloud Automation infrastructure settings, deployment options, and procedures. You explore Containers as a Service and understand the workflow details of Partner Integration processes. You are introduced to zero-touch provisioning and its importa nce in VMware Telco Cloud Automation. You onboard and instantiate network functions and network services using hands-on lab exercises. In addition, you are presented with life cycle management workflows as well as various types of technical problems in VMware Telco Cloud Automation, which you will identify, analyze, and solve through a systematic process.

<table>
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<th>Classroom</th>
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</table>

VMware Telco Cloud Automation: Install, Configure, Manage [V1.8] - Virtual Class

This five-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competency in operating and troubleshooting the VMware Telco Cloud Automation™ environment. In this course, you are introduced to VMware Telco Cloud Automation infrastructure settings, deployment options, and procedures. You explore Containers as a Service and understand the workflow details of Partner Integration processes. You are introduced to zero-touch provisioning and its importa nce in VMware Telco Cloud Automation. You onboard and instantiate network functions and network services using hands-on lab exercises. In addition, you are presented with life cycle management workflows as well as various types of technical problems in VMware Telco Cloud Automation, which you will identify, analyze, and solve through a systematic process.

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VMware Telco Cloud Infrastructure: Install, Configure, Manage [V2.0] - Virtual Class

This five-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competency in operating and troubleshooting the VMware Telco Cloud Infrastructure environment. In this course, you are introduced to VMware Telco Cloud Director™ as a virtualized infrastructure manager. You will examine ETSI NFV requirements, deployment options, and procedures. You will also deploy virtualized network functions and understand their detailed configuration settings. You will learn how to support organizations as well as set up networking and security using hands-on lab exercises. In addition, you are presented with various types of technical problems in VMware Cloud Director, which you will identify, analyze, and solve through a systematic troubleshooting process.

<table>
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<th>Virtual Class</th>
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VMware Telco Cloud Platform: Install, Configure, Manage [V2.0] - Virtual Class

This three-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competency in operating and troubleshooting the VMware Telco Cloud Platform™ environment. In this course, you are introduced to the VMware Telco Cloud Platform infrastructure, deployment options, and procedures. You also deploy Kubernetes clusters and understand the detailed configuration settings of management and workload clusters. You onboard and instantiate network functions and network services using hands-on lab exercises. In addition, you are presented with various types of technical problems in VMware Telco Cloud Platform, which you will identify, analyze, and solve through a systematic troubleshooting process.

<table>
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<tr>
<th>Classroom</th>
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VMware Telco Cloud Platform: Install, Configure, Manage [V2.0] - Virtual Class

This three-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competency in operating and troubleshooting the VMware Telco Cloud Platform™ environment. In this course, you are introduced to the VMware Telco Cloud Platform infrastructure, deployment options, and procedures. You also deploy Kubernetes clusters and understand the detailed configuration settings of management and workload clusters. You onboard and instantiate network functions and network services using hands-on lab exercises. In addition, you are presented with various types of technical problems in VMware Telco Cloud Platform, which you will identify, analyze, and solve through a systematic troubleshooting process.

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Third Party Vendor

Cisco Product Training

Cisco SD-WAN Operation and Deployment - Online ILT

The Cisco SD-WAN Operation and Deployment (EMSDW) v1.0 course provides an overview of the Cisco SD-WAN solution and SD-WAN components. Students will learn how to create, manage, and operate a secure extendible network using Cisco SD-WAN products. The course covers how to configure, operate, and monitor overlay routing in a secure extendible network. Students will also learn about policies and quality of service (QoS) in the SD-WAN overlay network.
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Cisco UCS Director Foundation v6.6</td>
<td>16 Hours</td>
<td>MR-1LN-ENS50D</td>
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<tr>
<td>Cisco UCS Director Foundation v6.6</td>
<td>24 Hours</td>
<td>MR-1LN-UCSDFv6.6</td>
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<tr>
<td>Configuring Cisco MDS 9000 Series Switches - Virtual</td>
<td>32 Hours</td>
<td>MR-1LN-DCMDSv3.1</td>
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<td>Configuring Cisco Unified Computing System - Virtual Classroom</td>
<td>24 Hours</td>
<td>MR-1LN-DCCUCS</td>
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<tr>
<td>Designing Cisco Data Center Infrastructure - Virtual</td>
<td>40 Hours</td>
<td>MR-1LN-DCCDv7.0</td>
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<td>Designing Cisco Wireless Networks - Virtual Class</td>
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<td>MR-1LN-ENS5LDv1.0</td>
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<tr>
<td>Designing Cisco Enterprise Wireless Networks - Virtual Class</td>
<td>40 Hours</td>
<td>MR-1LN-ERNSWLDv1.0</td>
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<tr>
<td>Implementing and Administering Cisco Solutions</td>
<td>40 Hours</td>
<td>ES40SLCCEAV1.0</td>
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<tr>
<td>Implementing and Configuring Cisco Identity Services Engine (ISE) 3.0 - Online ILT</td>
<td>40 Hours</td>
<td>MR-1LN-IESIEV3.0</td>
</tr>
<tr>
<td>Implementing and Operating Cisco Data Center Core Technologies - Virtual</td>
<td>40 Hours</td>
<td>MR-1LN-DCCOR</td>
</tr>
<tr>
<td>Implementing and Operating Cisco Data Center Core Technologies v1.0 - On Demand</td>
<td>40 Hours</td>
<td>MR-1LN-DCCORv1.0</td>
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</tbody>
</table>

