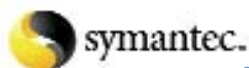


*fast lane*

# Storage & DataCenter Training 2009

**Discover tomorrow's  
Data Center Solutions today!**



# Welcome to Fast Lane!



We are pleased to present to you our comprehensive offering of Storage & Data Center training and certification here in our 2009 catalog. You will find individual courses listed on the next page. Our specialists will be happy to adapt training to your unique requirements. What's more, we can conduct all training on-site at your location.

Certified by the various vendors, our coaches bring to the classroom extensive practical experience with data centers. Our training goes far beyond mere classroom theory, affording every course participant opportunities to gain the necessary hands-on experience in our high-end data center labs.

We can deliver our training to you worldwide. Fast Lane has planted a footprint on all continents, with offices in 50 countries. This makes us the only Cisco Learning Solutions Partner (CLSP) worldwide serving all regions, as well as the only global Learning Partner of NetApp.

Our experienced experts will be delighted to help you draft a training plan attuned fully to your demands and geared to develop the professional skills your people need to make the most of your data center solutions.



We look forward to working with you.

Torsten Poels  
Senior Vice President & General Manager  
Europe, Americas & Japan  
Fast Lane

## AUTHORIZED NetApp TRAINING

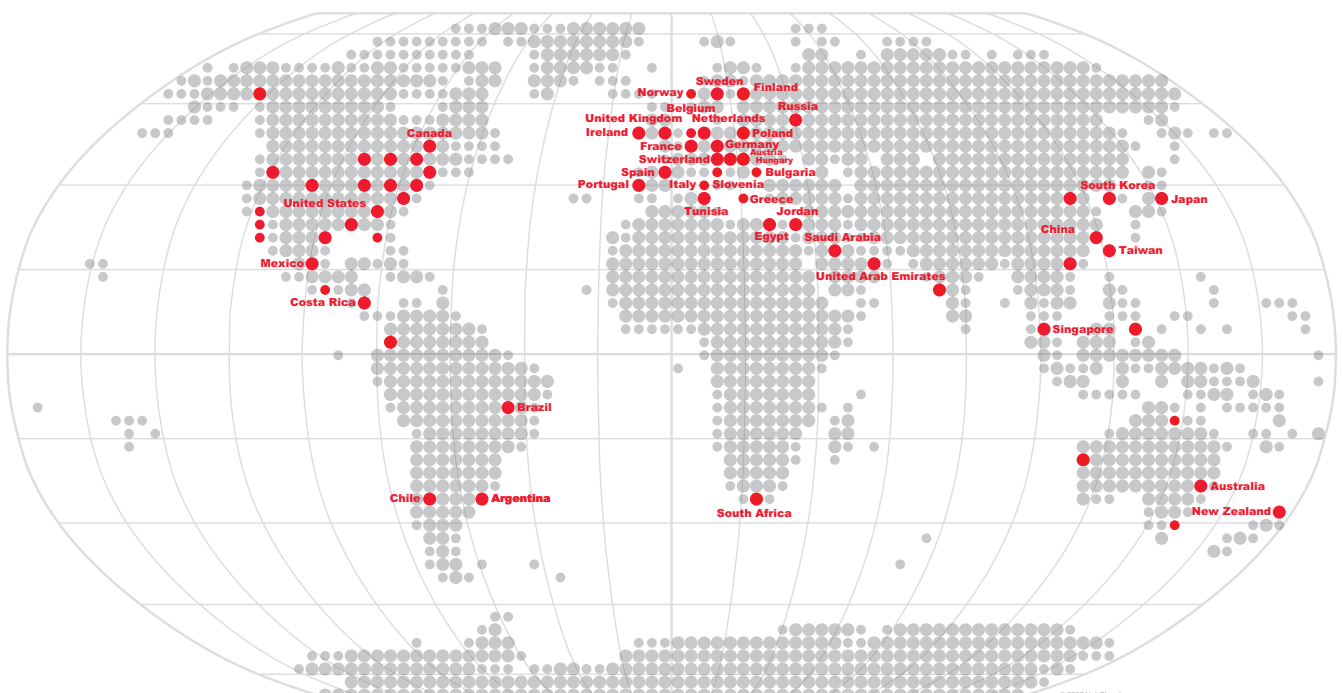
Fast Lane is the only global NetApp Learning Partner. We offer the full NetApp curriculum in more than 50 countries and 12 languages. 100 certified Fast Lane storage experts deliver our training programs to you worldwide.

**Redeem your NetApp Training Units (TUs).** Fast Lane is proud to accept NetApp training units. TUs can be used to purchase any NetApp course.

## AUTHORIZED Cisco TRAINING

Fast Lane is Cisco's fastest growing Cisco Learning Solutions Partner (CLSP) and is represented worldwide with subsidiaries in all regions. Fast Lane's instructors have been certified by Cisco to teach their authorized courses.

**Redeem your Cisco Learning Credits (CLCs).** Fast Lane accepts Cisco Learning Credits. CLCs can be used to purchase any Cisco course.

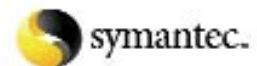


Fast Lane Training Centers

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Prices in this catalogue exclude VAT. Please note that pricing may differ between countries.

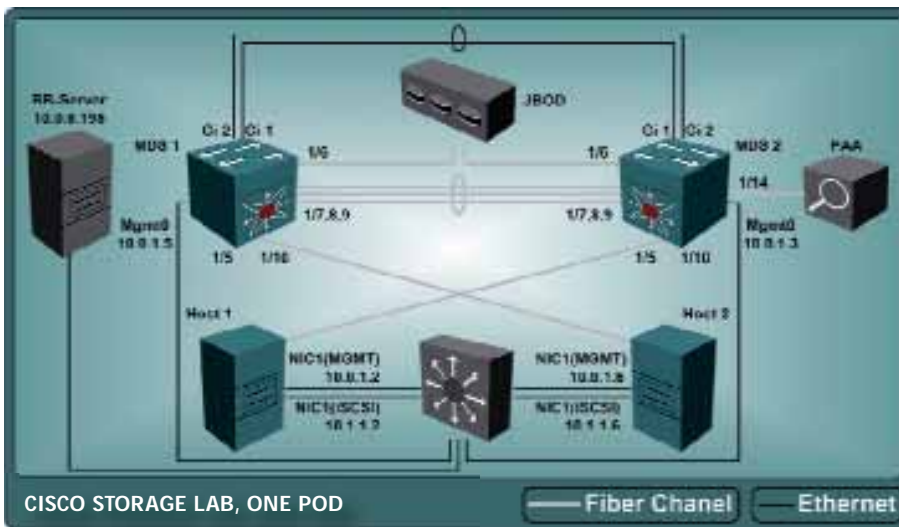
# High-end Data Center Labs



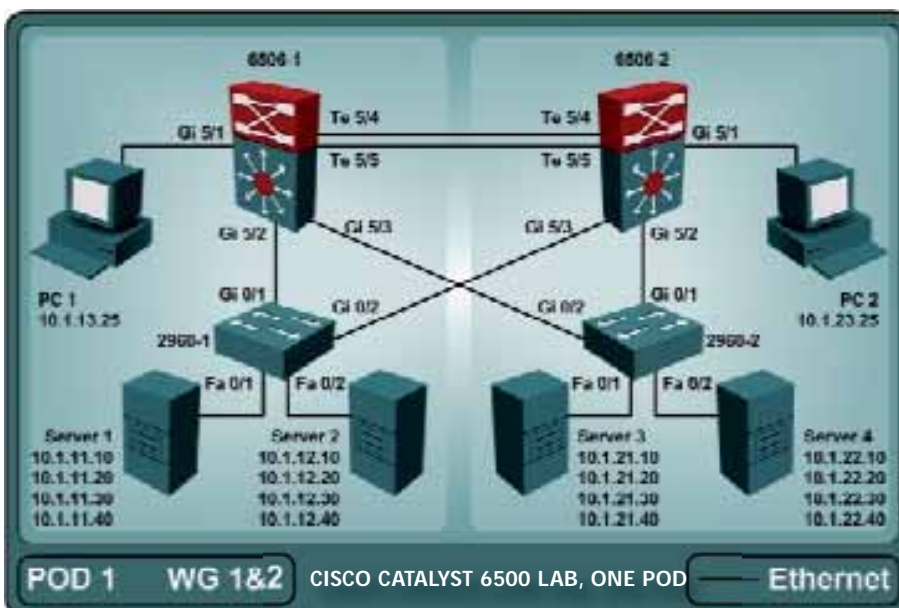
We offer our customers a data center solutions training and demo lab environment unrivalled worldwide. Featuring the latest devices and technologies, our high-end-labs provide first-rate service, setting premium quality standards for training. Our project consultants can also access our labs from any location, demonstrating complex storage environments in action on site, and enabling customers to test them under real-world conditions.

## CISCO DATA CENTER LABS

We offer you Europe's only Cisco SAN Lab with two MDS 9509 and 32 MDS 9216i switches. Each pod includes two MDS 9216i switches, one port analyzer, a JBOD and two high performance Dell servers.

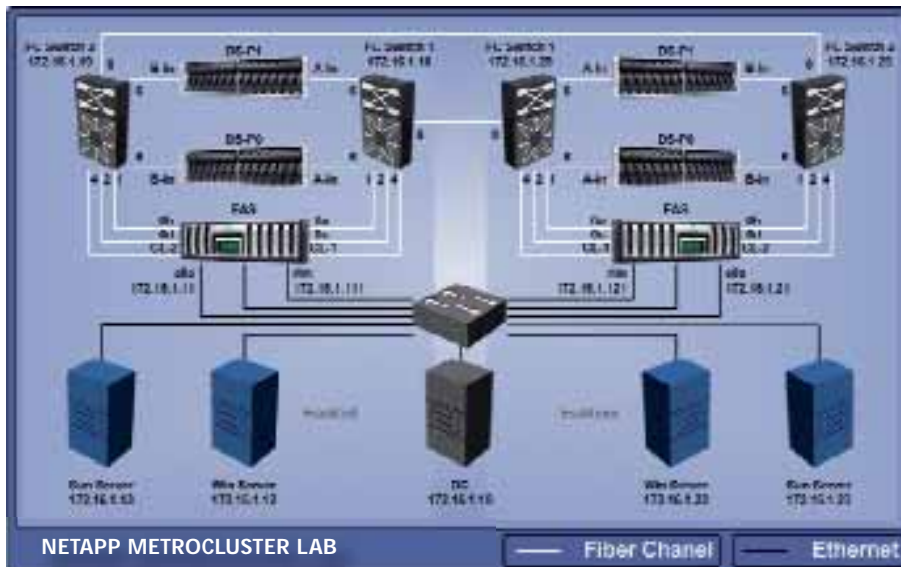


Our big Catalyst Core Lab comprises 14 Cisco 6500 Catalyst switches equipped with Virtual Switching Supervisor Engines 720-10G, Firewall Service Modules (FWSM), NAM as well as redundant ACE modules.



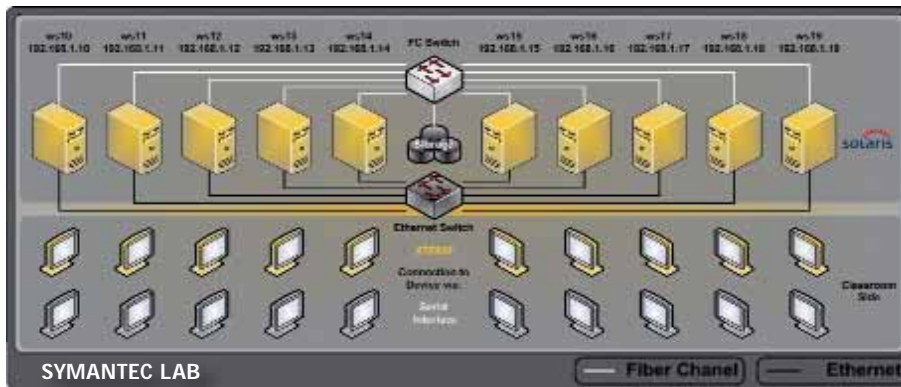
## NETAPP LABS

Fast Lane offers 12 NetApp Labs with FAS3040 Fabric Attached MetroCluster as well as 16 FAS2050 and 32 FAS270C storage systems. The labs include high performance Dell servers with Solaris and Windows. In addition the labs are equipped with Symantec and VMware backup and virtualization solutions.



## SYMANTEC LABS

Our Symantec labs include numerous high performance servers with Solaris and Windows, Brocade switches and tape libraries.



## HIRING REMOTE LABS

ID	Labs	Hours	Days	Pods	Total Price	Price/Day
L-DOTF	Data ONTAP 7.3 Fundamentals	40	5	8	3.490,00 EUR	749,00 EUR
L-CIFS	CIFS Administration on Data ONTAP 7.3	16	2	8	1.390,00 EUR	749,00 EUR
L-NFS	NFS Administration on Data ONTAP 7.3	8	1	8	749,00 EUR	749,00 EUR
L-SAN	SAN Administration on Data ONTAP 7.3	24	3	8	2.090,00 EUR	749,00 EUR
L-NPSA	NetApp Protection Software Administration	24	3	8	2.090,00 EUR	749,00 EUR
L-METRO	MetroCluster	16	2	8	1.390,00 EUR	749,00 EUR
L-SME	NetApp SnapManager 5.0 for Microsoft Exchange	32	4	8	2.790,00 EUR	749,00 EUR
L-NAVMW	VMware on NetApp Storage Systems	40	5	8	3.490,00 EUR	749,00 EUR
L-ACESM	Implementing the ACE Service Module	32	4	8	3.490,00 EUR	749,00 EUR
L-ACEAP	Cisco Application Control Engine Appliance	32	4	8	3.490,00 EUR	949,00 EUR
L-ACEDES	Designing an Enterprise Application Infrastructure	32	4	8	3.490,00 EUR	949,00 EUR
L-WAAS	Wide Area Application Services	24	3	8	2.690,00 EUR	899,00 EUR
L-DCNI-1	Implementing Cisco DC Network Infrastructure 1	40	5	8	3.490,00 EUR	749,00 EUR
L-DCNI-2	Implementing Cisco DC Network Infrastructure 2*	32	4	8	2.090,00 EUR	599,00 EUR
L-ICSNS	Implementing Cisco Storage Networking Solutions	40	5	8	3.490,00 EUR	749,00 EUR
L-IASNS	Implementing Cisco Adv. Storage Networking Solutions	40	5	8	3.490,00 EUR	749,00 EUR
L-DCSNS	Designing Cisco Storage Networking Solutions	40	5	8	3.490,00 EUR	749,00 EUR

NETAPP LABS  
CISCO LABS

\*Titanium-Simulator Prices exclude VAT.

Our labs are available to you for many data center training courses and also for customer focused training offerings. You can rent the labs weekly or by the day. If you want more information or have questions about our remote lab offering, simply dial +49 (0)40 25334610 or send an e-mail to info@flane.de.

## Storage Foundation (SAN)

**ID FL-SAN Price 2.950,00 EUR (excl. VAT) Duration 5 Days**

### WHO SHOULD ATTEND

- Entry level storage technicians

### PREREQUISITES

- **Networking & TCP/IP Fundamentals (NWF)** and **Troubleshooting TCP/IP Fundamentals (TTCP)** courses

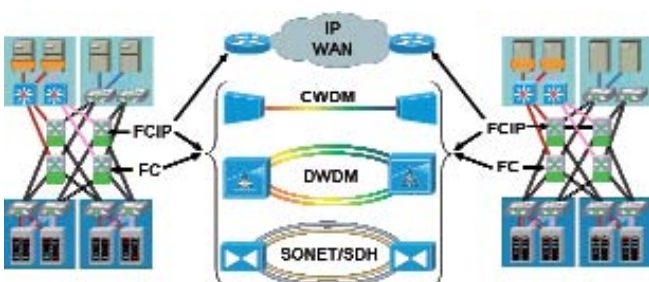
### COURSE OBJECTIVES

This course gives an overview of the design and concepts of storage technology as well as covering vendor specific features and protocols.

