

# **Enterprise Computing Solutions - Education Services**

# NABÍDKA ŠKOLENÍ

Prosím kontaktujte nás zde

Arrow ECS, a.s., 28. října 3390/111a, 702 00 Ostrava

Email: training.ecs.cz@arrow.com Phone: +420 597 488 811

# **MILLIN** HPE Storage Solutions, Rev. 20.41

Kód: DÉLKA: CENA:

HPE 0001132323 40 Hours (5 DENNÍ) Kč bez DPH 64,900.00

## **Description**

Školení je vedené v češtině.

This course teaches students how to identify, recommend, and explain HPE Enterprise Storage Solutions architectures and technologies, and translate business requirements into storage solution designs that support applications and data across physical, virtual and cloud environments with a common architecture and converged management. The course also covers designing HPE Backup Solutions including the right Backup, Recovery, and Archive (BURA) strategies for various customer scenarios. The course uses participant centered learning with 30% lecutre and 70% hands-on lab exercises.

Toto školení pořádá školicí středisko TD SYNNEX Academy

#### Cíle

After you successfully complete this course, expect to be able to:

Identify, recommend, and explain HPE Enterprise Storage Solutions architectures and technologies.

Translate business requirements into storage solution designs that support applications and data across physical, virtual and cloud environments with a common architecture and converged management.

Explain the HPE Storage Management tools.

Explain HPE 3PAR and Primera OS and configuration.

Explain Nimble storage features.

Explain the fundamentals of virtualization and virtualization management capabilities.

Describe SAN Fabric Topologies, SAN design principles and considerations.

Describe planning a RAID configuration.

Identify Drive I/O and Performance.

Provide an overview of HPE Reference Architectures.

Describe the goals of HPE presales consultants and storage architects.

Explain how to use HPE sizing, planning and ROI tools.

Explain the HPE Storage Management tools

Explain HPE 3PAR and Primera OS and configuration

Explain Nimble storage features

Explain the fundamentals of virtualization and virtualization management capabilities

Describe SAN Fabric Topologies, SAN design principles and considerations.

Describe planning a RAID configuration

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#### Určeno pro

Typical candidates for this course are channel partners, customers, and HPE employees who interpret customer requirements to design, install, configure, and manage HPE storage and backup solutions. The candidate will be able to demonstrate critical-thinking skills required to design, optimize, deploy, manage, and troubleshot storage solutions.

#### Vstupní znalosti

The HPE ATP - Hybrid IT Solutions V1 or V2 certification.

#### **Program**

Compare different storage technologies

File-based storage

Block-based storage

Object-based storage Comparison

Describe and evaluate use cases for various disk related technologies

Storage networking architectures and technologies

Interfaces

Disk (HDD) types and technologies

Flash-based technologies

Memory types

Describe storage related technologies

Storage virtualization options

Storage scalability options

Thin provisioning

Compression

Deduplication

Data migration

Comparison to traditional approach

Storage architectures andtechnologies Use-cases

Identify product and discuss features of:

Modular Smart Array (MSA)Nimble Storage

3PAR StoreServ

Primera

XP (overview only)

SimpliVity (overview only)

HPE storage products review Software-defined Storage

Describe SAN transport technologies and components

Transport technologies

Interconnect devices and adapters

StoreFabric portfolio overview

Describe and characterize the different SAN technologies

Used transport protocols

Available features

Zoning

Describe and characterize the different SAN topologies

HPE supported topologies

Redundancy and high availability

Scalability

Advantages and disadvantages

Describe storage presentation to hosts in SAN context

Basic concepts

Storage based presentation

Multi-pathing options and technologies

Describe the data protection terminology

Availability and downtime

RPO and RTO

3-2-1 rule

Disaster Recovery

Describe backup, archiving, and data availability technologies

Malware protection

Archiving concepts

Backup vs archiving

Available technologies and features

Tiering

Security aspects

Data protection aspects

Data protection

HPE backup solutions- disk

Review the HPE StoreOnce product

Overview

Portfolio and Positioning

Features and functions

**Emulation types** 

Networking

Explain the features of Deduplication technology in backup context

Deduplication: What is it?
Deduplication technology types
Key Benefits of Data Deduplication
How hash based chunking works
Target/server/source-side deduplication