Cisco UCS Director Foundation v6.6
The Cisco UCS Director Foundation (UCSDF) v6.6 course helps you understand concepts, architecture, and deployment use cases for Cisco UCS® Director. You will gain hands-on experience in deploying basic Cisco UCS Director solutions. You will also practice using core features that most implementations require, such as services design, using the self-service portal for provisioning services, creating workflows that enable cloud automation and standardize IT services, and more.

Configuring Cisco MDS 9000 Series Switches - Virtual
The Configuring Cisco MDS 9000 Series Switches (DCMDS) v3.1 course shows you how to implement, manage, and troubleshoot Cisco® MDS 9000 Series Switches, to build highly available, scalable storage networks. Through expert instruction and extensive hands-on practice, you will learn how to deploy and use capabilities such as Virtual Storage Area Networks (VSANs), Role-Based Access Control (RBAC), N-Port Virtualization (NPV) fabric security, zoning, automation with NX-API, Storage Virtualization, FC performance, Fabric and SAN analytics, Fibre Channel over TCP/IP (FCIP) tunnels, and more. You will learn how to configure and implement platform features and learn troubleshooting techniques pertaining to Fibre Channel (FC) domains, firmware upgrades, zones, and zone mergers. This course prepares you for the CCNP Data Center and Cisco Certified Specialist - Data Center SAN Implementation certifications (DCSAN).

Configuring Cisco Unified Computing System - Virtual Classroom
The Configuring Cisco Unified Computing System (DCCUCS) v1.0 shows you how to deploy, secure, operate, and maintain Cisco Unified Computing System (Cisco UCS) B-series blade servers, Cisco UCS C-Series, and S-Series rack servers for use in data centers. You will learn how to implement management and orchestration software for Cisco UCS. You will gain hands-on practice on: configuring key features of Cisco UCS, Cisco UCS Director, and Cisco UCS Manager; implementing UCS management software including Cisco UCS Director, Cisco UCS Manager, and Cisco Intersight; and more. This course can be used to prepare for the new CCNP Data Center and CCIE Data Center certifications.

Designing Cisco Data Center Infrastructure - Virtual
The Designing Cisco Data Center Infrastructure (DCID) v7.0 course helps you master design and deployment options focused on Cisco® data center solutions and technologies across network, compute, virtualization, storage area networks, automation, and security. You will learn design practices for the Cisco Unified Computing System™ (Cisco UCS®) solution based on Cisco UCS B-Series and C-Series servers, Cisco UCS Manager, and Cisco Unified Fabric. You will also gain design experience with network management technologies including Cisco UCS Manager, Cisco Data Center Network Manager (DCNM), and Cisco UCS Director. You can expect theoretical content as well as design-oriented case studies in the form of activities.

Designing Cisco Wireless Networks - Virtual Class
The Designing Cisco Enterprise Networks (ENSLD) v1.0 course gives you the knowledge and skills you need to design an enterprise network. This course serves as a deep dive into enterprise network design and expands on the topics covered in the Implementing and Operating Cisco® Enterprise Network Core Technologies (ENCOR) v1.0 course. This course also helps you prepare to take the exam, Designing Cisco Enterprise Networks v1.0 (ENSLD 300-420), which is part of the CCNP® Enterprise and Cisco Certified Specialist - Enterprise Design certifications.

Designing Cisco Enterprise Wireless Networks - Virtual Class
The Designing Cisco Enterprise Wireless Networks (ENWSLD) v1.0 course gives you the knowledge you need to design Cisco wireless networks. The course covers design specifics from scenario design concepts through the installation phase and to post-deployment validation. This course, including the self-paced material, helps you prepare to take the exam, Designing Cisco Enterprise Wireless Networks (300-425 ENWSLD), which leads to the new CCNP Enterprise and Cisco Certified Specialist – Enterprise Wireless Design certifications. The exam will be available beginning February 24, 2020.

Implementing and Administering Cisco Solutions
The Implementing and Administering Cisco Solutions (CCNA) v1.0 course gives you a broad range of fundamental knowledge for all IT careers. Through a combination of lecture and hands-on labs, you will learn how to install, operate, configure, and verify basic IPv4 and IPv6 networks. The course covers configuring network components such as switches, routers, and wireless LAN controllers; managing network devices; and identifying basic security threats. The course also gives you a foundation in new software-defined networking, automation, and software-defined networking. This course helps you prepare to take the 200-301 Cisco Certified Network Associate (CCNA) exam. By passing this one exam, you earn CCNA certification.