### COURSE CONTENT

- Overview
  - Direct Attached Storage
  - Network Attached Storage
  - Storage Area Networks
  - Difference DAS <-> NAS <-> SAN
  - Combinations NAS and SAN
  - Differentiation Blocklevel and Filelevel
  - Unified Storage
  - Storage Appliances and Storage Gateways
  - Market overview NAS and SAN
  - Market and perspectives
- Protocols
  - Small Computer System Interface (SCSI)
  - SCSI Commands and Versions
  - Fiber Channel Protocol (FCP)
  - Fiber Channel Packet design
  - SCSI via IP (iSCSI)
  - TCP/IP encapsulated SCSI
  - FCIP, iFCP, Ficon
  - Fiber versus Copper
- Components
  - Hosts, Host Bus Adapters
  - HBA's for FCP and iSCSI
  - Typical Host-Applications in the SAN
  - Storage Appliances
  - Storage Gateways

- Storage Virtualization
- Tapes and Libraries
- Backup-Strategies
- Fiber Channel Switches
- Fiber Channel Topologies
- Fiber Channel Fabric
- NAS and SAN Features
  - Replication and Mirror
  - Data Protection
  - High Availability
  - Disaster Recovery
  - Snapshots and Clones
  - Central SAN Management
  - Scalability and flexibility
  - Storage Consolidation
  - Diskless Server – Boot over IP/FC
  - LAN-Free Backup with NDMP
- Design and Implementation
  - Application analysis
  - Evaluation of Storage demand
  - Topology design
  - Storage Resources Design
  - Fiber Channel Zoning
  - iSCSI SAN Design
- Storage Market Overview
  - Storage Appliance Vendors
  - Storage virtualization Hard- and Software
  - Fiber Channel Switch vendors
  - Best practices
  - Vendor solutions



SCHEDULE Germany		SCHEDULE Switzerland	
Munich	23.02.-27.02.09	Frankfurt	E 19.10.-23.10.09
Hamburg	E 23.03.-27.03.09	Stuttgart	02.11.-06.11.09
Berlin	20.04.-24.04.09	Berlin	23.11.-27.11.09
Stuttgart	25.05.-29.05.09	Frankfurt	07.12.-11.12.09
Duesseldorf	E 22.06.-26.06.09	Zurich	23.02.-27.02.09
Berlin	13.07.-17.07.09	Zurich	E 25.05.-29.05.09
Munich	17.08.-21.08.09	Zurich	02.11.-06.11.09
Hamburg	21.09.-25.09.09	E Training in English	
Duesseldorf	05.10.-09.10.09	Further English dates on request	

Fast Lane is the only global NetApp Learning Partner. We offer the full NetApp curriculum in more than 50 countries and 12 languages. 100 certified Fast Lane storage experts deliver our training programs to you worldwide.

## ORIGINAL NETAPP

As an authorized NetApp Learning Partner, Fast Lane offers NetApp's original training programs to you wherever in the world you may be. Our storage specialists share their knowledge and experience, helping you acquire the skill set it takes to design and implement highly-available and scalable NetApp storage systems.

## SUPPLEMENTARY TRAINING

We conduct further courses alongside authorized NetApp training, for instance, NetApp Power Workshops and special sales courses.

## STORAGE SECURITY TRAINING

We also offer training on NetApp DataFort products and solutions that use encryption, authentication, secured access, and partitioning to protect storage networks.

## CUSTOMIZED TRAINING RIGHT ON SITE

Our storage specialists relish the challenge of adapting training to suit your needs. We can even conduct all NetApp training at your company's location.

## TOP COACHES

All our instructors are NetApp-certified specialists with extensive practical experience in the storage environment.

## NETAPP LABS

NetApp training extends far beyond mere classroom theory, affording every course participant opportunities to gain hands-on experience installing, configuring, and troubleshooting these systems. Fast Lane offers twelve NetApp labs featuring FAS3040 Fabric Attached MetroCluster as well as 16 FAS2050 and 32 FAS270C storage systems. These labs also comprise Dell servers with Solaris and Windows operating systems. And they are equipped with backup and virtualization solutions from Symantec and VMware.

## NETAPP TRAINING UNITS

Redeem your NetApp Training Units! You are free to use NTUs to pay for any NetApp training.



**„ NetApp relies on Fast Lane, as its sole global partner for customer training. In response Fast Lane continues to exceed our expectations in execution, quality of classroom training, expansion plans and focus.“**



Bruce MacInnis,  
Sr. Mgr. Global  
Commercial Education,  
NetApp, Inc. -  
NetApp University

# NetApp Products & Technologies

---

**Data center proven and engineered to simplify your critical storage networking infrastructure.** NetApp delivers powerful, data center proven products and services designed to simplify complex IT environments and dramatically reduce your total cost of ownership. Designed to support large data centers, NetApp's industry-leading products make your data management scalable, flexible, and available.

## PRIMARY STORAGE

NetApp primary storage enables you to unify and streamline your infrastructure by consolidating storage across many servers and applications over any storage fabric.



FAS2000 Series



FAS6000 Series



FAS3000 Series

## NEARLINE STORAGE

The NetApp NearStore system bridges the gap between primary storage and offline storage by providing much faster data access than offline storage at a cost much lower than primary storage. This makes NearStore ideal for data protection and retention applications such as disk-to-disk backup, disaster recovery, archival, compliant retention, and content storage.



NearStore on FAS, NearStore VTL

## STORAGE VIRTUALIZATION

NetApp V-Series is a network-based solution that virtualizes tiered, heterogeneous storage arrays enabling unified block (FCP and iSCSI) and file (NAS) access to data stored in Fibre Channel SAN storage arrays.



V-Series

## STORAGE SECURITY

NetApp DataFort offers you the only unified platform that transparently secures data at rest across heterogeneous enterprise environments. DataFort appliances are enterprise-class storage encryption systems that build the foundation to protect core data assets.



DataFort Platform

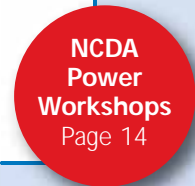


NetApp's comprehensive certifications give you the opportunity to validate your knowledge and skills as a trained NetApp technical professional. Fast Lane delivers the courses you need to prepare for the certification you desire.



## NETAPP CERTIFIED DATA MANAGEMENT ADMINISTRATOR (NCDA)

Test	Recommended Training
NSO 153: Storage Networking	<ul style="list-style-type: none"> <li>• Data ONTAP 7.3 Fundamentals (DOTF)</li> <li>• CIFS Administration on Data ONTAP 7.3 (CIFS)</li> <li>• NFS Administration on Data ONTAP 7.3 (NFS)</li> <li>• SAN Administration on Data ONTAP 7.3 (SAN)</li> </ul>
NSO 163: Data Protection Solutions	<ul style="list-style-type: none"> <li>• NetApp Protection Software Administration (NPSA)</li> <li>• High Availability (NAHA)</li> </ul>



## NETAPP CERTIFIED SOLUTION ARCHITECT (NCSA)

There are currently 4 specializations, or disciplines, that someone can earn: SAN, Backup & Restore, Business Continuity and Security.

Test	Recommended Training
NSO 301: SAN Solution Architect	<ul style="list-style-type: none"> <li>• Data ONTAP 7.3 Fundamentals (DOTF)</li> <li>• SAN Administration on Data ONTAP 7.3 (SAN)</li> <li>• NetApp Protection Software Administration (NPSA)</li> </ul>
NSO 310: Architecting NetApp Backup & Restore Solution	<ul style="list-style-type: none"> <li>• Data ONTAP 7.3 Fundamentals (DOTF)</li> <li>• Data Protection Software Administration (NPSA)</li> </ul>
NSO 320: Architecting NetApp Business Continuity Solution	<ul style="list-style-type: none"> <li>• Data ONTAP 7.3 Fundamentals (DOTF)</li> <li>• NetApp Protection Software Administration (NPSA)</li> <li>• High Availability (NAHA)</li> <li>• MetroCluster (METRO)</li> </ul>
NSO 330: Security Solutions Architect	<ul style="list-style-type: none"> <li>• Data ONTAP 7.3 Fundamentals (DOTF)</li> <li>• DataFort Storage Security Administration (DSSA)</li> </ul>

## NETAPP CERTIFIED IMPLEMENTATION ENGINEER (NCIE)

There are currently 4 specializations, or disciplines, that someone can earn: SAN, Backup & Recovery, Disaster Recovery and Security.

Test	Recommended Training
NSO 501: Implementing NetApp SAN Solution	<ul style="list-style-type: none"> <li>• Data ONTAP 7.3 Fundamentals (DOTF)</li> <li>• NetApp Protection Software Administration (NPSA)</li> <li>• SAN Administration on Data ONTAP 7.3 (SAN)</li> <li>• NetApp SnapManager for Microsoft Exchange (SME)</li> <li>• Microsoft SQL Server 2000 on NetApp Storage Systems (MSSQL)</li> </ul>
NSO 510: Implementing NetApp Backup & Recovery Solution	<ul style="list-style-type: none"> <li>• Data ONTAP 7.3 Fundamentals (DOTF)</li> <li>• NetApp Protection Software Administration (NPSA)</li> </ul>
NSO 520: Implementing NetApp Disaster Recovery Solution	<ul style="list-style-type: none"> <li>• Data ONTAP 7.3 Fundamentals (DOTF)</li> <li>• NetApp Protection Software Administration (NPSA)</li> </ul>
NSO 530: Storage Security Implementation Engineer	<ul style="list-style-type: none"> <li>• Data ONTAP 7.3 Fundamentals (DOTF)</li> <li>• DataFort Storage Security Administration (DSSA)</li> </ul>

# Data ONTAP 7.3 Fundamentals (DOTF)

**ID** NA-DOTF **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

## WHO SHOULD ATTEND

- Anyone who provides basic support and administrative functions of the Data ONTAP operating system

## PREREQUISITES

- Introduction to NetApp Products (WBT)
- NetApp Hardware Fundamentals (WBT)

## COURSE OBJECTIVES

Data ONTAP 7.3 Fundamentals is an instructor-led course designed for those who provide support and administration on NetApp storage systems running the Data ONTAP operating system. The course covers Write Anywhere File Layout (WAFL) file system, volumes, aggregates, qtrees, and quotas. Hands-on labs for the course focus on the basic administrative use of Data ONTAP in NAS and IP-SAN environments.

## COURSE CONTENT

- Describe the basic functions of the Data ONTAP operating system
- Access the NOW (NetApp on the Web) Knowledgebase to obtain software and hardware documentation
- Set up console access for a storage system
- Configure a storage system with the setup command

- Access FilerView and the command line to manage a storage system
- Configure and manage the AutoSupport service for a FAS storage system
- Define and create virtual interfaces (vifs) and VLANs
- Describe Data ONTAP RAID technology
- Calculate usable disk space of disks
- Define and create an aggregate and volume
- Define FlexClone volume
- Configure the storage system as an NFS server and CIFS server
- Configure a multiprotocol environment
- Configure a LUN for SAN environments
- Configure, create and restore Snapshot copies
- Describe the WAFL file system, including consistency points, tetris creation, RAID management, and storage levels
- Collect performance data
- Use FlexShare
- Configure an Active-Active Configuration



### SCHEDULE Bulgaria

Sofia **E** 16.03.-20.03.09

### SCHEDULE France

Paris 16.03.-20.03.09

Paris 11.05.-15.05.09

Paris 13.07.-17.07.09

Paris 14.09.-18.09.09

Paris 16.11.-20.11.09

### SCHEDULE Germany

Berlin 02.02.-06.02.09

Frankfurt 09.02.-13.02.09

Hamburg **E** 16.02.-20.02.09

Munich 23.02.-27.02.09

Berlin 02.03.-06.03.09

Duesseldorf 09.03.-13.03.09

Hamburg 16.03.-20.03.09

Munich **E** 16.03.-20.03.09

Frankfurt 23.03.-27.03.09

Stuttgart 30.03.-03.04.09

Berlin 20.04.-24.04.09

Hamburg 04.05.-08.05.09

Munich 11.05.-15.05.09

Frankfurt **E** 25.05.-29.05.09

Berlin **E** 15.06.-19.06.09

Duesseldorf 22.06.-26.06.09

Munich 29.06.-03.07.09

Hamburg 06.07.-10.07.09

Frankfurt 20.07.-24.07.09

Stuttgart 27.07.-31.07.09

Munich **E** 03.08.-07.08.09

Berlin 10.08.-14.08.09

Frankfurt 24.08.-28.08.09

Berlin **E** 31.08.-04.09.09

Hamburg 07.09.-11.09.09

Duesseldorf 14.09.-18.09.09

Munich 21.09.-25.09.09

Hamburg 28.09.-02.10.09

Frankfurt **E** 05.10.-09.10.09

Berlin 12.10.-16.10.09

Munich **E** 19.10.-23.10.09

Stuttgart 26.10.-30.10.09

Munich 02.11.-06.11.09

Berlin 09.11.-13.11.09

Frankfurt **E** 16.11.-20.11.09

Hamburg 23.11.-27.11.09

Duesseldorf 30.11.-04.12.09

Berlin **E** 07.12.-11.12.09

Frankfurt 14.12.-18.12.09

### SCHEDULE Greece

Athens **E** 23.02.-27.02.09

Athens **E** 01.06.-05.06.09

Athens **E** 31.08.-04.09.09

Athens **E** 07.12.-11.12.09

### SCHEDULE Italy

Milan 02.02.-06.02.09

Rome 30.03.-03.04.09

Milan 18.05.-22.05.09

Milan 27.07.-31.07.09

Rome 23.11.-27.11.09

### SCHEDULE Portugal

Lisbon 16.02.-20.02.09

Lisbon 27.04.-01.05.09

Lisbon 06.07.-10.07.09

Lisbon 28.09.-02.10.09

Lisbon 14.12.-18.12.09

### SCHEDULE Slovenia

Ljubljana **E** 16.02.-20.02.09

### SCHEDULE Spain

Madrid 09.03.-13.03.09

Madrid 20.04.-24.04.09

Madrid 08.06.-12.06.09

Barcelona 20.07.-24.07.09

Madrid 21.09.-25.09.09

Barcelona 26.10.-30.10.09

Madrid 30.11.-04.12.09

### SCHEDULE Sweden

Stockholm 23.03.-27.03.09

Stockholm 25.05.-29.05.09

Stockholm 31.08.-04.09.09

Stockholm 12.10.-16.10.09

Stockholm 30.11.-04.12.09

### SCHEDULE Switzerland

Zurich **E** 23.03.-27.03.09

Zurich 04.05.-08.05.09

Zurich 13.07.-17.07.09

Zurich 31.08.-04.09.09

Zurich **E** 26.10.-30.10.09

Zurich 07.12.-11.12.09

### SCHEDULE Turkey

Istanbul **E** 20.04.-24.04.09

**E** Training in English

Further English dates on request

# CIFS Administration on Data ONTAP 7.3 (CIFS)



ID NA-CIFS Price 1.800,00 EUR (excl. VAT) 24 TUs Duration 2 Days

## WHO SHOULD ATTEND

- Anyone who provides support and administration for a CIFS environment on NetApp storage systems running the Data ONTAP operating system

## PREREQUISITES

- **Data ONTAP Fundamentals (DOTF)** course

## COURSE OBJECTIVES

This course covers the different server environments where a storage system can support Windows client users, the licensing and setting up of CIFS on the storage system, configuring files & options, administering a storage system including creating and managing shares, users, and groups, and troubleshooting CIFS problems.