How deduplication integrates into backup software

Explain the features of Catalyst technology

Overview

StoreOnce Catalyst features and benefits

StoreOnce Integrations

HPE backup solutions-tape

**HPE Recovery Manager Central Software** 

Overview
Building blocks
Features overview

Basic integration with HPE products

Veeam Backup & Replication Overview

Building blocks
Features overview

Describe HPE StoreEver Tape solutions

HPE StoreEver Tape portfolio

LTO Ultrium Management Features

Linear Tape File System HPE Library and Tape Tools

Enterprise Secure Key Manager Backup and archiving software solutions – part 1 Basic integration with HPE products

Micro Focus Data Protector

Overview Building blocks Features overview

Basic integration with HPE products Commvault Complete Backup & Recovery

Overview Building blocks Features overview

Basic integration with HPE products SimpliVity protection and integration iTernity Compliant Archive Software (iCAS)

Backup and archiving software solutions-part 2 Cloud offerings and integrations

Infrastructure monitoring protocols and standards review

SNMP, SMI-S and REST API

Storage and backup products monitoring options

Modular Smart Array (MSA)

Nimble Storage

3PAR StoreServ / Primera

StoreOnce SAN Monitoring B. C and M -Series

Insight Remote Support review

Advanced administering and monitoring InfoSight

Staging an effective storage consulting engagement

Describe the goals of HPE presales consultants and storage architects

Identify Consultative sellingExplain how to use HPE sizing and planning tools during a consulting engagement

Calculate Payback period and ROI

Use Storage Assessment Foundry

List the available return on investment and total cost of ownership tools

Direct others to HPE resources online List steps for a Proof of Concept test

List HPE storage services

HPE Partner Ready Delivery Services program

Position the different HPE Storage arrays

Storage planning and sizing tools

Array planning and sizing

Describe SAN design principles and considerations

Planning and designing HPE storage solutions Talk about licensing

Identify data tiering and retention

List challenges in Data Protection

Discovering data protection opportunities

Not all data are equal: Classifying information

Solution and categorization

Recovery operations

The effectiveness of recovery

Steps in disaster recovery

Backup strategy planning

Protection and recovery methods

Data protection and retention challenges

Delivering agility and efficiency

Present HPE backup and restore strategy Backup and recovery strategy planning

Understanding the factors that influence the backup solution

Preparing the backup design

Backup topologies

Planning and designing HPEBURA solutions—theory Zoning for backup

Perform StoreOnce planning and sizing

HPE StoreOnce backup device emulation options HPE StoreOnce performance and sizing guidelines

Networking

Resource prerequisites for HPE StoreOnce VSA

Sizing considerations

Reference documents and sizing tools

**Emulation options** 

Performance and sizing guidelines

NinjaProtected Tool and Get Protected Guarantee

What is the NinjaProtected Tool? What does it do? What does it deliver? Why use the NinjaProtected Tool?

Perform RMC sizing Sizing considerations

Deployment and integrations

**Best Practices** 

Planning and designing HPEBURA solutions- practice Discuss licensing

Upgrade HPE 3PAR StoreServ and Primera system

Nimble Timeless Storage programUpgrade HPE Nimble array

Describe Nimble Scale-to-Fit options Upgrade HPE StoreOnce system Tune HPE 3PAR StoreServ and Primera

Optimize HPE Storage systems

Optimize StoreOnceDeduplication ratio Update HPE 3PAR and Primera OS Update HPE 3PAR Service processor

Upgrading, optimizing, and tuning HPE storage and BURA solutions Optimize HPE Backup systems and backup jobs

### Termíny školení

Termíny školení na vyžádání, kontaktujte nás prosím

## Dodatečné informace

Školení je možné zajistit na míru. Kontaktujte nás pro bližší informace.