Implementing and Configuring Cisco Identity Services Engine (ISE) 3.0 - Online ILT
This course discusses the Cisco Identity Services Engine (ISE), an identity and access control platform that provides a single policy plane across the entire organization. Combining multiple services, including authentication, authorization, and accounting (AAA), posture, profiling, device on-boarding, and guest management, into a single context-aware identity-based platform. The training provides learners with the knowledge and skills to enforce security posture compliance for wired and wireless endpoints and enhance infrastructure security using the Cisco ISE.

Implementing and Operating Cisco Data Center Core Technologies - Virtual
The Implementing and Operating Cisco Data Center Core Technologies (DCCOR) v1.0 course helps you prepare for the CCNP Data Center and CCIE Data Center certifications, and for advanced-level data center roles. In this course, you will master the skills and technologies you need to implement data center compute, LAN and SAN infrastructure. You will also learn the essentials of automation and security in data centers. You will get hands-on experience with deploying, securing, operating, and maintaining Cisco data center infrastructure including: Cisco MDS Switches and Cisco Nexus Switches; Cisco Unified Computing System™ (Cisco UCS®) B-Series Blade Servers, and Cisco UCS C-Series Rack Servers. This course, including the self-paced material, helps you prepare to take the exam, Implementing Cisco Data Center Core Technologies (300-601 DCCOR), which leads to the new CCNP Data Center, CCIE Data Center, and the Cisco Certified Specialist - Data Center Core certifications. The exam will be available beginning February 24, 2020.

Implementing and Operating Cisco Data Center Core Technologies v1.0 - On Demand
This course gives you the knowledge and skills needed to configure, troubleshoot, and manage wired and wireless Cisco enterprise networks.
The Implementing Cisco Enterprise Wireless Networks (ENWLSI) v1.1 course gives you the knowledge and skills needed to secure wireless network infrastructure and troubleshoot any related issues. You'll learn how to implement and secure a wireless network infrastructure and use Cisco Identity Service Engine (ISE), Cisco Prime Infrastructure (PI), and Cisco Connect Mobile Experience to monitor and troubleshoot network issues. The course provides hands-on labs to reinforce concepts including deploying Cisco Prime Infrastructure Release 3.5, Cisco Catalyst 9800 Wireless Controller Release IOS XE Gibraltar 16.10, Cisco Digital Network Architecture (DNA) Center Release 2.8, Cisco CMX Release 10.5, Cisco MSE Release 8.0 features and Cisco Identity Service Engine (ISE) Release 2.4. This course also helps you prepare to take the ImplementingCisco Enterprise Wireless Networks (300-430 ENWLSI) exam, which is part of the new CCNP Enterprise certification and the Cisco Certified Specialist - Enterprise Wireless Implementation certification. The exam will

<table>
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<tr>
<th>Type</th>
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<tbody>
<tr>
<td>Virtual Class</td>
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</table>

**Introducing Cisco Unified Computing System - Virtual Class**

The Introducing Cisco Unified Computing System (DCIUUCS) v1.0 is an introductory course that shows you how to deploy, secure, operate, and maintain the Cisco Unified Computing System (Cisco UCS) B-Series blade server, Cisco UCS C-Series and S-Series rack servers, and Cisco HyperFlex product family; for use in data centers. You will gain hands-on practice using Cisco UCS server configuration and performing backup and restore activities. This course can be used to prepare for the new CCNP Data Center and CCIE Data Center certifications.

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<th>Type</th>
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</table>

**Troubleshooting Cisco Data Center Infrastructure (DCIT) v6.2 - Online ILT**

The Troubleshooting Cisco Data Center Infrastructure (DCIT) skills-building course focuses on troubleshooting of LANs, SANs, Cisco Unified Fabric, Cisco Unified Computing System (Cisco UCS), and Cisco Application Centric Infrastructure (ACI). The course provides rich hands-on experience in resolving problems on Cisco MDS switches, Cisco Nexus switches, Cisco Fabric Extenders (FEX), Cisco UCS, and Cisco ACI.

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**Understanding Cisco Collaboration Foundations - Virtual Classroom**

The Understanding Cisco Collaboration Foundations (CLFNDU) 1.0 course gives you the skills and knowledge needed to administer and support a simple, single-site Cisco Unified Communications Manager (CM) solution with Session Initiation Protocol (SIP) gateway. The course covers initial parameters, management of devices including phones and video endpoints, management of users, and management of media resources, as well as Cisco Unified Communications solutions maintenance and troubleshooting tools. In addition, you will learn the basics of SIP dial plans including connectivity to Public Switched Telephone Network (PSTN) services, and how to use class-of-service capabilities. This course provides the fundamental knowledge needed to take CCP® Collaboration certification courses. It also serves as entry-level training for newcomers to Cisco on-premise collaboration technologies.

