

Szkolenie: HPE  
HPE XP Storage Array Administration and Configuration

FORMA SZKOLENIA	MATERIAŁY SZKOLENIOWE	CENA	CZAS TRWANIA
Stacjonarne	Tradycyjne	9500 PLN NETTO*	5 dni
Stacjonarne	Tablet CTAB	10100 PLN NETTO*	5 dni
Metoda dlearning	Tradycyjne	9500 PLN NETTO*	5 dni
Metoda dlearning	Tablet CTAB	10100 PLN NETTO*	5 dni

\* (+VAT zgodnie z obowiązującą stawką w dniu wystawienia faktury)

## LOKALIZACJE

Kraków - ul. Tatarska 5, II piętro, godz. 9:00 - 16:00

Warszawa - ul. Bielska 17, godz. 9:00 - 16:00

## Cel szkolenia:

This course introduces students to the XP7 array terminology, function, architecture, and configuration. Students will get hands-on practice with LUN and volume management, data replication, cache partitioning, thin provisioning, Auto LUN, Performance Monitor, and Performance Advisor. In addition, we cover the concepts and setup of XP7 High Availability and Command View Advanced Edition. This course is 60% lecture and 40% hands-on labs.

## Course objectives:

- Understand the hardware architecture of the HPE XP7 disk array
- Use Remote Web Console user interface to manage and view XP configuration information
- Use RAID Manager command line to manage the array configuration
- Set the fibre port topology for the XP ports
- Configure LUNs
- Use the Volume Manager to create custom size volumes
- Understand how to implement LUN security
- Handle multiple paths to a LUN
- Understand XP replication products: Business Copy, Fast Snap, and Continuous Access
- Understand how to use external storage

## Audience / Job Roles

Storage administrators responsible for the configuration and management of HPE XP7 disk arrays

## Plan szkolenia:

- XP7 Array Concepts and Hardware
  - Architecture overview
  - XP7 building blocks
  - Component details
  - Terminology
- Remote Web Console
  - Management options
  - Web console architecture
  - Web client requirements
  - Web console navigation
- Command Line Interface
  - Setup RAID Manager
  - Send commands to SVP in-band and out of band
  - Authenticate with SVP
  - List array configuration
- Volume Management
  - Custom volumes
  - Custom volume overview
  - Volume usage
  - Capacity expansion enabled parity groups
  - Command line for volume management
  - Volume Shredder
  - Data retention
- LUN Management
  - Fibre port management
  - Host groups
  - Host modes
  - Fibre port topology and settings
  - Create LUNs and command devices
  - Command line for LUN management
  - Use of the XPInfo tool
  - Multi-pathing solutions
- XP7 Thin Provisioning and SMART Tiers
  - What is Thin Provisioning (THP)?

- THP operation sequence
- THP pools
- Subscription limits
- Rebalancing THP pools
- Monitoring pool and THP volume space usage
- THP Smart Tiers
- Capacity expansion enabled FMD pools
- Cache Partitioning
  - With and without cache partitions
  - Cache Logical Partitions (CLPRs)
- External Storage
  - Overview and features
  - External storage path modes
  - Cache mode
  - Use with cache partitions
  - Configure external ports
  - Configure external volumes
  - Power on and off order
- Performance Monitor and Performance Control (PFC)
  - Data collection
  - Viewing collected data
  - XP7 QOS Performance Control (PFC)
  - Performance Control RAID Manager commands
- Performance Advisor
  - Product overview
  - Collecting array and host information
  - Management Station — components
  - Host agents and clients
  - Installing and logging on to Performance Advisor
  - Performance Advisor GUI
  - PA licensing
  - Configuration data collection
  - Creating charts
  - Generating and scheduling reports
- Business Copy
  - Business Copy terminology

- Full copy vs. Fast Snap comparison
- Business Copy operations and states
- Configuring Business Copy with RWC
- Configuring Business Copy with RAID Manager
- Auto LUN
  - Tiered storage approach
  - Auto LUN migration
  - Auto LUN tasks
  - Auto LUN migration configuration
- Fast Snap (Snapshots)
  - Fast Snap overview
  - Fast Snap components
  - Floating snapshots
  - Snapshot states
  - Cascade snapshots
  - Fast Snap Clone
- Performance Advisor
  - Continuous Access overview
  - Continuous Access Synchronous overview
  - Fence levels
  - Continuous Access Journal overview
  - CA Journal link requirements
  - 3 Data Center CA model
- XP7 High Availability Concepts
  - HA vs CA Synchronous comparison
  - Virtual DKC (virtual storage machine) concepts
  - HA I/O operation walkthrough
  - HA components
  - HA failure scenarios
  - 3 Data Center HA model
- High Availability Setup (lecture only)
  - Array to array connections
  - Setup quorum device
  - Configuring Virtual DKC (VSM)
  - Pair creation
  - ALUA configuration

- HA configuration with CVAE
- Introduction to Command View
  - Advanced Edition
  - Command View AE features
  - Architecture
  - Device Manager host agent and web client
  - GUI highlights
  - Logical Group concept

## Wymagania:

Knowledge of networks and the storage administration tasks for the operating system being served by the array will be useful.

## Poziom trudności



## Certyfikaty:

The participants will obtain certificates signed by HPE (course completion).

## Prowadzący:

Authorized HPE Trainer.