## COURSE CONTENT

- Describe the different CIFS environments
- Identify the appropriate server environment for your storage system to support Windows client users
- Configure the CIFS environment on a storage system by licensing CIFS
- Configure files and options on the storage system
- Administer a storage system in a CIFS environment including creating and managing shares, users, groups, and sessions
- Understand group policy objects and file blocking

- Review approaches to harden security for a storage system in a CIFS environment
- Collect CIFS performance statistics with storage system commands and tools
- Explain how to troubleshoot basic CIFS problems

<b>SCHEDULE Bulgaria</b>		Athens	E 07.09.-08.09.09
Sofia	E 30.03.-31.03.09	<b>SCHEDULE Italy</b>	
<b>SCHEDULE France</b>		Milan	09.02.-10.02.09
Paris	23.03.-24.03.09	Rome	06.04.-07.04.09
Paris	18.05.-19.05.09	Milan	19.10.-20.10.09
Paris	21.09.-22.09.09	Rome	30.11.-01.12.09
<b>SCHEDULE Germany</b>		<b>SCHEDULE Poland</b>	
Hamburg	E 23.02.-24.02.09	Warsaw	E 09.02.-10.02.09
Duesseldorf	09.03.-10.03.09	<b>SCHEDULE Portugal</b>	
Frankfurt	30.03.-31.03.09	Lisbon	23.02.-24.02.09
Stuttgart	06.04.-07.04.09	Lisbon	04.05.-05.05.09
Berlin	27.04.-28.04.09	Lisbon	05.10.-06.10.09
Hamburg	11.05.-12.05.09	<b>SCHEDULE Spain</b>	
Frankfurt	02.06.-03.06.09	Madrid	16.03.-17.03.09
Duesseldorf	22.06.-23.06.09	Madrid	27.04.-28.04.09
Berlin	06.07.-07.07.09	Madrid	28.09.-29.09.09
Munich	E 10.08.-11.08.09	Madrid	07.12.-08.12.09
Hamburg	14.09.-15.09.09	<b>SCHEDULE Sweden</b>	
Munich	28.09.-29.09.09	Stockholm	16.02.-17.02.09
Frankfurt	E 12.10.-13.10.09	Stockholm	04.05.-05.05.09
Stuttgart	02.11.-03.11.09	Stockholm	21.09.-22.09.09
Munich	16.11.-17.11.09	<b>SCHEDULE Switzerland</b>	
Hamburg	E 14.12.-15.12.09	Zurich	E 11.05.-12.05.09
<b>SCHEDULE Greece</b>		Zurich	E 02.11.-03.11.09
Athens	E 02.03.-03.03.09		
Athens	E 08.06.-09.06.09		

E Training in English  
Further English dates on request

# NFS Administration on Data ONTAP 7.3 (NFS)

ID NA-NFS Price 900,00 EUR (excl. VAT) 12 TUs Duration 1 Day

## WHO SHOULD ATTEND

- Anyone who provides support and administration for a NFS environment on NetApp storage systems running the Data ONTAP operating system

## PREREQUISITES

- **Data ONTAP Fundamentals (DOTF)** course
- Working knowledge of UNIX
- Familiarity with networking concepts

## COURSE CONTENT

- Explain NFS protocol overview, NFS versions, and NFS implementation criteria
- Configure NFS protocol and options on the storage system
- Configure the storage system to export resources to clients
- Configure access permissions and options
- Configure the clients to mount resources from the storage system
- Administer exported resources to targets
- Monitor the usage of exported resources
- Create quota reports based on resource usage
- State the rules for exporting resources to hosts, subnets, and netgroups

- Explain the /etc/exports access options and how they relate to mount permissions
- Review approaches to harden security for a storage system in an NFS environment
- Collect NFS performance statistics with storage system commands and tools
- Troubleshoot basic NFS problems

<b>SCHEDULE Bulgaria</b>		Frankfurt	E 14.10.09	<b>Spain</b>	
Sofia	E 30.03.09	Stuttgart	04.11.09	Madrid	18.03.09
<b>France</b>		Munich	18.11.09	Madrid	29.04.09
Paris	25.03.09	Hamburg	E 16.12.09	Madrid	30.09.09
Paris	20.05.09	<b>Greece</b>		Madrid	09.12.09
Paris	23.09.09	Athens	E 04.03.09	<b>Sweden</b>	
<b>Germany</b>		Athens	E 10.06.09	Stockholm	18.02.09
Frankfurt	11.02.09	Athens	E 09.09.09	Stockholm	06.05.09
Hamburg	E 25.02.09	<b>Italy</b>		Stockholm	23.09.09
Duesseldorf	11.03.09	Milan	11.02.09	<b>Switzerland</b>	
Frankfurt	01.04.09	Rome	08.04.09	Zurich	01.04.09
Stuttgart	17.04.09	Milan	21.10.09	Zurich	E 13.05.09
Berlin	29.04.09	Rome	02.11.09	Zurich	22.07.09
Hamburg	13.05.09	<b>Poland</b>		Zurich	03.09.09
Duesseldorf	24.06.09	Warsaw	E 09.02.09	Zurich	E 04.11.09
Berlin	08.07.09	<b>Portugal</b>		Zurich	16.12.09
Munich	E 12.08.09	Lisbon	25.02.09		
Hamburg	16.09.09	Lisbon	06.05.09		
Munich	30.09.09	Lisbon	07.10.09		

E Training in English  
Further English dates on request

# SAN Administration on Data ONTAP 7.3 (SAN)

**ID** NA-SAN **Price** 2.700,00 EUR (excl. VAT) **36 TUs** **Duration** 3 Days

## WHO SHOULD ATTEND

- Anyone who provides support and administration for FC and IP SAN environments running the Data ONTAP operating system

## PREREQUISITES

- **Data ONTAP Fundamentals (DOTF)** course

## COURSE OBJECTIVES

The SAN Administration on Data ONTAP 7.3 course was designed for those who provide support and administration for FC and IP SAN environments running the Data ONTAP operating system. This course is delivered using Windows and UNIX hosts. The course covers SAN infrastructure preparation, storage provisioning options, creation and management of LUNs and volumes, multipathing and high availability, Fibre Channel cfmodes, and troubleshooting techniques.

## COURSE CONTENT

- Define the characteristics of a SAN environment and how LUNs relate to the storage system
- Describe the components of FC and IP SANs
- Describe size planning requirements for LUNs
- Create and manage LUNs on a storage system from both Windows and UNIX hosts
- Explain both FC and IP SAN multipathing options for both Windows and native Solaris 10 operating system
- Explain the most common problems associated with a SAN environment and how to troubleshoot these problems



### SCHEDULE Bulgaria

Sofia **E** 30.03.-01.04.09

### SCHEDULE France

Paris 20.04.-22.04.09

### SCHEDULE Germany

Munich 02.02.-04.02.09

Hamburg **E** 02.03.-04.03.09

Frankfurt 11.03.-13.03.09

Hamburg 14.04.-16.04.09

Berlin 04.05.-06.05.09

Frankfurt 18.05.-20.05.09

Munich **E** 08.06.-10.06.09

Duesseldorf 29.06.-01.07.09

Munich 17.08.-19.08.09

Berlin **E** 07.09.-09.09.09

Hamburg 05.10.-07.10.09

Frankfurt 26.10.-28.10.09

Frankfurt **E** 02.11.-04.11.09

Berlin 30.11.-02.12.09

Munich 14.12.-16.12.09

### SCHEDULE Italy

Milan 09.03.-11.03.09

### SCHEDULE Poland

Warsaw **E** 09.02.-11.02.09

### SCHEDULE Spain

Madrid 23.03.-25.03.09

Madrid 04.05.-06.05.09

Madrid 05.10.-07.10.09

### SCHEDULE Sweden

Stockholm 04.02.-06.02.09

Stockholm 11.05.-13.05.09

Stockholm 07.09.-09.09.09

Stockholm 02.11.-04.11.09

### SCHEDULE Switzerland

Zurich **E** 01.04.-03.04.09

Zurich 13.05.-15.05.09

Zurich 09.09.-11.09.09

Zurich 04.11.-06.11.09

**E** Training in English

Further English dates on request

# NetApp Protection Software Administration (NPSA)

ID NA-NPSA Price 2.700,00 EUR (excl. VAT) 36 TUs Duration 3 Days

## WHO SHOULD ATTEND

- Administrators and support personnel who will use SnapMirror, SnapRestore, SnapVault, Open Systems SnapVault, SnapLock, and LockVault

## PREREQUISITES

- Data ONTAP Fundamentals (DOTF)** and **High Availability (NAHA)** courses

## COURSE OBJECTIVES

This instructor-led course is for administrators and support personnel who will use SnapMirror, SnapRestore, SnapVault, Open Systems SnapVault, SnapLock, and LockVault to manage mission-critical data in the enterprise. Basic information on SnapMirror for Open Systems and Protection Manager and Provisioning Manager are presented. A mixture of lecture and hands-on activities teach concepts and techniques needed to effectively use these solutions.

## COURSE CONTENT

- Set up and maintain Snapshot copies
- Revert a file system to a previous version using SnapRestore



- Describe SnapMirror, SnapVault, and Open Systems SnapVault features and functions
- Process basic backup and restore operations with SnapMirror, SnapVault, and Open Systems SnapVault
- Troubleshoot common issues and optimize mirror solution performance
- Describe functionality for the Protection Manager and the Provisioning Manager application that run in the NetApp Management Console
- Describe SnapMirror for Open Systems features, operating concepts and components and how they work together to provide reliable system-wide data consistency for data migration, replication and disaster recovery
- Protect your data with SnapLock

### SCHEDULE Bulgaria

Sofia E 04.05.-06.05.09

### SCHEDULE France

Paris 30.03.-01.04.09

Paris 28.09.-30.09.09

Paris 30.11.-02.12.09

### SCHEDULE Germany

Munich 09.02.-11.02.09

Berlin 23.02.-25.02.09

Hamburg E 09.03.-11.03.09

Duesseldorf 23.03.-25.03.09

Frankfurt 20.04.-22.04.09

Berlin 11.05.-13.05.09

Munich 08.06.-10.06.09

Frankfurt E 22.06.-24.06.09

Hamburg 22.06.-24.06.09

Stuttgart 20.07.-22.07.09

Berlin E 17.08.-19.08.09

Hamburg 21.09.-23.09.09

Munich E 05.10.-07.10.09

Frankfurt 19.10.-21.10.09

Berlin 23.11.-25.11.09

Munich 07.12.-09.12.09

### SCHEDULE Italy

Milan 16.02.-18.02.09

Rome 20.04.-22.04.09

Milan 26.10.-28.10.09

Rome 07.12.-09.12.09

### SCHEDULE Poland

Warsaw E 16.03.-18.03.09

### SCHEDULE Portugal

Lisbon 11.05.-13.05.09

Lisbon 12.10.-14.10.09

### SCHEDULE Spain

Madrid 04.05.-06.05.09

Madrid 05.10.-07.10.09

Madrid 14.12.-16.12.09

### SCHEDULE Switzerland

Zurich 08.04.-10.04.09

Zurich E 20.05.-22.05.09

Zurich 16.09.-18.09.09

Zurich 11.11.-13.11.09

E Training in English

Further English dates on request



## NCDA Power Workshop (NCDAPW)

For further information about NetApp's Certification Programs please see page 9!

**ID** FL-NCDAPW **Price** 9.000,00 EUR (excl. VAT) **120 TUs** **Duration** 10 Days

### WHO SHOULD ATTEND

- NCDA (NetApp Certified Data Management Administrator) Candidates
- Personnel who is responsible for support and administration of a NetApp storage system with the Data ONTAP operating system

### PREREQUISITES

- Introduction to NetApp Products Web-based Training
- Basic knowledge of client/server and networking technologies and management including TCP/IP
- Background in UNIX, Windows or SAN systems

### COURSE CONTENT

The NCDA Power Workshop comprises the following courses:

- **Data ONTAP 7.3 Fundamentals (DOTF)**
- **CIFS Administration on Data ONTAP 7.3 (CIFS)**
- **NFS Administration on Data ONTAP 7.3 (NFS)**
- **SAN Administration on Data ONTAP 7.3 (SAN)**
- **NetApp Protection Software Administration (NPSA)**
- **High Availability (NAHA)**

#### SCHEDULE France

Paris	16.03.-27.03.09
Paris	11.05.-22.05.09
Paris	13.07.-24.07.09
Paris	14.09.-25.09.09
Paris	16.11.-27.11.09

#### SCHEDULE Germany

Hamburg	<b>E</b> 16.02.-27.02.09
Munich	<b>E</b> 16.03.-27.03.09
Frankfurt	23.03.-03.04.09
Hamburg	04.05.-15.05.09
Berlin	<b>E</b> 15.06.-26.06.09
Munich	29.06.-10.07.09
Frankfurt	20.07.-31.07.09
Berlin	<b>E</b> 31.08.-11.09.09
Duesseldorf	14.09.-25.09.09
Berlin	12.10.-23.10.09
Frankfurt	<b>E</b> 15.10.-26.10.09
Stuttgart	26.10.-06.11.09
Hamburg	02.11.-13.11.09
Frankfurt	<b>E</b> 16.11.-27.11.09
Munich	23.11.-04.12.09
Berlin	<b>E</b> 07.12.-18.12.09

#### SCHEDULE Greece

Athens	<b>E</b> 01.06.-12.06.09
Athens	<b>E</b> 31.08.-11.09.09

Athens **E** 07.12.-18.12.09

#### SCHEDULE Italy

Milan	02.02.-13.02.09
Rome	30.03.-10.04.09
Milan	18.05.-29.05.09
Milan	27.07.-07.08.09
Rome	23.11.-04.12.09

#### SCHEDULE Portugal

Lisbon	16.02.-27.02.09
Lisbon	27.04.-08.05.09
Lisbon	06.07.-17.07.09
Lisbon	28.09.-09.10.09

#### SCHEDULE Spain

Madrid	09.03.-20.03.09
Madrid	20.04.-01.05.09
Madrid	08.06.-19.06.09
Madrid	21.09.-02.10.09
Madrid	30.11.-11.12.09

#### SCHEDULE Switzerland

Zurich	<b>E</b> 23.03.-03.04.09
Zurich	04.05.-15.05.09
Zurich	13.07.-24.07.09
Zurich	31.08.-11.09.09
Zurich	<b>E</b> 26.10.-06.11.09

**E** Training in English

Further English dates on request

## Advanced NCDA Power Workshop (ANCDAPW)

Intensive preparation for NCDA (NetApp Certified Data Management Administrator) certification!