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<tr>
<th>Type</th>
<th>Duration</th>
<th>Course Code</th>
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<tbody>
<tr>
<td>Virtual Class</td>
<td>40 Hours</td>
<td>MR-1LN-CLFNDU</td>
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</tbody>
</table>

**Understanding Cisco Data Center Foundations - Virtual**

The Understanding Cisco Data Center Foundations (DFCFNDU) v1.0 course helps you prepare for entry-level data center roles. In this course, you will learn the foundational knowledge and skills you need to configure Cisco data center technologies including networking, virtualization, storage area networking, and unified computing. You will get hands-on experience with configuring features on Cisco Nexus® 9000 Series switches, Cisco Nexus switches, Cisco Fabric Extenders (FEX), Cisco UCS, and Cisco ACI.

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<tr>
<td>Virtual Class</td>
<td>40 Hours</td>
<td>MR-1LN-DFCFNDU</td>
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</table>
Google Cloud

Google Cloud Fundamentals: Core Infrastructure
This course provides an overview of Google Cloud Platform products and services. Through a combination of presentations, demos, and hands-on labs, you will learn the value of Google Cloud Platform and how to incorporate cloud-based solutions into business strategies.

Virtual Class 08 Hours ESTPS03283

Red Hat

Red Hat System Administration I RH124
The first of two courses covering the core system administration tasks needed to manage Red Hat Enterprise Linux servers. Red Hat System Administration I RH124 equips you with Linux administration survival skills by focusing on foundational Linux concepts and core tasks. You will learn how to apply command-line concepts and enterprise-level tools, starting you on your journey toward becoming a full-time Linux system administrator. This course is based on Red Hat® Enterprise Linux 9.0.

Unstructured Storage

Apex
APEX Data Storage Services: File - Capacity Management
This course focuses on monitoring the capacity of your file storage within the APEX solution. Providing appropriate storage pools, setting filters to examine files being stored, and setting appropriate quotas for your environment.

On Demand Class 01 Hours ESSTGD03503

APEX Data Storage Services: File - Data Protection
This course focuses on the data protection features and functions when storing file data within the APEX solution. The course provides demonstrations and hands-on activity to ensure students know the available options and features to appropriately protect any data brought into the system automatically.

On Demand Class 01 Hours ESSTGD03504

APEX Data Storage Services: File – Client Access
The APEX Data Storage Services Element Manager allows you to adjust configuration of your data storage. This course will step through tasks you can do to configure your file storage services.

On Demand Class 02 Hours ESSTGD02944

CloudIQ

CloudIQ Concepts & Features
This course is designed to provide a comprehensive introduction to the CloudIQ platform. From this training, students will gain a foundational understanding of the CloudIQ platform to prepare learners to utilize CloudIQ for specific product monitoring.

On Demand Class 02 Hours ES301STG02108

DataIQ

DataIQ Administration and Management
This course is covers the administration of DataIQ. How to use DataIQ monitoring features and plugins to provide the information you need about your connected storage systems.

On Demand Class 01 Hours 30 Minutes ES101STG01599

DataIQ Concepts and Features
This course presents an overview of the DataIQ product at a high level. What is DataIQ, what can it do and what does it look like

On Demand Class 01 Hours ES102STG01326

ECS

Data Domain Cloud Tier and ECS Integrated Solution
The Elastic Cloud Storage (ECS) and Data Domain Cloud Tier Integration eLearning course is intended to supplement and augment the knowledge provided in the ECS Management and Monitoring course and the Data Domain System Administration course. This course is intended to provide further details on the integrated solution using ECS as a Cloud Tier with Data Domain. This course includes use cases, provides information about the configuration of ECS and Data Domain, and includes configuration demonstration.

On Demand Class 01 Hours MR-1WN-ECSDDCT

ECS 3.3 Features and Differences
This course covers an overview of the enhancements, features and new functionality of ECS 3.3.

On Demand Class 02 Hours ES131STG00948

ECS Administration
This course is intended for anyone who needs to manage, customize, monitor, or use an ECS system for data storage. It provides detailed coverage of ECS features designed to support typical use cases, including global content repository, geo-scale object storage with Access Anywhere, and Big Data Analytics.

Classroom 40 Hours ESSTGS02853
Virtual Class 40 Hours ESSTGS02853

ECS Administration - On-Demand
This course is intended for anyone who needs to manage, customize, monitor, or use an ECS system for data storage. It provides detailed coverage of ECS features designed to support typical use cases, including global content repository, geo-scale object storage with Access Anywhere, and Big Data Analytics.

On Demand Class 40 Hours ESSTGD02854

ECS Application Developer Workshop

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 02
The ECS Application Developer workshop is designed to help application developers learn the concepts and best practices when developing next-generation applications that leverage object storage (e.g. S3) instead of traditional storage (e.g. SAN or NAS). The course includes a review of Frequently Asked Questions and guided hands-on labs and sample code.

