



HP 教育訓練中心課程簡介

HP Accelerated SAN Essentials (UC434S)

本課程為技術人員了解 SAN 的加速學習路徑。內容除讓您在短期內全面性瞭解 SAN 技術與概念外，還提供企業環境中所需要 SAN 的解決方案及相關經驗。

適合對象

- 本課程是專為尋求快速學習途徑的技術專家所設計，其中包括 Fibre Channel SAN 技術的概念知識和在不同 SAN 環境的體驗。

先修課程

- 網路和儲存設備、概念以及術語的基本技術認知。
- 管理 Windows 或 UNIX 系統的經驗。
- 建議參加 <http://education.itrc.hp.com> 上提供的免費線上課程：SAN Fundamentals (U5527aae)。

課程目標

At the conclusion of this course you should be able to:

- Identify the differences between DAS, NAS, and SAN
- Explain fibre channel layers and switch configuration parameters
- Boot from SAN and verify device connectivity
- Install and use SANsurfer utility
- Implement zoning and troubleshoot fabric segmentation
- Configure an HP storage SAN and RBAC B-series
- Secure SAN data and mitigate risk
- Plan a disk system that accounts for effects of RAID, cache, and chunk size on performance

課程效益

- Gain a comprehensive understanding of the leading SAN technologies and the experience needed to tackle the challenges of working with SAN solutions

為何選擇 HP 教育訓練中心？

- Training Industry Top 20 training provider and content development
- Recognized as an IDC MarketScape leader for IT education (IDC MarketScape: Worldwide IT Education and Training 2012 Vendor Analysis, doc #232870, February 2012)

Course title:	HP Accelerated SAN Essentials
HP product number:	UC434S
Category/Subcategory:	Storage
Course length:	5 days
Level:	Intermediate
To order:	To review course schedules and to register for a course, visit http://www.hp.com.tw/education

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進階課程

- Managing HP Storage Enterprise Virtual Array (U4879S)
- HP Storage XP1: Configuration and Management (H6773S)

課程大綱

Introduction

- SAN definition, benefits, and goals
- High-speed backup and availability
- Server and storage consolidation

- DAS, NAS, and SAN concepts and comparisons
- Host, target, and interconnect device characteristics
- Power-on sequence

Fibre Channel (FC) Basics

- FC terminology, port types, topologies, and layers
- Class of service

Fibre Channel Switches

- Switch configuration parameters
- Principal switch selection
- Frame routing within a fabric
- Trunking and port channels
- Virtualization within the fabric

SAN Hosts

- Host role within SAN and virtualization
- Host installation checklist and bus connections
- Boot from SAN and load balancing
- Multi-path SAN connections and software
- Multi-path I/O (MPIO) components within OS

Disk Targets

- Disk drives and associated technologies
- How disks are connected to controllers
- LUN masking and array management

Fibre Channel Advanced

- Fibre channel addressing and reserved addresses
- Ordered sets
- Primitive signals and sequences
- Flow control and zoning
- Link and fabric services
- Fabric login and segmentation

SAN Management

- SAN management choices and considerations
- Technologies driving SAN management
- HP SAN management today
- HP storage essentials

iSCSI

- IP storage
- iSCSI stack, packet construction, and name convention
- iSCSI connection, hardware options, and security

- HP Storage SAN as a sample of a iSCSI system

SAN Extension

- SAN extension technologies and implementations
- Fibre channel over IP (FCIP)
- FCIP and its role in SAN extension
- FCIP performance and security
- Fibre routing implementations in a SAN

FCoE / CEE

- FCoE and CEE standards
- FCoE I/O consolidation and terminology
- Lossless ethernet
- FCIP, iSCSI, and FCoE protocols

SAN Security

- Basic storage security model and access points
- Planning security in a SAN
- Core components for securing SAN data management
- Security in practice
- Authentication and encryption

Data Protection

- Backup types and their differences
- Accelerated and dynamic de-duplication
- Synchronous and asynchronous replication
- Split mirror and snapshot replication

Performance

- Factors affecting SAN, disk, and drive speed performance
- Fibre channel technology and how it affects storage performance
- Planning a disk system that accounts for effects of RAID, cache, and chunk size on performance
- I/O profiling

SAN Design

- Architecture choices and design considerations
- HP standard SAN topologies and topology design rules
- Core and edge architecture
- Levels of high availability in SAN architecture

更多訊息

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所有課程相關訊息及活動請造訪：
<http://www.hp.com.tw/education>