**ID** FL-ANCDAPW **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

### PREREQUISITES

- **Data ONTAP Fundamentals (DOTF)** course

### COURSE CONTENT

The Advanced NCDA Power Workshop comprises the courses:

- **CIFS Administration on Data ONTAP 7.3 (CIFS)**
- **NFS Administration on Data ONTAP 7.3 (NFS)**
- **SAN Administration on Data ONTAP 7.3 (SAN)**
- **NetApp Protection Software Administration (NPSA)**
- **High Availability (NAHA)**

#### SCHEDULE France

Paris	23.03.-27.03.09
Paris	18.05.-22.05.09
Paris	20.07.-24.07.09
Paris	21.09.-25.09.09
Paris	23.11.-27.11.09

#### SCHEDULE Germany

Berlin	09.02.-13.02.09
Hamburg	<b>E</b> 23.02.-27.02.09
Munich	<b>E</b> 23.03.-27.03.09
Frankfurt	30.03.-03.04.09
Hamburg	11.05.-15.05.09
Berlin	<b>E</b> 22.06.-26.06.09
Munich	06.07.-10.07.09

Frankfurt 27.07.-31.07.09

Berlin **E** 07.09.-11.09.09

Duesseldorf 21.09.-25.09.09

Frankfurt **E** 12.10.-16.10.09

Berlin 19.10.-23.10.09

Stuttgart 02.11.-06.11.09

Hamburg 09.11.-13.11.09

Frankfurt **E** 23.11.-27.11.09

Munich 30.11.-04.12.09

Berlin **E** 14.12.-18.12.09

#### SCHEDULE Greece

Athens **E** 08.06.-12.06.09

Athens **E** 07.09.-11.09.09

Athens **E** 14.12.-18.12.09

#### SCHEDULE Italy

Milan	09.02.-13.02.09
Rome	06.04.-10.04.09
Milan	25.05.-29.05.09
Milan	03.08.-07.08.09
Rome	30.11.-04.12.09

#### SCHEDULE Portugal

Lisbon	23.02.-27.02.09
Lisbon	04.05.-08.05.09
Lisbon	13.07.-17.07.09
Lisbon	05.10.-09.10.09

#### SCHEDULE Spain

Madrid	16.03.-20.03.09
Madrid	27.04.-01.05.09

Madrid 15.06.-19.06.09

Madrid 28.09.-02.10.09

Madrid 07.12.-11.12.09

#### SCHEDULE Switzerland

Zurich	<b>E</b> 30.03.-03.04.09
Zurich	11.05.-15.05.09
Zurich	20.07.-24.07.09
Zurich	07.09.-11.09.09
Zurich	<b>E</b> 02.11.-06.11.09
Zurich	14.12.-18.12.09

**E** Training in English

Further English dates on request

## NCDA Recertification Workshop (RNCDA)

**ID** FL-RNCDA **Price** 1.800,00 EUR (excl. VAT) **24 TUs** **Duration** 2 Days

### WHO SHOULD ATTEND

- NCDA certified individuals who need to recertify

### COURSE CONTENT

This course provides accelerated preparation for NCDA recertification.

#### SCHEDULE Germany

Frankfurt	23.02.-24.02.09
Hamburg	16.04.-17.04.09
Munich	<b>E</b> 04.06.-05.06.09
Hamburg	06.07.-07.07.09
Frankfurt	<b>E</b> 17.08.-18.08.09

Munich 21.09.-22.09.09

Berlin 16.11.-17.11.09

Hamburg **E** 21.12.-22.12.09

**E** Training in English

Further English dates on request

# Fundamentals of Performance Analysis (FPA)



**ID** NA-FPA **Price** 1.800,00 EUR (excl. VAT) **24 TUs** **Duration** 2 Days

### WHO SHOULD ATTEND

- Individuals who will interpret data and apply performance changes based on their analysis

### PREREQUISITES

- **Data ONTAP Fundamentals (DOTF)** course
- Three months of experience with NetApp hard- & software

### COURSE OBJECTIVES

This course provides students with the knowledge and skills to perform data collection and analysis on NetApp storage systems. Students learn how to interpret the data and apply performance changes based on their analysis. Students will use data for tuning, monitoring, and other performance related areas.

### COURSE CONTENT

- Recognize performance terminology and basic methodology
- Describe how Data ONTAP reads and writes data to disks
- Diagram how data flows through Data ONTAP components
- Use knowledge about how data flows through the network and protocol layers of Data ONTAP to monitor and analyze storage system performance
- Use Data ONTAP tools and NetApp provided scripts to identify

networking disk I/O, Fibre Channel loop saturation and CPU bottlenecks

- Use the reallocation command to optimize disk performance
- Utilize both client and storage system tools to monitor and analyze a performance problem
- Identify where to find further information

<b>SCHEDULE France</b>		Athens	<b>E</b> 05.03.-06.03.09
Paris	26.03.-27.03.09	Athens	<b>E</b> 11.06.-12.06.09
Paris	21.05.-22.05.09	Athens	<b>E</b> 10.09.-11.09.09
Paris	24.09.-25.09.09	<b>SCHEDULE Italy</b>	
Paris	26.11.-27.11.09	Milan	12.02.-13.02.09
<b>SCHEDULE Germany</b>		Rome	09.04.-10.04.09
Frankfurt	12.02.-13.02.09	Milan	22.10.-23.10.09
Frankfurt	02.03.-03.03.09	Rome	03.12.-04.12.09
Munich	<b>E</b> 30.03.-31.03.09	<b>SCHEDULE Portugal</b>	
Stuttgart	08.04.-09.04.09	Lisbon	26.02.-27.02.09
Hamburg	14.05.-15.05.09	Lisbon	07.05.-08.05.09
Frankfurt	04.06.-05.06.09	Lisbon	08.10.-09.10.09
Duesseldorf	25.06.-26.06.09	<b>SCHEDULE Spain</b>	
Berlin	09.07.-10.07.09	Madrid	19.03.-20.03.09
Munich	<b>E</b> 13.08.-14.08.09	Madrid	30.04.-01.05.09
Munich	01.09.-02.09.09	Madrid	01.10.-02.10.09
Hamburg	17.09.-18.09.09	Madrid	10.12.-11.12.09
Frankfurt	<b>E</b> 15.10.-16.10.09	<b>SCHEDULE Switzerland</b>	
Hamburg	03.11.-04.11.09	Zurich	14.05.-15.05.09
Stuttgart	05.11.-06.11.09	Zurich	<b>E</b> 10.09.-11.09.09
Berlin	<b>E</b> 19.11.-20.11.09	Zurich	10.12.-18.12.09
Hamburg	<b>E</b> 17.12.-18.12.09	<b>E</b> Training in English	
<b>SCHEDULE Greece</b>		Further English dates on request	

# MetroCluster (METRO)

**ID** FL-METRO **Price** 1.800,00 EUR (excl. VAT) **24 TUs** **Duration** 2 Days

### WHO SHOULD ATTEND

- Administrators, support staff and SAN administrators responsible for the implementation and management of a NetApp Cluster solution over long distance

### PREREQUISITES

- **Data ONTAP Fundamentals (DOTF)** and **Data ONTAP SAN Administration (SAN)** courses
- Basic skills in High Availability solutions

### COURSE OBJECTIVES

This course delivers the necessary knowledge for installation, configuration, and administration of a NetApp Fabric attached MetroCluster.

### COURSE CONTENT

- Fibre Channel Fabric Basics
- Analysis of existing Storage systems
- Configuration of the components
- Installation of a Cluster & Cabling
- SnapMirror Configuration & Administration
- Failover scenarios
- Disaster Recovery
- Troubleshooting in MetroCluster environments



<b>SCHEDULE Germany</b>		Frankfurt	<b>E</b> 05.11.-06.11.09
Munich	05.02.-06.02.09	Berlin	03.12.-04.12.09
Hamburg	<b>E</b> 05.03.-06.03.09	Munich	17.12.-18.12.09
Frankfurt	27.04.-28.04.09	<b>SCHEDULE Italy</b>	
Duesseldorf	02.06.-03.06.09	Milan	12.03.-13.03.09
Berlin	<b>E</b> 10.09.-11.09.09	<b>E</b> Training in English	
Hamburg	08.10.-09.10.09	Further English dates on request	
Frankfurt	29.10.-30.10.09		

# High Availability (NAHA)

**ID** FL-NAHA **Price** 1.800,00 EUR (excl. VAT) **24 TUs** **Duration** 2 Days

**WHO SHOULD ATTEND**

- Professionals responsible for continuous data availability

**PREREQUISITES**

- **Data ONTAP Fundamentals (DOTF)** course

**COURSE OBJECTIVES**

This course conveys the concepts and tasks involved in successfully implement a high-availability solution.

**COURSE CONTENT**

- Backing up storage systems with redundant setups
- Employing mechanisms to protect data
- Ensuring storage systems' high availability
- Conducting an SPOF analysis
- Implementing an HA solution
- Upgrading a storage system to an HA solution
- Multi-path HA cabling
- Failover scenarios
- Protocol behavior in case of failover
- Troubleshooting and optimizing systems



<b>SCHEDULE France</b>		Frankfurt	22.10.-23.10.09
Paris	02.04.-03.04.09	Berlin	26.11.-27.11.09
Paris	01.10.-02.10.09	Munich	10.12.-11.12.09
Paris	03.12.-04.12.09	<b>SCHEDULE Italy</b>	
<b>SCHEDULE Germany</b>		Milan	19.02.-20.02.09
Munich	12.02.-13.02.09	Rome	23.04.-24.04.09
Berlin	26.02.-27.02.09	Milan	29.10.-30.10.09
Hamburg	<b>E</b> 12.03.-13.03.09	Rome	10.12.-11.12.09
Duesseldorf	26.03.-27.03.09	<b>SCHEDULE Portugal</b>	
Frankfurt	23.04.-24.04.09	Lisbon	14.05.-15.05.09
Berlin	14.05.-15.05.09	Lisbon	15.10.-16.10.09
Frankfurt	<b>E</b> 25.06.-26.06.09	<b>SCHEDULE Spain</b>	
Hamburg	25.06.-26.06.09	Madrid	07.05.-08.05.09
Stuttgart	23.07.-24.07.09	Madrid	08.10.-09.10.09
Berlin	<b>E</b> 20.08.-21.08.09	Madrid	17.12.-18.12.09
Hamburg	24.09.-25.09.09	<b>E Training in English</b>	
Munich	<b>E</b> 05.10.-06.10.09	Further English dates on request	

# Business Continuity (BCON)

**ID** FL-BCON **Price** 2.700,00 EUR (excl. VAT) **36 TUs** **Duration** 3 Days

**WHO SHOULD ATTEND**

- Professionals responsible for continuous data availability

**PREREQUISITES**

- **Data ONTAP Fundamentals (DOTF)** course

**COURSE OBJECTIVES**

This course combines the MetroCluster (METRO) and High Availability (NAHA) courses.

**COURSE CONTENT**

- Backing up storage systems with redundant setups
- Employing mechanisms to protect data
- Ensuring storage systems' high availability
- Conducting an SPOF analysis
- Implementing an HA solution
- Upgrading a storage system to an HA solution
- Multi-path HA cabling
- Failover scenarios
- Protocol behavior in case of failover
- Troubleshooting and optimizing systems
- Fibre Channel Fabric Basics
- Analysis of existing Storage systems
- Configuration of the components
- Installation of a Cluster & Cabling

- SnapMirror Configuration & Administration
- Disaster Recovery
- Troubleshooting in MetroCluster environments



<b>SCHEDULE France</b>		Milan	09.03.-11.03.09
Paris	20.04.-22.04.09	Rome	27.04.-29.04.09
Paris	12.10.-14.10.09	Milan	09.11.-11.11.09
<b>SCHEDULE Germany</b>		<b>SCHEDULE Portugal</b>	
Frankfurt	<b>E</b> 16.02.-18.02.09	Lisbon	18.05.-20.05.09
Munich	16.03.-18.03.09	Lisbon	02.11.-04.11.09
Hamburg	14.04.-16.04.09	<b>SCHEDULE Spain</b>	
Stuttgart	11.05.-13.05.09	Madrid	11.05.-13.05.09
Berlin	<b>E</b> 02.06.-04.06.09	Madrid	19.10.-21.10.09
Frankfurt	13.07.-15.07.09	<b>SCHEDULE Switzerland</b>	
Hamburg	<b>E</b> 17.08.-19.08.09	Zurich	02.03.-04.03.09
Munich	14.09.-16.09.09	Zurich	25.05.-27.05.09
Duesseldorf	12.10.-14.10.09	Zurich	<b>E</b> 31.08.-02.09.09
Berlin	09.11.-11.11.09	Zurich	23.11.-25.11.09
Frankfurt	<b>E</b> 07.12.-09.12.09	<b>E Training in English</b>	
<b>SCHEDULE Italy</b>		Further English dates on request	



# Operations Manager, Protection Manager & Provisioning Manager 3.7 Administration (OPSMGR)

**ID** NA-OPSMGR **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

### WHO SHOULD ATTEND

- Administrators and support personnel who will use Operations Manager 3.7, Protection Manager, and Provisioning Manager services to backup & protect mission critical data in the enterprise

### PREREQUISITES

- Data ONTAP Fundamentals (DOTF)** course

### COURSE CONTENT

- Articulate the different components of Operations Manager 3.7 data management suite
- Explain Operations Manager licensing & required hard- & software
- Determine proper sizing of the Operations Manager Environment
- Install Operations Manager 3.7
- Configure user accounts
- Create and manage configuration templates
- Explain the Discovery process
- Setup host credentials and create groups
- Configure Operations Manager database backups
- Explain how hosts become visible in Protection Manager
- Navigate through the Protection Manager management console
- Explain the configuration of groups
- Configure Resource Pools, Schedules, Polices, and Data Sets
- Configure hosts & OSSV systems for use with Protection Manager
- Enable backup interfaces
- Operate the core Operations Manager software suite and know its limitations
- Identify common problems with normal Operations Manager use and their remedies
- Perform common tasks in Protection Manager such as add

hosts, backup and restore data, manage resource pools, setup schedules, and more

- Explain how to backup and restore VMware ESX servers using Protection Manager
- Explain user-defined Provisioning Manager policies and conformance checking
- Explain how to configure Thin Provisioning using Provisioning Manager
- Troubleshoot common issues associated with provisioning, jobs, access, and hosts
- Articulate the features and functions of Performance Advisor
- Monitor & display disk, file system, processor & memory resources
- Replay performance charts in Performance Advisor
- Explain third party SNMP integration with Performance Advisor
- Explain integration of Operations Manager RBAC support into Performance Advisor
- Create custom performance views, alarms, and thresholds in Performance Advisor

<b>SCHEDULE France</b>		Athens	<b>E</b> 14.12.-18.12.09
Paris	11.05.-15.05.09	<b>SCHEDULE Italy</b>	
Paris	30.11.-04.12.09	Milan	18.05.-22.05.09
<b>SCHEDULE Germany</b>		Milan	07.12.-11.12.09
Munich	<b>E</b> 23.02.-27.02.09	<b>SCHEDULE Portugal</b>	
Berlin	23.03.-27.03.09	Lisbon	04.05.-08.05.09
Frankfurt	<b>E</b> 20.04.-24.04.09	Lisbon	23.11.-27.11.09
Hamburg	25.05.-29.05.09	<b>SCHEDULE Spain</b>	
Munich	22.06.-26.06.09	Madrid	27.04.-01.05.09
Berlin	<b>E</b> 27.07.-31.07.09	Madrid	16.11.-20.11.09
Frankfurt	24.08.-28.08.09	<b>SCHEDULE Switzerland</b>	
Berlin	21.09.-25.09.09	Zurich	11.05.-15.05.09
Frankfurt	<b>E</b> 26.10.-30.10.09	Zurich	28.09.-02.10.09
<b>SCHEDULE Greece</b>		<b>E</b> Training in English	
Athens	<b>E</b> 25.05.-29.05.09	Further English dates on request	

# Data ONTAP GX Fundamentals (DOTGX)

**ID** NA-DOTGX **Price** 2.700,00 EUR (excl. VAT) **36 TUs** **Duration** 3 Days

### WHO SHOULD ATTEND

- Individuals who will administrate a NetApp storage system with Data ONTAP GX operating system software installed

### PREREQUISITES

- Data ONTAP Fundamentals (DOTF)** course
- Basic knowledge of networking and UNIX

### COURSE CONTENT

- Describe the major principles associated with Data ONTAP GX
- Describe how an N-blade and a Dblade interact with each other
- Describe how a replicated database (RDB) application communicates among the members in its ring
- Describe the difference between an mroot volume and a virtual server root volume
- Create a cluster made up of multiple nodes
- Create an aggregate
- Create two virtual servers, two additional volumes in each, and

two three-volume namespaces

- Configure an active-active relationship between a pair of nodes
- Configure network interfaces for a virtual server
- Create an NFS export and a CIFS share
- Move a volume from one node to another
- Create a Snapshot policy for a volume
- Create two load-sharing (LS) mirrors of a volume, and manually replicate them; Create two disaster-recovery (DR) mirrors of a volume, and manually replicate them
- Promote a mirror to be a read-write volume
- Diagnose a VLDB crash and recover from it
- Upgrade the Common Firmware Environment on a node
- Upgrade the Data ONTAP GX software on two nodes with no downtime

<b>SCHEDULE Germany</b>		Hamburg	25.11.-27.11.09
Frankfurt	<b>E</b> 04.03.-06.03.09	Hamburg	<b>E</b> 07.12.-09.12.09
Frankfurt	06.04.-08.04.09	<b>E</b> Training in English	
Berlin	<b>E</b> 29.06.-01.07.09	Further English dates on request	
Munich	07.09.-09.09.09		



# DataFort Storage Security Administration (DSSA)

**ID** NA-DSSA **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

**WHO SHOULD ATTEND**

- Anyone who performs basic support, and administration functions on DataFort Storage Security appliance or Lifetime Key Management appliance

**PREREQUISITES**

- Knowledge of networking terminology and management
- Background in Unix or Windows server administration
- Knowledge of SAN administration

**COURSE OBJECTIVES**

Through a combination of discussion and hands-on activities, this course describes the features and functions of the DataFort E-Series (NAS & iSCSI), FC-Series (SAN Disk & SAN Tape), S-Series (SCSI Tape), Lifetime Key Management appliances and the Data Decryption Software.