### ECS Concepts and Features

This course is designed to provide a comprehensive introduction to ECS. From this training, students will gain a high-level understanding of how ECS works, product architecture, configurations that are typically deployed, and product features that enable management of the ECS environment.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>02 Hours</th>
<th>MR-1TN-ECSADW</th>
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### ECS Data Client Access - OpenStack Swift

This course covers ECS integration with OpenStack Swift. The course is intended to provide greater detail on the configuration, use, and management capabilities using the management interface and using the APIs. This course supplements and augments the knowledge provided in the ECS Management and Monitoring Course.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>01 Hours 30 Minutes</th>
<th>MR-1WN-ECSDCAOSW</th>
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### ECS Networking Implementation

This eLearning course covers ECS networking concepts and configuration and provides specific details on all the latest ECS network hardware, network separation and topologies. The course also includes various network configurations and best practices.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>02 Hours</th>
<th>ESSTGD02586</th>
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</table>

### Isilon CloudPools and ECS Integrated Solution

The Elastic Cloud Storage (ECS) and Isilon CloudPools integration eLearning course is intended to supplement and augment the knowledge provided in the ECS Management and Monitoring course and the Isilon Administration and Management course. This course is intended to provide further details on the integrated solution using ECS as a Cloud storage target with Isilon. This course includes use cases, provides information about the configuration of ECS and Isilon, and includes configuration demonstrations.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>01 Hours</th>
<th>MR-1WN-ECSICP</th>
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</table>

### NetWorker CloudBoost and ECS Integrated Solution

The Elastic Cloud Storage (ECS) and NetWorker CloudBoost Integration eLearning course is intended to supplement and augment the knowledge provided in the ECS Management and Monitoring course and the NetWorker Implementation and Management course. This course is intended to provide further details on the integrated solution using ECS as a CloudBoost tier with NetWorker. This course includes use cases, provides information about the configuration of ECS and NetWorker, and includes configuration demonstrations.

<table>
<thead>
<tr>
<th>On Demand Class</th>
<th>01 Hours</th>
<th>MR-1WN-ECSNWCR</th>
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### PowerScale

#### PowerScale A2000 Hardware Installation and Maintenance

This course presents a focused view of PowerScale hardware installation and maintenance specific to one specialized cluster implementation.

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<thead>
<tr>
<th>On Demand Class</th>
<th>01 Hours</th>
<th>ESSTGD024E8</th>
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</table>

#### PowerScale Administration

This course will prepare students to implement a Dell EMC PowerScale cluster, configure software features of the OneFS operating system and administer a cluster on a day to day basis. Students will learn about PowerScale's data protection methods, the ability to tier data from one node pool to another based on configured rules and synchronize data to other clusters or to cloud resources. This course is in alignment with the Specialist, PowerScale Implementation Engineer Proven Professional certification. Note this is an update to the previously known Isilon Administration and Management course. This package does not include a Proven Professional exam voucher, in order to add please search for "Dell Technologies Proven Professional VUE Exam Voucher" or Course ID "MR-1EV-VUEEMCPROV".

| Classroom | 40 Hours | MR-1CP-ISIAM |

| Virtual Class | 40 Hours | MR-1CP-ISIAM |

### PowerScale Administration

This course will prepare students to implement a Dell EMC PowerScale cluster, configure software features of the OneFS operating system and administer a cluster on a day to day basis. Students will learn about PowerScale's data protection methods, the ability to tier data from one node pool to another based on configured rules and synchronize data to other clusters or to cloud resources. This course is in alignment with the Specialist, Isilon Implementation Engineer Proven Professional certification. This is a direct update to the previously known Isilon Administration and Management course.

| Virtual Class | 40 Hours | MR-1LP-ISIAM |

| Classroom | 40 Hours | MR-1LP-ISIAM |

### PowerScale Administration - On-Demand

The PowerScale Administration course prepares students to perform Dell EMC PowerScale cluster and OneFS 9.0 implementation, configuration, and administration. Topics include and overview of hardware, the configuration and verification of basic and advanced networking, authentication, identity management and authorization, client and data access, data layout, and OneFS modules such as SmartPools, SnapshotIQ, SyncIQ, SmartDedup, and others. This training consists of 8 modules. The total time required to complete this course and the accompanying lab exercises is approximately 5 days. This course is an update to the Isilon Administration and Management course.

| On Demand Class | 40 Hours | MR-1TP-ISIAM-0608 |

### PowerScale Advanced Administration

This course builds on the PowerScale Administration course to provide a deeper look at advanced topics such as Authentication, Performance Monitoring, Disaster Recovery and System Troubleshooting. This course is accompanied by hands-on lab activities. This is an update to the previously known Isilon Advanced Administration course and is offered exclusively as a classroom or remote classroom experience with a live instructor.

| Classroom | 40 Hours | ES103STG01979 |

### PowerScale Advanced Administration

This course builds on the PowerScale Administration course to provide a deeper look at advanced topics such as Authentication, Performance Monitoring, Disaster Recovery and System Troubleshooting. This course is accompanied by hands-on lab activities. This is an update to the previously known Isilon Advanced Administration course and is offered exclusively as a classroom or remote classroom experience with a live instructor.

| Virtual Class | 40 Hours | ES103STG01980 |

| Classroom | 40 Hours | ES103STG01980 |

### PowerScale and NetApp Admin Differences

This course provides a comparison in common daily tasks for a NetApp administrator and how or if they translate when using an Isilon cluster instead.
PowerScale Concepts
This course provides the groundwork to understand the Dell EMC PowerScale scale-out NAS solution from a holistic perspective. The latest architecture in terms of hardware configurations and software features are discussed in context with some of the use cases for the product. This is a direct update to the course previously known as Isilon Fundamentals 2019.

PowerScale File System: OneFS File System Data Layout
In this course we will discover the components of a PowerScale OneFS write request, examine the relationship between capacity, protection and performance, walk through the components of a read request, and balance decisions to match the goals for your data.

PowerScale Implementation
The Dell EMC PowerScale Implementation course is a video based, online presentation, designed to introduce customer engineers and implementation specialists to the steps to perform the initial configuration. This course is presented using a range of mediums, from animations to video demonstrations. Topics include creating a new cluster, joining a node to an existing cluster, completing the initial configuration, and completing other configuration options. This is an update to the course previously known as Isilon Initial Configuration 2017.

PowerScale Performance - IO Optimization
PowerScale Performance is a series of courses that step through configurable elements of the PowerScale operating system focused on changes in performance. Each course will focus on a specific scenario, their configurable elements and the expected performance attributes, then an associated on-demand lab will allow you to get hands on with performance tuning tasks.

PowerScale Performance - Migration with File Filtering
PowerScale Performance is a series of courses that step through configurable elements of the PowerScale operating system focused on changes in performance. Each course will focus on a specific scenario, their configurable elements and the expected performance attributes, then an associated on-demand lab will allow you to get hands on with performance tuning tasks.

PowerScale Performance - NDMP Tuning
PowerScale Performance is a series of courses that step through configurable elements of the PowerScale operating system focused on changes in performance. Each course will focus on a specific scenario, their configurable elements and the expected performance attributes, then an associated on-demand lab will allow you to get hands on with performance tuning tasks.

PowerScale Performance - Small File Storage Efficiency
PowerScale Performance is a series of courses that step through configurable elements of the PowerScale operating system focused on changes in performance. Each course will focus on a specific scenario, their configurable elements and the expected performance attributes, then an associated on-demand lab will allow you to get hands on with performance tuning tasks.

PowerScale Performance - SyncIQ Tuning
PowerScale Performance is a series of courses that step through configurable elements of the PowerScale operating system focused on changes in performance. Each course will focus on a specific scenario, their configurable elements and the expected performance attributes, then an associated on-demand lab will allow you to get hands on with performance tuning tasks.

Tech Exchange - PowerScale Simplify and Consolidate Workflows
This session discusses how PowerScale can simplify and consolidate workflows to increase flexibility, adding value to large-scale unstructured data assets. Our expert explains the benefits of using one operating system and provides use cases and examples of techniques to consolidate and control separation as needed.

SRM
SRM 4.x Administration User Interface
This course introduces the administration user interface features and functionalities. It describes the process of installing and validating an ApplicationSolutionPack using SRM frontend.

SRM 4.x Backend Operations
This course introduces the SRM Backend architecture and its data flow. This course also covers the tasks that are performed for monitoring and troubleshooting the backend component. The topology services and its functionalities are also discussed in this course.

SRM 4.x Complex Expansion - On-Demand Course
This course introduces techniques used to take data from multiple sources to generate reports using the complex expansion feature. This course covers four of the commonly used complex expansion types, which are simple-split, split, regex, and sql.

SRM 4.x Concepts - On-Demand Course
This course provides an introduction to SRM. It includes an overview of SRMs architecture, features, functionality, and user interface.
SRM 4.x Concepts: Alert Reports - On-Demand Course
This course covers an introduction to alert report in SRM. It also covers the operations that are performed in the alert report.

On Demand Class 15 Minutes ES131STG00216

SRM 4.x Concepts: Architecture
This course introduces the Dell EMC SRM architectural components like Frontend, Primary Backend, Additional Backends, Collector Manager and Database. It also describes the types of data collected and data flow, Base Deployment, All-in-One, and complete architecture models of SRM are also discussed in this course.

On Demand Class 30 Minutes ES132STG01106

SRM 4.x Concepts: Backup and Restore
This course introduces the SRM Backup concepts. This course also covers the operations for backup and restore. The VMware High Availability along with vSphere fault tolerance, vSphere vMotion and vSphere Storage motion are also discussed in this course.