**COURSE CONTENT**

- Basic security and encryption principles and how those apply to a storage security appliance
- Features and functions of the DataFort platform including encryption key hierarchy and Smart Card operation
- Architectures and deployment options for the DataFort storage security appliance and Lifetime Key Management appliance
- Install the Management Console for centralized key and configuration management
- Manage a DataFort storage security appliance using the Management Console
- Use the Setup Wizard to initialize a DataFort storage security appliance

- Create and manage Cryptainer vaults that encrypt data-at-rest
- Configure the E-series DataFort (NAS and iSCSI) for storage encryption and access control
- Configure E-series DataFort appliances into a cluster and simulate failover
- Configure the FC-series DataFort (disk and tape) for storage encryption
- Perform administration of a DataFort appliance using specialty administrative accounts
- Recover an E-series DataFort appliance from a configuration backup file
- Decrypt data without a DataFort storage security appliance using Data Decryption Software
- Complete operations using the command line interface (CLI) on the E-series and FC-series DataFort appliances
- Describe the key sharing methods available for DataFort storage security appliances
- Perform key sharing operations using the DataFort storage security appliances and the LKM appliance

<b>SCHEDULE France</b>	Athens	<b>E</b> 26.10.-30.10.09
Paris 16.02.-20.02.09	<b>SCHEDULE Italy</b>	
Paris 12.10.-16.10.09	Milan	23.02.-27.02.09
<b>SCHEDULE Germany</b>	Milan	19.10.-23.10.09
Frankfurt 09.02.-13.02.09	<b>SCHEDULE Portugal</b>	
Munich 20.04.-24.04.09	Lisbon	09.02.-13.02.09
Berlin <b>E</b> 25.05.-29.05.09	Lisbon	05.10.-09.10.09
Frankfurt 29.06.-03.07.09	<b>SCHEDULE Spain</b>	
Hamburg 31.08.-04.09.09	Madrid	02.02.-06.02.09
Berlin <b>E</b> 14.09.-18.09.09	Madrid	28.09.-02.10.09
Stuttgart 09.11.-13.11.09		
<b>SCHEDULE Greece</b>		
Athens <b>E</b> 02.03.-06.03.09		
	<b>E</b> Training in English	
	Further English dates on request	

# NetApp Hardware Class (NAHW)



**ID** FL-NAHW **Price** 1.800,00 EUR (excl. VAT) **24 TUs** **Duration** 2 Days

**WHO SHOULD ATTEND**

- System engineers and technical support personnel

**PREREQUISITES**

- Server, network and FibreChannel knowledge
- **Data ONTAP Fundamentals (DOTF)** and **High Availability (NAHA)** courses
- NetApp Hardware Fundamentals (Web-based Training)

**COURSE OBJECTIVES**

This course covers the hardware topics of a NetApp environment. The course includes an extensive hands-on training using the NetApp hardware.

**COURSE CONTENT**

- Introduction to NetApp products
- NOW support webpage (partner section)
- Firmware update (disk/shelf/system)

- ONTAP update & downgrade
- Command line operations
- Disk troubleshooting
- ONTAP simulator
- Diagnose
- Hardware replacement procedures: Disk replacement, ESH replacement, Shelf replacement, NVRAM replacement, PCI card replacement in a clustered environment, Motherboard replacement, CF card replacement
- Exceptions (fabric) in a metro cluster
- Autosupport functions
- RLM card
- Hardware characteristics

<b>SCHEDULE Germany</b>	Frankfurt	06.10.-07.10.09
Berlin 07.04.-08.04.09	Frankfurt	<b>E</b> 19.11.-20.11.09
Frankfurt <b>E</b> 03.06.-04.06.09	Hamburg	08.12.-09.12.09
Frankfurt 09.06.-10.06.09		
Munich 18.08.-19.08.09		
Berlin <b>E</b> 08.09.-09.09.09		
	<b>E</b> Training in English	
	Further English dates on request	

# NetApp Advanced Solution Pack Windows CIFS (NAWC)

**ID** FL-NAWC **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

**PREREQUISITES**

- Basic knowledge of the NetApp storage systems, network infrastructure, Microsoft Windows operating systems and Active Directory

**COURSE CONTENT**

- Primary function of a storage appliance
- Different server environments
- Use a storage appliance console to access & execute commands
- Determine a storage appliance's system configuration
- Manage a storage appliance's configuration files from an adminhost
- Setup aggregates and volumes and set volume specific options
- Identify the physical interfaces used by a storage appliance
- Configure physical interface parameters on a storage appliance
- Configure the virtual interfaces used by a storage appliance
- Upgrade Data ONTAP via CIFS or HTTP
- Integrating NetApp storage systems into an Active Directory infrastructure
- Join a storage appliance into a Windows domain using the CIFS setup command
- Create Qtrees
- Configure the CIFS environment on a storage system by licensing CIFS, setting up CIFS, and configuring files and options

- Administer a storage system in a CIFS environment including creating and managing shares, users, groups, and sessions
- Install system files
- Describe Snapshot concepts
- Set the Snapshot schedule on a storage appliance
- Restore a deleted file from the snapshot directory
- Create the /etc/quotas file
- Restrict disk space using quotas
- Backup a volume and a qtree using a storage appliance's native dump command
- Restore a volume and a qtree using a storage appliance's native restore command
- Test NDMP services on a storage appliance
- Perform a volume and aggregate copy on a storage appliance
- Access & execute a storage appliance's admin privilege commands
- Access & modify the storage appliance's optional settings
- Troubleshoot basic CIFS problems

SCHEDULE Germany		SCHEDULE Switzerland	
Hamburg	09.02.-13.02.09	Zurich	30.03.-03.04.09
Frankfurt	<b>E</b> 11.05.-15.05.09	Zurich	<b>E</b> 15.06.-19.06.09
Munich	15.06.-19.06.09	Zurich	<b>E</b> 21.09.-25.09.09
Berlin	31.08.-04.09.09	Zurich	30.11.-04.12.09
Munich	<b>E</b> 07.12.-11.12.09	<b>E</b> Training in English	
Frankfurt	07.12.-11.12.09	Further English dates on request	

# NetApp Architecture & Storage Design Workshop (NAASD)

**ID** FL-NAASD **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

**PREREQUISITES**

- Basic knowledge in the field of storage technologies

- Storage virtualization
- Storage security
- NetApp storage solutions
- Examples of storage solutions

**COURSE CONTENT**

- Storage concepts, functionality, performance, prerequisites
- Hardware basics
- Backup & restore
- Solutions
- Storage management

SCHEDULE Germany		SCHEDULE Switzerland	
Munich	<b>E</b> 20.04.-24.04.09	Frankfurt	02.11.-06.11.09
Berlin	06.07.-10.07.09	<b>E</b> Training in English	
Munich	<b>E</b> 31.08.-04.09.09	Further English dates on request	

# NetApp Advanced Solution Pack Data ONTAP (NADOT)

**ID** FL-NADOT **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

**PREREQUISITES**

- **Data ONTAP Fundamentals (DOTF)** course

- Data ONTAP NFS Administration: Storage Appliance NFS concepts & components; NFS configuration requirements; NFS exports of resources to hosts, subnets & netgroups; Analysis of NFS performance with sysstat & nfsstat

**COURSE CONTENT**

- Data Protection: Information lifecycle management (ILM); Snapshot; SnapRestore; SnapMirror; SnapVault; Operations Manager; SnapLock; Performance analysis of the storage solution; Analysis & problem solution
- High Availability: High-availability solutions; Clustered failover; SyncMirror; MetroCluster; Disaster-recovery alternatives; Troubleshooting

SCHEDULE Germany		SCHEDULE Switzerland	
Hamburg	23.02.-27.02.09	Frankfurt	<b>E</b> 19.10.-23.10.09
Frankfurt	04.05.-08.05.09	Munich	09.11.-13.11.09
Munich	<b>E</b> 13.07.-17.07.09	<b>E</b> Training in English	
Berlin	31.08.-04.09.09	Further English dates on request	

# NetApp Advanced Solution Pack UNIX NFS (NAUN)

**ID** FL-NAUN **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

**PREREQUISITES**

- Knowledge of NetApp storage systems, network infrastructure services and UNIX administration

**COURSE CONTENT**

- NetApp integration into UNIX networks: Integration into NIS/YP; Integration into LDAP/Kerberos environments; Name resolution using DNS & NIS; Monitoring with SNMP
- NetApp & NAS: NFS; Kerberos; CIFS with & without UNIX-Extensions; Other protocols: WebDAV, HTTP, FTP
- Multiprotocol environments
- Linux in SAN environments: HBAs; Booting off a SAN device; (Re)Sizing of LUNs; Volume management; NetApp SnapDrive; NetApp Host Attach Kit;
- Linux with IP-SAN/iSCSI: Linux as a Client; iSCSI-Initiator; Booting off an iSCSI target; iSNS - iSCSI Name Services; iGroups



SCHEDULE Germany			
Hamburg	23.03.-27.03.09	Berlin	23.11.-27.11.09
Frankfurt	<b>E</b> 15.06.-19.06.09	<b>E</b> Training in English	
Munich	14.09.-18.09.09	Further English dates on request	

# Advanced Data ONTAP for Windows Application Server (NAWAS)

**ID** FL-NAWAS **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

**PREREQUISITES**

- Experience with NetApp storage systems, Microsoft Windows server operating systems, Active Directory, Exchange, and SQL Server
- **Data ONTAP Fundamentals (DOTF)** and **NetApp Advanced Solution Pack Windows CIFS (NAWC)** courses

- Setting up server clusters for Exchange and/or SQL Server using NetApp resources (iSCSI and/or FCP)
- iSCSI basics
- Windows 2003: feature comparison, minimum hardware requirements, extended and cluster features
- Implementation of Active Directories and Exchange

**COURSE CONTENT**

- NetApp storage systems within a MS Active Directory 2003
- Storage Management
- Exchange
- SQL Server backup and restore

SCHEDULE Germany			
Hamburg	09.03.-13.03.09	Frankfurt	<b>E</b> 19.10.-23.10.09
Munich	25.05.-29.05.09	Frankfurt	23.11.-27.11.09
Munich	<b>E</b> 27.07.-31.07.09	<b>E</b> Training in English	
Berlin	24.08.-28.08.09	Further English dates on request	

# NetApp Advanced Solution Pack SAN (NASAN)

**ID** FL-NASAN **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

**PREREQUISITES**

- **Data ONTAP Fundamentals (DOTF)** course
- Experience with Solaris and Windows operating systems

- HBA Emulex/qLogic
- Connecting Windows 2003 Servers
- Connecting Solaris Servers
- Troubleshooting



**COURSE CONTENT**

- SAN definition
- Components
- Fundamentals and protocols
- Zoning
- LUN Masking
- Brocade Hardware
- Brocade Administration
- NetApp storage systems in a SAN

SCHEDULE Germany			
Hamburg	16.03.-20.03.09	Frankfurt	<b>E</b> 28.09.-02.10.09
Hamburg	<b>E</b> 30.03.-03.04.09	Frankfurt	30.11.-04.12.09
Munich	15.06.-19.06.09	<b>E</b> Training in English	
Berlin	17.08.-21.08.09	Further English dates on request	

# Data ONTAP 7.x Tuning & Troubleshooting (NATT)

**ID** FL-NATT **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

### PREREQUISITES

- **Data ONTAP Fundamentals (DOTF)** and **NetApp Advanced Solution Pack Data ONTAP (NADOT)** courses

- Troubleshooting, performance tuning & advanced topics: Data ONTAP upgrade & downgrade; Remote LAN module (RLM) management; File system management; Storage design, storage management; Monitoring, statistics commands

### COURSE CONTENT

- New features in ONTAP 7.x
- Migration: Planning & considerations; Migration tools (ONTAP & client operating systems); Data migration from traditional volumes to flexible volumes

#### SCHEDULE Germany

Hamburg	09.02.-13.02.09	Hamburg	E 28.09.-02.10.09
Frankfurt	E 09.03.-13.03.09	Berlin	09.11.-13.11.09
Munich	11.05.-15.05.09	E Training in English	
Frankfurt	03.08.-07.08.09	Further English dates on request	

# NetApp Storage Systems & Cisco MDS Switch Administration (NACSA)

**ID** FL-NACSA **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

### PREREQUISITES

- Profound Solaris and/or Windows knowledge; basic storage knowledge

- Switch Security
- Zoning & IVR
- FCIP

### KURSIHALT

- Installation & Administration of NetApp Storage Systems
- Topologies
- Fiber Channel Protocol
- Cisco Storage Products & Features
- Cisco MDS 9000 Administration
- Server Connection
- Differences SAN / NAS
- Backup in SANs
- Load Balancing, FSPF, Port-Channel, Trunking
- Performance & High Availability
- SAN Monitoring
- Virtualization
- Snapshots
- NFS, CIFS
- Quota Management
- Volume Management, NDMP
- Multipathing
- Cluster Failover
- Designing a SAN
- NASB, FAIS, SSM-Virtualization



#### SCHEDULE Germany

Munich	16.02.-20.02.09	Berlin	24.08.-28.08.09
Berlin	E 20.04.-24.04.09	Hamburg	02.11.-06.11.09
Frankfurt	22.06.-26.06.09	E Training in English	
Further English dates on request			

# NetApp Storage Systems & Brocade Switch Administration (NABSA)

**ID** FL-NABSA **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

### PREREQUISITES

- Profound Solaris and/or Windows knowledge; basic storage knowledge

- SAN Monitoring
- Virtualization
- Snapshots
- NFS, CIFS
- Quota Management
- Volume Management, NDMP
- Multipathing
- Cluster Failover
- Switch Security
- Zoning & IVR
- FCIP

### COURSE CONTENT

- Installation & Administration of NetApp Storage Systems
- Topologies
- Fiber Channel Protocol
- Brocade Storage Products & Features
- Brocade Switch Administration
- Server Connection
- Differences SAN / NAS
- Backup in SANs
- Load Balancing, FSPF, Port-Channel, Trunking
- Performance & High Availability



#### SCHEDULE Germany

Munich	23.02.-27.02.09	Hamburg	09.11.-13.11.09
Berlin	E 04.05.-08.05.09	E Training in English	
Frankfurt	29.06.-03.07.09	Further English dates on request	

# VMware ESX on NetApp Storage Systems (NAVMW)

**ID** FL-NAVMW **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

## WHO SHOULD ATTEND

- System administrators and system engineers who are responsible for the integration, administration and management of VMware ESX server in a NetApp storage environment

## PREREQUISITES

- Knowledge on NetApp storage systems, VMware ESX, Linux and Windows servers

## COURSE OBJECTIVES

This course covers the installation, configuration and administration of ESX Servers and focuses on optimal connectivity to NetApp storage systems using FCP, iSCSI, CIFS and NFS. Backup and restore of VMware ESX Server storage LUNs with ESX and NetApp means are also covered, as is the planning and operation of VMware ESX Server and NetApp storage systems in a high availability scenario.