On Demand Class 25 Minutes ES132STG01124

SRM 4.x Concepts: Graph Reports - On-Demand Course
This course covers an introduction to graph report in SRM. It also covers the operations that are performed in the graph report.

On Demand Class 15 Minutes ES131STG00214

SRM 4.x Concepts: Portal Navigation - On-Demand Course
This course identifies the functional areas of the SRM console and describes the options available in menu bar, navigation bar, and report area.

On Demand Class 30 Minutes ES131STG00211

SRM 4.x Concepts: Report Features and User Customizations - On-Demand Course
This course covers various report features like scheduling a report, changing display settings for a report, and so on. It also covers report wizards and other user customization options.

On Demand Class 15 Minutes ES131STG00218

SRM 4.x Concepts: Report Types - On-Demand Course
This course identifies various types of reports available in the portal and describes the options available in various report types.

On Demand Class 15 Minutes ES131STG00212

SRM 4.x Data Enrichment - On-Demand Course
This course provides the learner with an advanced understanding of SRM administration features concentrating on Data Enrichment.

On Demand Class 45 Minutes MR-1WP-SRM4ADM

SRM 4.x Extracting Data - On-Demand Course
This course introduces techniques to extract data from the SRM product. The techniques include report scheduling and web services. Web services include a presentation of SOAP XML and REST API.

On Demand Class 01 Hours MR-1WP-SRM4EXTDAT

SRM 4.x Features: Alert Configuration
This course explains the alerting components, process, and alert consolidation. It also describes frontend components, pre-configured alert definition, alert definition panel, and its components. This course also covers internal alert operations, storage-related prerequisites, enabling and disabling alert definition.

On Demand Class 35 Minutes ES132STG01119

SRM 4.x Features: Collector Operations
This course introduces DELL EMC SRM Collector, including Collector Host and Load Balancer Connector. It also explains SRM Solution Packs (SP), SP components, SP installation and maintenance, and event handling operations.

On Demand Class 30 Minutes ES132STG01123

SRM 4.x Features: Device Discovery
This course describes discovery center tools and process along with discovery center backend, process and architecture. It also covers device management and discovery wizard.

On Demand Class 25 Minutes ES132STG01201

SRM 4.x Features: User Management and Authentication
This course introduces the SRM Users, Profiles and Roles. It also describes master filter and role management. User Authentication and Authorization concepts are also covered in this course. Along with that LDAP securing connectivity setup is also discussed.

On Demand Class 45 Minutes ES132STG01118

SRM 4.x for Storage Administrators - Classroom
This course will assist storage administrators to monitor and report on a storage environment using SRM. Various SRM use cases are presented. Hands-on labs will cover the creation of localized dashboard views and reports which can be used to analyze common storage management issues related to performance, capacity planning, storage chargeback, configuration compliance, service level usage, and alerting.

Classroom 16 Hours MR-1CP-SRM4ADM

SRM 4.x for Storage Administrators - On-Demand Course
This course will assist storage administrators to monitor and report on a storage environment using SRM. Various SRM use cases are presented. Demos will cover the creation of localized dashboard views and reports which can be used to analyze common storage management issues related to performance, capacity planning, storage chargeback, configuration compliance, service level usage, and alerting.

On Demand Class 24 Hours MR-1TP-SRM4ADM-1612

SRM 4.x for Storage Administrators - Virtual Classroom
This course will assist storage administrators to monitor and report on a storage environment using SRM. Various SRM use cases are presented. Hands-on labs will cover the creation of localized dashboard views and reports which can be used to analyze common storage management issues related to performance, capacity planning, storage chargeback, configuration compliance, service level usage, and alerting.

Virtual Class 16 Hours MR-1TP-SRM4ADM

SRM 4.x Implementation
This course provides an overview of the SRM Installation process. It describes deployment operations, the post installation steps and validation. It also provides an overview on SRM Expansion. This includes SRM Expansion workflow, scaling out Backend and Collector, installation of Additional Backend Host, Collector Host, and Additional Frontend Host.

To learn more about these offerings, contact your Education Services Account Manager | COURSE CATALOG | 65
SRM 4.x Implementation and Management - On-Demand Course
This course covers initial installation, configuration, and validation of a SRM deployment using both the vApp and Binary methods. Lecture and labs will support performing frontend and backend administration, platform expansion, SolutionPack deployment, alerting, and related troubleshooting procedures. Demonstrations assist the learner to integrate and practice the skills introduced in class, and provide real-life experiences with selected Solution Packs and common administrative tasks.

On Demand Class 45 Minutes ES132STG01115

SRM 4.x Implementation and Management - Virtual Classroom
This course covers initial installation, configuration, and validation of a SRM deployment using both the vApp and Binary methods. Lecture and labs will support performing frontend and backend administration, platform expansion, SolutionPack deployment, alerting, and related troubleshooting procedures. Hands-on labs assist the learner to integrate and practice the skills introduced in class, and provide real-life experiences with selected Solution Packs and common administrative tasks.