## COURSE CONTENT

- Overview of VMware virtualization concepts
- Basic configuration of the VMware ESX Server and the VMs
- Networks in VMware
- Planning, installation & configuration of CIFS/SMB, NFS & iSCSI within a VM
- Planning, installation & configuration of CIFS/SMB & NFS in the service console of VMware ESX server

- Planning, installation & configuration of FCP, NFS & iSCSI in the VMkernel
- Backup scenarios
- High availability scenarios
- Monitoring & system management
- Troubleshooting



<b>SCHEDULE France</b>		Milan	22.06.-26.06.09
Paris	16.03.-20.03.09	Milan	23.11.-27.11.09
Paris	15.06.-19.06.09	<b>SCHEDULE Portugal</b>	
Paris	16.11.-20.11.09	Lisbon	09.03.-13.03.09
<b>SCHEDULE Germany</b>		Lisbon	08.06.-12.06.09
Munich	02.02.-06.02.09	Lisbon	09.11.-13.11.09
Hamburg	02.03.-06.03.09	<b>SCHEDULE Spain</b>	
Berlin	30.03.-03.04.09	Madrid	02.03.-06.03.09
Frankfurt	04.05.-08.05.09	Madrid	01.06.-05.06.09
Munich	<b>E</b> 25.05.-29.05.09	Madrid	02.11.-06.11.09
Hamburg	15.06.-19.06.09	<b>SCHEDULE Sweden</b>	
Berlin	<b>E</b> 20.07.-24.07.09	Stockholm	09.03.-13.03.09
Duesseldorf	07.09.-11.09.09	Stockholm	08.06.-12.06.09
Frankfurt	12.10.-16.10.09	Stockholm	05.10.-09.10.09
Hamburg	<b>E</b> 02.11.-06.11.09	Stockholm	14.12.-18.12.09
Stuttgart	23.11.-27.11.09	<b>SCHEDULE Switzerland</b>	
Munich	14.12.-18.12.09	Zurich	16.02.-20.02.09
<b>SCHEDULE Greece</b>		Zurich	11.05.-15.05.09
Athens	<b>E</b> 30.03.-03.04.09	Zurich	<b>E</b> 24.08.-28.08.09
Athens	<b>E</b> 29.06.-03.07.09	Zurich	23.11.-27.11.09
Athens	<b>E</b> 30.11.-04.12.09	<b>E</b> Training in English	
<b>SCHEDULE Italy</b>		Further English dates on request	
Milan	23.03.-27.03.09		

# Oracle on NetApp Storage Systems (NAOR)

**ID** NA-NAOR **Price** 4.500,00 EUR (excl. VAT) **60 TUs** **Duration** 5 Days

## WHO SHOULD ATTEND

- Oracle database administrators, system managers, developers

## PREREQUISITES

- Proficiency in Oracle database administration
- Proficiency in NetApp storage system administration
- UNIX/Linux and/or Windows knowledge

## COURSE OBJECTIVES

This course covers the alternatives of running Oracle databases in a NetApp storage infrastructure. The course focuses on the relevant features of NetApp storage systems, like Snapshots.

## COURSE CONTENT

- Fundamentals: Storage networks: NFS, iSCSI, FCP; Configuration of NFS & iSCSI on the database server and on the storage system; Networking: Configuring gigabit ethernet, NFS mount options, tuning
- Backup and recovery: Online and offline backup: Basics; archivelog mode of the Oracle database; Backup/recovery based on NetApp snapshots: Configuration on Unix & Windows; Database cloning with storage system means: rewriteable snapshots, FlexClone & NDMP-Copy
- High Availability: Storage: basics of NetApp Cluster & MetroCluster; Oracle: Oracle Real Application Cluster; Standby database & shadow database

<b>SCHEDULE France</b>		<b>SCHEDULE Italy</b>	
Paris	16.02.-20.02.09	Milan	23.02.-27.02.09
Paris	18.05.-22.05.09	Milan	25.05.-29.05.09
Paris	23.11.-27.11.09	Milan	30.11.-04.12.09
<b>SCHEDULE Germany</b>		<b>SCHEDULE Portugal</b>	
Hamburg	16.02.-20.02.09	Lisbon	09.02.-13.02.09
Munich	<b>E</b> 30.03.-03.04.09	Lisbon	11.05.-15.05.09
Frankfurt	04.05.-08.05.09	Lisbon	16.11.-20.11.09
Berlin	31.08.-04.09.09	<b>SCHEDULE Spain</b>	
Frankfurt	<b>E</b> 19.10.-23.10.09	Madrid	02.02.-06.02.09
Munich	30.11.-04.12.09	Madrid	04.05.-08.05.09
<b>SCHEDULE Greece</b>		Madrid	09.11.-13.11.09
Athens	<b>E</b> 02.03.-06.03.09	<b>E</b> Training in English	
Athens	<b>E</b> 01.06.-05.06.09	Further English dates on request	
Athens	<b>E</b> 07.12.-11.12.09		

# NetApp SnapManager 5.0 for Microsoft Exchange (SME)

ID NA-SME Price 3.600,00 EUR (excl. VAT) 48 TUs Duration 4 Days

## WHO SHOULD ATTEND

- System Engineers, Windows and Exchange administrators

## PREREQUISITES

- **Data ONTAP Fundamentals (DOTF)** and **NetApp Protection Software Administration (NPSA)** courses
- Microsoft courses: Implementing and Managing Microsoft Exchange Server 2007, Troubleshooting Microsoft Exchange Server 2007 and Microsoft Exchange Server 2007 Disaster Recovery

## COURSE OBJECTIVES

This solution-based course focuses on the optimization of Microsoft Exchange 2007 in a NetApp storage environment. The course takes students through the entire system integration process of architecture planning, data migration, backup and restore, disaster recovery, clustering and troubleshooting.

## COURSE CONTENT

- Benefits of running MS Exchange on a storage system
- Perform Exchange 2007 storage planning, implementation, and administration
- MS Exchange backup and restore process

- Perform an installation of a Clustered Exchange server on a NetApp storage system
- Install and configure SnapDrive for Windows 6.0
- Back up & verify an Exchange Data Store using SnapManager 5.0
- Restore data using SnapManager 5.0



### SCHEDULE France

Milan 24.02.-27.02.09  
Paris 06.04.-09.04.09  
Paris 06.10.-09.10.09

### SCHEDULE Germany

Munich 17.02.-20.02.09  
Hamburg E 17.03.-20.03.09  
Frankfurt 06.04.-09.04.09  
Hamburg 02.06.-05.06.09  
Berlin 30.06.-03.07.09  
Munich E 04.08.-07.08.09  
Munich 15.09.-18.09.09  
Munich E 13.10.-16.10.09  
Hamburg 10.11.-13.11.09  
Frankfurt 15.12.-18.12.09

### SCHEDULE Italy

Milan 24.02.-27.02.09  
Milan 03.11.-06.11.09

### SCHEDULE Portugal

Lisbon 19.05.-22.05.09  
Lisbon 20.10.-23.10.09

### SCHEDULE Spain

Madrid 12.05.-15.05.09  
Madrid 13.10.-16.10.09

### SCHEDULE Switzerland

Zurich E 03.02.-06.02.09  
Zurich 05.05.-08.05.09  
Zurich 01.09.-04.09.09  
Zurich E 01.12.-04.12.09

E Training in English  
Further English dates on request

# MS SQL on NetApp Storage Systems (MSSQL)

ID NA-MSSQL Price 3.600,00 EUR (excl. VAT) 48 TUs Duration 4 Days

## WHO SHOULD ATTEND

- Administrators who are responsible for the integration process of architecture planning, data migration, backup and restore, disaster recovery, and troubleshooting SQL Server with NetApp storage system environments

## PREREQUISITES

- **Data ONTAP Fundamentals (DOTF)**, **SAN Administration on Data ONTAP (SAN)** and **High Availability (NAHA)** courses
- One year of Microsoft SQL Server 2005 experience

## COURSE OBJECTIVES

This solution-based course focuses on the optimization of Microsoft SQL Server 2005 in a NetApp storage environment. This course takes students through the entire systems-integration process of architecture planning, data migration, backup and restore, disaster recovery, and troubleshooting.

## COURSE CONTENT

- Benefits of running SQL Server 2005 on a NetApp storage system
- Perform SQL Server 2005 storage planning, implementation, and administration
- Architect a high performance, highly available, consolidated SQL Server solution on a NetApp storage system

- Deploy SQL Server 2005 on a NetApp storage system
- Describe the SQL Server 2005 backup and restore process using SnapManager
- Determine the correct NetApp storage controller model, volume size, and LUN size to support the solution
- Back up and verify a SQL Server 2005 database using SnapManager
- Restore data using SnapManager
- Describe different disaster-recovery methods
- Implement disaster-recovery methods
- Isolate & correct faults in a SQL Server & SnapManager solution

### SCHEDULE France

Milan 09.11.-12.11.09  
Paris 14.04.-17.04.09  
Paris 12.10.-15.10.09

### SCHEDULE Germany

Munich 03.03.-06.03.09  
Berlin 14.04.-17.04.09  
Berlin E 02.06.-05.06.09  
Frankfurt 07.07.-10.07.09  
Hamburg E 08.09.-11.09.09  
Hamburg 28.09.-01.10.09  
Frankfurt 09.11.-12.11.09  
Munich E 15.12.-18.12.09

### SCHEDULE Italy

Milan 03.03.-06.03.09

Milan 09.11.-12.11.09

### SCHEDULE Portugal

Lisbon 26.05.-29.05.09  
Lisbon 26.10.-29.10.09

### SCHEDULE Spain

Madrid 19.05.-22.05.09  
Madrid 19.10.-22.10.09

### SCHEDULE Switzerland

Zurich 10.02.-13.02.09  
Zurich E 28.04.-01.05.09  
Zurich 08.09.-11.09.09  
Zurich 08.12.-11.12.09

E Training in English  
Further English dates on request

# Cisco Data Center Training



Fast Lane's training offerings are as multifaceted as the diverse Cisco data center technologies and specialized solutions your company and workforce need.

## **CISCO COMPLETE**

Fast Lane offers the full range of Cisco data center training, from entry-level to high-end specialty courses. We can ensure you are prepared to master the challenges of Cisco data center certification and specialization.

## **TAILORED COURSES**

Our experts will be delighted to tailor and conduct training to suit your wishes.

## **TOP COACHES**

All our instructors are Cisco-certified specialists with extensive practical experience in their specialty fields.

## **CERTIFIED WORLDWIDE**

Fast Lane is certified in all regions worldwide as a Cisco Learning Solutions Partner.

## **ADVANCED TECHNOLOGY LABS**

Putting hands-on exercises and the latest Cisco equipment to good use, we convey the knowledge you need to operate complex data center infrastructures.

## **CISCO LEARNING CREDITS**

Redeem your Cisco Learning Credits! You are free to use CLCs to pay for any Cisco training.





# Cisco Data Center Products & Technologies



By aligning your IT people, processes, and technology with your business objectives, the new, virtualized data center helps you address global challenges. Cisco Data Center 3.0 transforms infrastructure silos into pools of resources that can be dynamically aligned to meet your application and business needs. Create network-enabled virtualized pools of storage, server, compute and application resources with Cisco data center portfolio.

## DATA CENTER SWITCHING



The network platform for Data Center 3.0 delivers new levels of operational continuity, scalability and transport flexibility to meet the demands of the next generation data center. Featured

products include:

- Cisco Nexus 1000V Virtual Switch
- Cisco Nexus 5000 series
- Cisco Nexus 7000 series
- Cisco Catalyst 6500-V-E Modular Switch
- Catalyst 4900M Rack Switch

## STORAGE NETWORKING



Address the challenges of managing, protecting, and scaling data storage with an efficient, reliable, and secure solution. Featured products include:

- Cisco MDS 9000 Product Portfolio
- Cisco MDS 9000 Products for Intelligent Fabric Applications
- Cisco MDS 9000 SAN-OS Software
- Cisco MDS 9000 SAN Management

## INFINIBAND SERVER SWITCHING



Build cost-effective server clusters to support high performance computing applications and distributed systems. Featured products include:

- Cisco SFS 7000 Series InfiniBand Switches
- Cisco SFS 3000 Series Multilayer Switches
- Cisco SFS High Performance InfiniBand Subnet Manager
- Cisco InfiniBand Host Channel Adapters

## BLADE SWITCHING



Maximize investment by providing secure, resilient, and manageable blade switch solutions. Featured products include:

- Cisco Catalyst 3100 Series Blade Switches
- Cisco MDS Fibre Channel Blade Switch for IBM BladeCenter and HP c-Class BladeSystem
- Cisco SFS InfiniBand Blade Switch for IBM BladeCenter

## APPLICATION NETWORKING



Increase performance, scale, and security with network-based application delivery tools. Featured products include:

- Cisco ACE Application Control Engine 4710 Appliance
- Cisco Wide Area Application Services (WAAS) Mobile
- Cisco ACE XML Gateway

## DATA CENTER SECURITY



Defend critical business processes against attack and disruption, protect privacy, and support policy and regulatory compliance. Featured products include:

- Cisco Firewall Services Module
- Cisco ACE Application Control Engine Module
- Cisco ACE XML Gateway
- Cisco ASA 5500 Series Adaptive Security Appliance

## NETWORK MANAGEMENT



Automate and simplify your data center network to reduce operational costs and improve productivity. Featured products include:

- Cisco Data Center Network Manager
- Cisco VFrame Data Center 1.1
- Cisco Fabric Manager
- Cisco Application Networking Manager

# Cisco Data Center Certifications



The Cisco Data Center certifications validate knowledge of the corresponding Cisco technologies. Fast Lane delivers the courses you need to prepare for the certification you desire.