On Demand Class 24 Hours MR-1LP-SRM4IM-1704

Virtual Class 24 Hours MR-1LP-SRM4IM

SRM 4.x Infrastructure Solution Pack
This course introduces SRM Solution Pack, its types, and functionalities. It describes the process of installing and validating an Infrastructure Solution Pack using SRM frontend.

On Demand Class 30 Minutes ES132STG01127

SRM 4.x Maintenance - On-Demand Course
The goal of the course is to provide knowledge on how to proactively detect potential issues in the SRM platform and to address them to alleviate the risk of loss of service of the SRM platform. The course begins with a holistic view of the platform before entering in components and architecture details. The course then covers common tasks in monitoring, troubleshooting, and maintaining of the backend, frontend, and collection layers of the platform. The final topic of this course covers backup and recovery, and upgrades of the SRM platform.

On Demand Class 16 Hours MR-1TP-SRM4MAINT-1704

SRM 4.x Maintenance - Virtual Classroom
The goal of the course is to provide knowledge on how to proactively detect potential issues in the SRM platform and to address them to alleviate the risk of loss of service of the SRM platform. The course begins with a holistic view of the platform before entering in components and architecture details. The course then covers common tasks in monitoring, troubleshooting, and maintaining of the backend, frontend, and collection layers of the platform. The final topic of this course covers backup and recovery, and upgrades of the SRM platform. In order to better integrate the concepts presented, some labs and demos activities are provided.

Virtual Class 16 Hours MR-1LP-SRM4MAINT

SRM 4.x Maintenance Concepts
This course introduces the maintenance tasks performed by the storage administrators. It also discusses about various logs and the operations carried out by vApp Utilities Manager.

On Demand Class 45 Minutes ES132STG01120

SRM 4.x Reporting - On-Demand Course
This course provides the learner with a base understanding of SRM reporting editing features. Many concepts of SRM reporting are covered: data organization, manipulation, and selection for report generation. The base concepts acquired will allow users to edit and customize reports, as well as to create base reports, such as tables, graphs, and advanced report types. Hands on labs will assist the learner to integrate and practice the lecture material. This course assumes you are already familiar with the report user interface and tools at the level of a user or report consumer.

On Demand Class 24 Hours MR-1TP-SRM4REP

Virtual Class 24 Hours MR-1CP-SRM4REP

SRM 4.x Reporting Features Revisited - On-Demand Course
This course covers the concept of spatial aggregation, additional features to enhance report layouts, modify reports through a period of exclusion, and create pre-generated reports.

On Demand Class 01 Hours MR-1WP-SRM4ADREP

SRM 4.x Storage Solution Pack
This course introduces SRM Solution Pack, its types, and functionalities. It describes the process of installing and validating a Storage Solution Pack using SRM frontend.

On Demand Class 30 Minutes ES132STG01121

On Demand Lab ES132STG01121

SRM 4.x Upgrades
This course introduces the SRM upgrades and its best practices. It lists down the required tools and credentials. It also explains automated upgrade and online update process.

On Demand Class 15 Minutes ES132STG01125

SRM Reporting
This course provides the learner with a base understanding of SRM reporting editing features. Many concepts of SRM reporting are covered: data organization, manipulation, and selection for report generation. The base concepts acquired will allow users to edit and customize reports, as well as to create base reports, such as tables, graphs, and advanced report types. Hands on labs will assist the learner to integrate and practice the lecture material. This course assumes you are already familiar with the report user interface and tools at the level of a user or report consumer.

Virtual Class 24 Hours MR-1LP-SRM4REP
CI/HCI Block Rail

VxRail

DCS-SA VxRail System Administrator [Classroom] - Package

This Learning path present the entirety of the curricula required to complete the learning activities in order to attain the DCS-6332 Specialist - Systems Administrator, VxRail certification.

This package includes the following courses:

- VxRail Administration(Virtual Class, 24 Hours|Classroom, 24 Hours)
- Cloud Infrastructure and Services v3 - On-demand Course(On Demand Class, 32 Hours)
- VxRail 7.0.XXX Concepts(On Demand Class, 01 Hours 30 Minutes)
- VxRail 7.0.XXX Feature - REST API(On Demand Class, 02 Hours)
- Cloud infrastructure and Services v4(On Demand Class, 32 Hours)

VCF on VxRail Administration - Package

This Learning path present the entirety of the curricula required to complete the learning activities from VxRail orientation through VCF on VxRail administration.

This package includes the following courses:

- VxRail Administration(Virtual Class, 24 Hours|Classroom, 24 Hours)
- VCF 3.9.0 on VxRail Concepts - On Demand Course(On Demand Class, 01 Hours)
- VxRail 7.0.XXX Concepts(On Demand Class, 01 Hours 30 Minutes)
- VxRail 7.0.XXX Feature - REST API(On Demand Class, 02 Hours)
- VCF 4.2 on VxRail Administration(Classroom, 16 Hours|Virtual Class, 16 Hours)