## DATA CENTER SPECIALIST CERTIFICATIONS

Prerequisites	Recommended Training	Days	Test
<b>CISCO DATA CENTER APPLICATION SERVICES SUPPORT SPECIALIST</b>			
CCNA Certification	<b>DCASI</b> Implementing Cisco Data Center Application Services	5	<b>DCASI</b> Test #642-975
<b>CISCO DATA CENTER APPLICATION SERVICES DESIGN SPECIALIST</b>			
CCDA Certification	<b>DCASD</b> Designing Cisco Data Center Application Services	5	<b>DCASD</b> Test #642-972
<b>CISCO DATA CENTER NETWORKING INFRASTRUCTURE DESIGN SPECIALIST</b>			
CCDA Certification	<b>DCNID</b> Designing Cisco Data Center Network Infrastructure	5	<b>DCNID</b> Test #642-971
<b>CISCO DATA CENTER NETWORKING INFRASTRUCTURE SUPPORT SPECIALIST</b>			
CCNP Certification	<b>DCNI-1</b> Implementing Cisco Data Center Network Infrastructure 1	5	<b>DCNI-1</b> Test #642-973 <b>DCNI-2</b> Test #642-974
	<b>DCNI-2</b> Implementing Cisco Data Center Network Infrastructure 2	4	
<b>CISCO DATA CENTER STORAGE NETWORKING DESIGN SPECIALIST</b>			
None	<b>DCSNS</b> Designing Cisco Storage Networking Solutions	5	<b>CSSDS</b> Test #642-355
<b>CISCO DATA CENTER STORAGE NETWORKING SUPPORT SPECIALIST</b>			
None	<b>ICSNS</b> Implementing Cisco Storage Networking Solutions	5	<b>CSSSS</b> Test #642-356
	<b>IASNS</b> Implementing Cisco Advanced Storage Networking Solutions	5	
<b>CISCO DATA CENTER NETWORKING SALES SPECIALIST</b>			
CSE Certification	<b>DCNS</b> Selling Cisco Data Center Networking Solutions		<b>DCNS</b> Test #646-976
<b>CISCO DATA CENTER STORAGE NETWORKING SALES SPECIALIST</b>			
CSE Certification	<b>DCNS</b> Selling Cisco Data Center Networking Solutions		<b>DCNS</b> Test #646-976

## CCIE STORAGE NETWORKING

Prerequisites	Recommended Training	Days	Test
<b>CCIE CISCO CERTIFIED INTERNETWORK EXPERT - STORAGE NETWORKING</b>			
None	<b>ICSNS</b> Implementing Cisco Storage Networking Solutions	5	Storage Networking Qualification
	<b>IASNS</b> Implementing Cisco Adv. Storage Networking Solutions	5	
	<b>DCSNS</b> Designing Cisco Storage Networking Solutions	5	
	<b>CMSS</b> Cisco Mainframe Storage Solutions	2	
	<b>CCIESANPL</b> CCIE Storage Networking Power Lab	5	
			Storage Networking Lab Exam



# Implementing Cisco Data Center Network Infrastructure 1 (DCNI-1)

ID CI-DCNI-1 Price 2.990,00 EUR (excl. VAT) Duration 5 Days

## WHO SHOULD ATTEND

- Network Administrators; Network Engineers; Network Designers; System Engineers and Network Managers involved with Data Center Infrastructure

## PREREQUISITES

- CCNP or CCIE Routing & Switching certification status or equivalent knowledge

<b>SCHEDULE Bulgaria</b>	Berlin	<b>E</b> 16.11.-20.11.09
Sofia <b>E</b> 18.05.-22.05.09	<b>SCHEDULE Poland</b>	
<b>SCHEDULE Germany</b>	Warsaw	<b>E</b> 06.07.-10.07.09
Hamburg <b>E</b> 02.02.-06.02.09	<b>SCHEDULE Serbia</b>	
Berlin 16.02.-20.02.09	Belgrade <b>E</b> 02.02.-06.02.09	
Frankfurt <b>E</b> 02.03.-06.03.09	<b>SCHEDULE Slovenia</b>	
Hamburg 16.03.-20.03.09	Ljubljana <b>E</b> 01.06.-05.06.09	
Munich <b>E</b> 30.03.-03.04.09	<b>SCHEDULE Sweden</b>	
Berlin 20.04.-24.04.09	Stockholm <b>E</b> 02.03.-06.03.09	
Hamburg <b>E</b> 04.05.-08.05.09	Stockholm <b>E</b> 01.06.-05.06.09	
Frankfurt 25.05.-29.05.09	Stockholm <b>E</b> 17.08.-21.08.09	
Duesseldorf <b>E</b> 15.06.-19.06.09	<b>SCHEDULE Switzerland</b>	
Munich 03.08.-07.08.09	Zurich <b>E</b> 11.05.-15.05.09	
Berlin <b>E</b> 24.08.-28.08.09	<b>SCHEDULE Turkey</b>	
Frankfurt 14.09.-18.09.09	Istanbul <b>E</b> 30.03.-03.04.09	
Hamburg <b>E</b> 12.10.-16.10.09	<b>E</b> Training in English	
Berlin 02.11.-06.11.09	Further English dates on request	

## COURSE OBJECTIVES

This course will teach you to build scalable, reliable, and intelligent Data Center networks using Catalyst 6500 Series switches. You will deploy an efficient and expandable enterprise network using Catalyst 6500, 4900, and the Data Center Infrastructure Module of the Enterprise Composite Network Model (ECNM). Explore the capabilities and performance considerations of the Catalyst 6500 Series switch supervisor modules including Sup720-3B/BXL, Sup32-PISA, and Sup720-10G-3C/CXL. In class you will identify and implement traffic flows including FWSM routed/transparent modes, supervisor based packet acceleration, and FWSM-PISA integration and describe the multiple contexts concept, and how multiple contexts are provisioned and managed on FWSM.

## COURSE CONTENT

- Implementing the Catalyst 6500, 4900 and Blade Switches
- Implementing FWSM for a Data Center Network Infrastructure
- Implementing Network Analysis with NAM
- Implementing High Availability Data Center Features



# Implementing Cisco Data Center Network Infrastructure 2 (DCNI-2)

ID CI-DCNI-2 Price 2.690,00 EUR (excl. VAT) Duration 4 Days

## WHO SHOULD ATTEND

- Network Administrators; Network Engineers; Network Designers; System Engineers and Network Managers involved with Data Center Infrastructure

## PREREQUISITES

- **Interconnecting Cisco Network Devices 2 (ICND2), Building Cisco Multilayer Switched Networks (BCMSN), Building Scalable Cisco Internetworks (BSCI) and Implementing Secure Converged Wide Area Networks (ISCW)** courses

## COURSE OBJECTIVES

This course teaches you how to implement an enterprise Data Center routing and switching infrastructure with the next-generation Cisco Nexus 7000 and 5000 platforms. The first 3 days will focus on the Nexus 7000, with an overview of the Nexus 5000 and FCoE on Day 4. This course provides a technical overview of the Nexus platform architecture, deployment, and operations, including Virtual Device Contexts, Layer 2 and Layer 3 features, QoS, and security. You will explore the features of NX-OS and the Nexus platform by performing hands-on labs using a Nexus 7000 simulator.



## COURSE CONTENT

- Deploying the Nexus 7000: Overview of the Cisco Nexus 7000; Introduction to Virtual Device Contexts in the Cisco Nexus 7000 / NX-OS; Managing the Cisco Nexus 7000 / NX-OS; Nexus 7000 and NX-OS Layer 2 Protocols & Features; Nexus 7000 and NX-OS Layer 3 Protocols & Features; Nexus 7000 Fabric Switching; Nexus 7000 / NX-OS Quality of Service; Nexus 7000 / NX-OS Security; Troubleshooting
- Overview of the Nexus 5000: Implementing an FCoE Network Using Nexus 5000 Switches; Understanding Fibre Channel; Understanding the FCoE Protocol

<b>SCHEDULE Bulgaria</b>	<b>SCHEDULE Poland</b>
Sofia <b>E</b> 25.05.-28.05.09	Warsaw <b>E</b> 13.07.-16.07.09
<b>SCHEDULE Germany</b>	<b>SCHEDULE Serbia</b>
Hamburg <b>E</b> 17.02.-20.02.09	Belgrade <b>E</b> 09.02.-12.02.09
Frankfurt 24.03.-27.03.09	<b>SCHEDULE Slovenia</b>
Munich <b>E</b> 14.04.-17.04.09	Ljubljana <b>E</b> 08.06.-11.06.09
Hamburg 12.05.-15.05.09	<b>SCHEDULE Sweden</b>
Berlin <b>E</b> 02.06.-05.06.09	Stockholm <b>E</b> 09.03.-12.03.09
Frankfurt <b>E</b> 23.06.-26.06.09	Stockholm <b>E</b> 08.06.-11.06.09
Munich 14.07.-17.07.09	Stockholm <b>E</b> 24.08.-27.08.09
Berlin 25.08.-28.08.09	<b>SCHEDULE Switzerland</b>
Frankfurt <b>E</b> 08.09.-11.09.09	Zurich <b>E</b> 16.06.-19.06.09
Hamburg 22.09.-25.09.09	<b>SCHEDULE Turkey</b>
Frankfurt 20.10.-23.10.09	Istanbul <b>E</b> 06.04.-09.04.09
Hamburg <b>E</b> 10.11.-13.11.09	<b>E</b> Training in English
Hamburg 08.12.-11.12.09	Further English dates on request

## Data Center Network Infrastructure Design (DCNID)

**ID** CI-DCNID **Price** 3.290,00 EUR (excl. VAT) **Duration** 5 Days

### WHO SHOULD ATTEND

- Network Administrators; Network Engineers; Network Designers; System Engineers and Network Managers involved with Data Center Infrastructure

### PREREQUISITES

- **Designing for Cisco Internetwork Solutions (DESGN), Implementing Cisco IOS Network Security (IINS) and Security Solutions for System Engineers (SSSE)** courses

### COURSE OBJECTIVES

This course enables students to create a converged Data Center network design that optimizes availability, scalability, performance, and security, using the Nexus 7000, Nexus 5000 family of switches, VSS (Virtual Switching Systems), Catalyst 6500, Catalyst 4900M, Cisco Blade Switches, Firewall Services Module, Intrusion Protection/Detection Services Module, Network Analysis Module and application networking platforms such as ACE module and appliances. This course discusses Cisco Data Center Ethernet and FCoE protocols along with the virtualization technologies and related solutions.



### COURSE CONTENT

- Data Center Objectives: Key Data Center Concerns and Objectives; Data Center Environmental Requirements; Data Center Networking Components: Cisco Platforms and Modules
- Cisco Nexus 7010 Switch: Hardware Architecture; Software Architecture; Continual Availability; Network Management; Security Overview; QoS implementation on NX 7010; Cisco Nexus 7010 position in the DC network
- Cisco Nexus 5000 Switch: Introduction to Fibre Channel over Ethernet (FCoE); Introduction to Cisco Nexus 5000 Switch; Cisco Nexus 5000 Switch Design Overview
- Data Center Design: Overview; Data Center Application Design
- Data Center Design Strategy

<b>SCHEDULE Bulgaria</b>	Warsaw	E 04.05.-08.05.09	
Sofia	E 15.06.-19.06.09	<b>SCHEDULE Serbia</b>	
<b>SCHEDULE Germany</b>	Belgrade	E 16.03.-20.03.09	
Frankfurt	E 09.02.-13.02.09	<b>SCHEDULE Sweden</b>	
Berlin	09.03.-13.03.09	Stockholm	E 16.03.-20.03.09
Hamburg	E 20.04.-24.04.09	Stockholm	E 22.06.-26.06.09
Frankfurt	11.05.-15.05.09	Stockholm	E 31.08.-04.09.09
Berlin	E 15.06.-19.06.09	<b>SCHEDULE Switzerland</b>	
Munich	06.07.-10.07.09	Zurich	E 04.05.-08.05.09
Hamburg	E 10.08.-14.08.09	Zurich	05.10.-09.10.09
Berlin	14.09.-18.09.09	<b>SCHEDULE Turkey</b>	
Frankfurt	E 05.10.-09.10.09	Istanbul	E 13.04.-17.04.09
Hamburg	19.10.-23.10.09	E Training in English	
<b>SCHEDULE Poland</b>		Further English dates on request	

## Designing Data Center Application Services (DCASD)

**ID** CI-DCASD **Price** 2.990,00 EUR (excl. VAT) **Duration** 5 Days

### PREREQUISITES

- Basic understanding of the following topics: The TCP/IP protocol, the HTTP and SSL protocols, N-tier application architecture, Server load-balancing

### COURSE CONTENT

- Data Center Application Services Overview
- Designing Server Load Balancing Solutions
- Designing Web Application Acceleration Solutions
- Designing Site-to-Site Load Balancing Solutions

- Optimizing the DCAS Solution

<b>SCHEDULE Bulgaria</b>	Munich	E 05.10.-09.10.09	
Sofia	Berlin	26.10.-30.10.09	
<b>SCHEDULE Germany</b>	<b>SCHEDULE Poland</b>		
Hamburg	Warsaw	E 27.07.-31.07.09	
Berlin	02.03.-06.03.09	<b>SCHEDULE Serbia</b>	
Munich	E 23.03.-27.03.09	Belgrade	E 23.03.-27.03.09
Hamburg	20.04.-24.04.09	<b>SCHEDULE Switzerland</b>	
Frankfurt	E 04.05.-08.05.09	Zurich	E 16.02.-20.02.09
Berlin	15.06.-19.06.09	Zurich	11.05.-15.05.09
Frankfurt	E 06.07.-10.07.09	E Training in English	
Munich	27.07.-31.07.09	Further English dates on request	
Hamburg	14.09.-18.09.09		

## Implementing Data Center Application Services (DCASI)

**ID** CI-DCASI **Price** 2.990,00 EUR (excl. VAT) **Duration** 5 Days

### PREREQUISITES

- Basic understanding of the following topics: The TCP/IP protocol, the HTTP and SSL protocols, N-tier application architecture, Server load-balancing

### COURSE CONTENT

- Data Center Application Services Overview
- Implementing Server Load Balancing

- Implementing Web Application Acceleration
- Implementing Site-to-Site Load Balancing
- Redundancy and Troubleshooting

<b>SCHEDULE Germany</b>	Berlin	12.10.-16.10.09	
Frankfurt	Munich	E 02.11.-06.11.09	
Berlin	E 16.03.-20.03.09	<b>SCHEDULE Switzerland</b>	
Hamburg	04.05.-08.05.09	Zurich	28.09.-02.10.09
Frankfurt	E 22.06.-26.06.09	E Training in English	
Munich	27.07.-31.07.09	Further English dates on request	

# Implementing Cisco Storage Networking Solutions (ICSNS)

**ID** CI-ICSNS **Price** 2.890,00 EUR (excl. VAT) **Duration** 5 Days

## WHO SHOULD ATTEND

- Cisco Channel Partner/Reseller, Cisco Customers

## PREREQUISITES

- Basic understanding of data storage hardware components and protocols, including SCSI and Fibre Channel

## COURSE OBJECTIVES

ICSNS enables the student to describe and configure the hardware and software components of the Cisco MDS 9000 product family, focusing on key technologies and features that apply to departmental, mid-range, and enterprise SANs.

## COURSE CONTENT

- MDS 9000 Platform Overview
- System Installation and Initial Configuration
- Building Virtual SANs

- Managing SAN Traffic
- Implementing FCIP
- Troubleshooting Tools and Scenarios

<b>SCHEDULE Bulgaria</b>	Berlin	14.12.-18.12.09	
Sofia	<b>E</b> 01.06.-05.06.09	<b>SCHEDULE Poland</b>	
<b>SCHEDULE Germany</b>	Warsaw	<b>E</b> 20.07.-24.07.09	
Munich	<b>E</b> 02.02.-06.02.09	<b>SCHEDULE Serbia</b>	
Frankfurt	16.02.-20.02.09	Belgrade	<b>E</b> 23.02.-27.02.09
Hamburg	<b>E</b> 02.03.-06.03.09	<b>SCHEDULE Slovenia</b>	
Duesseldorf	16.03.-20.03.09	Ljubljana	<b>E</b> 15.06.-19.06.09
Hamburg	20.04.-24.04.09	<b>SCHEDULE Sweden</b>	
Berlin	<b>E</b> 04.05.-08.05.09	Stockholm	<b>E</b> 04.05.-08.05.09
Munich	25.05.-29.05.09	Stockholm	<b>E</b> 14.09.-18.09.09
Frankfurt	<b>E</b> 08.06.-12.06.09	Stockholm	<b>E</b> 23.11.-27.11.09
Hamburg	13.07.-17.07.09	<b>SCHEDULE Switzerland</b>	
Berlin	10.08.-14.08.09	Zurich	09.02.-13.02.09
Berlin	<b>E</b> 24.08.-28.08.09	Zurich	<b>E</b> 01.06.-05.06.09
Frankfurt	14.09.-18.09.09	Zurich	19.10.-23.10.09
Munich	19.10.-23.10.09		
Hamburg	<b>E</b> 09.11.-13.11.09		
Hamburg	23.11.-27.11.09		

**E** Training in English  
Further English dates on request

# Implementing Cisco Advanced Storage Networking Solutions (IASNS)

**ID** CI-IASNS **Price** 2.990,00 EUR (excl. VAT) **Duration** 5 Days

## WHO SHOULD ATTEND

- Cisco Channel Partner/Reseller, Cisco Customers

## PREREQUISITES

- Implementing Cisco Storage Networking Solutions (ICSNS) course

## COURSE OBJECTIVES

IASNS enables the student to implement advanced Cisco MDS 9000 technologies and features that apply primarily to enterprise SANs, and troubleshoot common SAN problems and configuration errors.

## COURSE CONTENT

- Building Enterprise SAN Fabrics
- Implementing Management and Security Services
- Advanced Troubleshooting

- Implementing iSCSI



<b>SCHEDULE Bulgaria</b>	Hamburg	30.11.-04.12.09	
Sofia	<b>E</b> 08.06.-12.06.09	<b>SCHEDULE Poland</b>	
<b>SCHEDULE Germany</b>	Warsaw	<b>E</b> 02.03.-06.03.09	
Frankfurt	<b>E</b> 09.02.-13.02.09	<b>SCHEDULE Serbia</b>	
Berlin	23.02.-27.02.09	Belgrade	<b>E</b> 16.02.-20.02.09
Hamburg	<b>E</b> 09.03.-13.03.09	<b>SCHEDULE Slovenia</b>	
Frankfurt	23.03.-27.03.09	Ljubljana	<b>E</b> 22.06.-26.06.09
Berlin	<b>E</b> 30.03.-03.04.09	<b>SCHEDULE Sweden</b>	
Munich	20.04.-24.04.09	Stockholm	<b>E</b> 23.03.-27.03.09
Hamburg	<b>E</b> 11.05.-15.05.09	Stockholm	<b>E</b> 12.10.-16.10.09
Duesseldorf	25.05.-29.05.09	Stockholm	<b>E</b> 07.12.-11.12.09
Munich	<b>E</b> 15.06.-19.06.09	<b>SCHEDULE Turkey</b>	
Hamburg	22.06.-26.06.09	Istanbul	<b>E</b> 20.04.-24.04.09
Berlin	27.07.-31.07.09	<b>SCHEDULE Switzerland</b>	
Munich	24.08.-28.08.09	Zurich	<b>E</b> 04.05.-08.05.09
Munich	<b>E</b> 07.09.-11.09.09	Zurich	24.08.-28.08.09
Frankfurt	05.10.-09.10.09		
Berlin	<b>E</b> 19.10.-23.10.09		
Duesseldorf	02.11.-06.11.09		

**E** Training in English  
Further English dates on request

# Cisco MDS 9000 Technical Pre-Sales Training (CMDSPS)

**ID** FL-CMDSPS **Price** 1.200,00 EUR (excl. VAT) **Duration** 2 Days

## PREREQUISITES

- Basic storage knowledge

## COURSE OBJECTIVES

This course gives a comprehensive overview of the actual Cisco MDS solutions (incl. Virtual SANs (VSANs), Switch Port Analyzer (SPAN) and iSCSI solutions) as well as their installation. As one major point the differences in architecture, management and

implementation between Cisco and its competitors solutions will be shown.

<b>SCHEDULE Germany</b>	Hamburg	15.10.-16.10.09	
Frankfurt	<b>E</b> 12.02.-13.02.09	Munich	<b>E</b> 05.11.-06.11.09
Hamburg	19.03.-20.03.09	<b>SCHEDULE Switzerland</b>	
Berlin	<b>E</b> 23.04.-24.04.09	Zurich	<b>E</b> 05.03.-06.03.09
Frankfurt	04.06.-05.06.09	Zurich	18.05.-19.05.09
Berlin	<b>E</b> 23.07.-24.07.09		
Munich	13.08.-14.08.09		

**E** Training in English  
Further English dates on request

# Designing Cisco Storage Networking Solutions (DCSNS)

**ID** CI-DCSNS **Price** 2.890,00 EUR (excl. VAT) **Duration** 5 Days

## WHO SHOULD ATTEND

- Cisco Channel Partner/Reseller, Cisco Customers

## PREREQUISITES

- Basic understanding of data storage hardware components and protocols, including SCSI and Fibre Channel

## COURSE OBJECTIVES

DCSNS enables the student to design enterprise Cisco MDS 9000 solutions that include core Fibre Channel SANs, iSCSI for mid-range applications, and SAN extension solutions.

## COURSE CONTENT

- MDS 9000 Platform Overview
- Designing SAN Fabrics
- Consolidating Storage in the Data Center
- Securing the SAN
- Designing SAN Extension Solutions



### SCHEDULE Germany

Berlin	E 02.02.-06.02.09
Frankfurt	23.02.-27.02.09
Hamburg	E 23.03.-27.03.09
Munich	20.04.-24.04.09
Frankfurt	E 04.05.-08.05.09
Hamburg	25.05.-29.05.09
Berlin	E 15.06.-19.06.09
Frankfurt	13.07.-17.07.09
Hamburg	31.08.-04.09.09
Frankfurt	E 21.09.-25.09.09
Berlin	19.10.-23.10.09
Munich	23.11.-27.11.09

### SCHEDULE Poland

Warsaw E 03.08.-07.08.09

### SCHEDULE Serbia

Belgrade E 02.03.-06.03.09

### SCHEDULE Switzerland

Zurich 09.03.-13.03.09

Zurich E 22.06.-26.06.09

Zurich 23.11.-27.11.09

### SCHEDULE Turkey

Istanbul E 04.05.-08.05.09

E Training in English

Further English dates on request

# Cisco Mainframe Storage Solutions (CMSS)

**ID** CI-CMSS **Price** 1.490,00 EUR (excl. VAT) **Duration** 2 Days

## PREREQUISITES

- **Implementing Cisco Storage Networking Solutions (ICSNS)** course

## COURSE CONTENT

- Mainframe Storage Technologies: IBM Mainframe Architecture; ESCON
- FICON: Concepts; Applications; The FC-SB-3 Protocol
- Implementing Cisco FICON Solutions: FICON Fabric

Configuration; FICON Port Configuration; Troubleshooting; FICON Cascade

- Labs: Basic FICON Configuration; Optional FICON Features and Basic Troubleshooting; Configuring Channel Paths

### SCHEDULE Germany

Frankfurt	05.02.-06.02.09
Munich	E 26.02.-27.02.09
Hamburg	08.04.-09.04.09
Hamburg	E 30.04.-01.05.09
Munich	18.05.-19.05.09
Berlin	08.06.-09.06.09

Munich 09.07.-10.07.09

Hamburg 13.08.-14.08.09

Frankfurt E 17.09.-18.09.09

Berlin 15.10.-16.10.09

Frankfurt 26.11.-27.11.09

E Training in English

Further English dates on request

# Implementing High Performance Computing Networks with the Cisco SFS (HPCSFS)

**ID** CI-HPCSFS **Price** 2.990,00 EUR (excl. VAT) **Duration** 4 Days

## PREREQUISITES

- CCNA certification or equivalent knowledge
- **Implementing Cisco Storage Networking Solutions (ICSNS)** course

## COURSE CONTENT

- Fundamentals of High Performance Computing
- Designing HPC Server Fabrics
- Implementing Server Fabrics with the Cisco SFS
- Building the Unified Compute Fabric
- Configuring the Ethernet Gateway

- Configuring the Fibre Channel Gateway
- Boot over InfiniBand



### SCHEDULE Germany

Munich	17.02.-20.02.09
Munich	E 17.03.-20.03.09
Hamburg	14.04.-17.04.09
Berlin	02.06.-05.06.09
Hamburg	E 23.06.-26.06.09
Frankfurt	28.07.-31.07.09

Berlin 22.09.-25.09.09

Munich 03.11.-06.11.09

Berlin E 24.11.-27.11.09

Hamburg 08.12.-11.12.09

E Training in English

Further English dates on request

# Cisco Wide Area Application Services (CWAAS)

**ID** CI-CWAAS **Price** 2.990,00 EUR (excl. VAT) **Duration** 5 Days

## PREREQUISITES

- CCNP certification or equivalent knowledge
- Background in TCP and exposure to layer 7 protocols



## COURSE CONTENT

- Cisco Wide Area Application Services
- WAAS Quick Start
- Implementation, Integration, Management
- Cisco WAAS Application Optimizers
- Cisco WAAS Design and Troubleshooting
- Cisco WAAS Mobile Client Solution

### SCHEDULE Germany

Frankfurt	E 16.02.-20.02.09
Hamburg	16.03.-20.03.09
Frankfurt	11.05.-15.05.09
Hamburg	E 08.06.-12.06.09
Munich	13.07.-17.07.09
Frankfurt	E 10.08.-14.08.09
Hamburg	31.08.-04.09.09
Munich	E 12.10.-16.10.09

Berlin 02.11.-06.11.09

Frankfurt 14.12.-18.12.09

### SCHEDULE Switzerland

Zurich	02.02.-06.02.09
Zurich	E 20.04.-24.04.09
Zurich	13.07.-17.07.09
Zurich	E 28.09.-02.10.09
E Training in English	
Further English dates on request	

# Implementing the Application Control Engine Service Module (ACESM)

**ID** CI-ACESM **Price** 2.490,00 EUR (excl. VAT) **Duration** 4 Days

## PREREQUISITES

- Basic understanding of the following topics: The TCP/IP protocol, the HTTP and SSL protocols, N-tier application architecture, Server load-balancing

## COURSE CONTENT

- Introducing the Cisco ACE Module
- Deploying the Cisco ACE Module
- Understanding Modular Policy CLI
- Managing the Cisco ACE Module
- Understanding Security Features
- Configuring Layer 4 Load Balancing
- Configuring Health Monitoring



- Configuring Layer 7 Protocol Processing
- Processing Secure Connections
- Understanding High Availability
- Integrating Multiple Features

### SCHEDULE Germany

Frankfurt	E 10.02.-13.02.09
Berlin	24.03.-27.03.09
Munich	E 14.04.-17.04.09
Frankfurt	12.05.-15.05.09
Hamburg	E 16.06.-19.06.09
Hamburg	28.07.-31.07.09
Munich	E 25.08.-28.08.09
Frankfurt	22.09.-25.09.09
Frankfurt	E 03.11.-06.11.09
Berlin	17.11.-20.11.09

### SCHEDULE Sweden

Stockholm	E 14.04.-17.04.09
Stockholm	E 15.06.-18.06.09
Stockholm	E 06.10.-09.10.09
Stockholm	E 01.12.-04.12.09

### SCHEDULE Switzerland

Zurich	E 17.02.-20.02.09
Zurich	21.04.-24.04.09
Zurich	25.08.-28.08.09
E Training in English	
Further English dates on request	

# Global Site Selector Operation & Configuration (GSSOC)

**ID** CI-GSSOC **Price** 1.990,00 EUR (excl. VAT) **Duration** 3 Days

## PREREQUISITES

- Basic understanding of the following topics: The TCP/IP protocol, the HTTP and SSL protocols, N-tier application architecture, Server load-balancing

## COURSE CONTENT

- Basic DNS Review
- GSS Deployment Model Overview
- GSS Setup
- Global Server Load Balancing

- GSS Keepalives
- GSS Load Balancing Methods
- GSS Network Proximity
- GSS DDos Protection
- GSS / CNR Interaction

### SCHEDULE Germany

Hamburg	04.03.-06.03.09
Frankfurt	E 01.04.-03.04.09
Berlin	18.05.-20.05.09
Munich	08.07.-10.07.09
Frankfurt	09.09.-11.09.09

Berlin 30.09.-02.10.09

Hamburg E 14.10.-16.10.09

Berlin 11.11.-13.11.09

Frankfurt 02.12.-04.12.09

E Training in English

Further English dates on request

# Designing an Enterprise Application Infrastructure with the ACE Family (ACEDES)

**ID** CI-ACEDES **Price** 2.390,00 EUR (excl. VAT) **Duration** 4 Days

## PREREQUISITES

- Basic understanding of the following topics: The TCP/IP protocol, the HTTP and SSL protocols, N-tier application architecture, Server load-balancing

## COURSE CONTENT

- Introducing ACE
- Deploying ACE
- Modular Policy Configuration
- Layer 4 / 7 Load Balancing
- Layer 7 Protocol Processing
- Processing Secure Connections
- Security Features
- High Availability
- Integrating Multiple Features



### SCHEDULE Germany

Hamburg	24.02.-27.02.09
Berlin	<b>E</b> 17.03.-20.03.09
Frankfurt	06.04.-09.04.09
Hamburg	<b>E</b> 12.05.-15.05.09
Berlin	02.06.-05.06.09
Hamburg	04.08.-07.08.09
Frankfurt	<b>E</b> 15.09.-18.09.09
Munich	06.10.-09.10.09

Berlin	<b>E</b> 03.11.-06.11.09
Frankfurt	24.11.-27.11.09

### SCHEDULE Switzerland

Zurich	10.03.-13.03.09
Zurich	<b>E</b> 23.06.-26.06.09
Zurich	06.10.-09.10.09

**E** Training in English  
Further English dates on request

# Implementing the Cisco ACE Appliance (ACEAP)

**ID** CI-ACEAP **Price** 2.490,00 EUR (excl. VAT) **Duration** 4 Days

## PREREQUISITES

- Basic understanding of the following topics: The TCP/IP protocol, the HTTP and SSL protocols, N-tier application architecture, Server load-balancing

## COURSE CONTENT

- Implementing the Cisco Application Control Engine Appliance
- Introducing the Cisco ACE 4710 Appliance
- Deploying Cisco ACE
- Modular Policy CLI
- Managing the Cisco ACE Appliance
- Security Features
- Load Balancing

- Health Monitoring
- Layer 7 Protocol Processing
- Processing Secure Connections
- Deploying Application Acceleration and Optimization
- High Availability
- Integrating Multiple Features

### SCHEDULE Germany

Frankfurt	<b>E</b> 10.03.-13.03.09
Hamburg	28.04.-01.05.09
Berlin	<b>E</b> 23.06.-26.06.09
Frankfurt	<b>E</b> 18.08.-21.08.09
Munich	22.09.-25.09.09
Berlin	<b>E</b> 20.10.-23.10.09
Frankfurt	10.11.-13.11.09

Hamburg 08.12.-11.12.09

### SCHEDULE Switzerland

Zurich	<b>E</b> 17.02.-20.02.09
Zurich	14.04.-17.04.09
Zurich	22.09.-25.09.09

**E** Training in English  
Further English dates on request

# ACE XML Gateway Operations & Configuration (AXGOC)

**ID** CI-AXGOC **Price** 1.290,00 EUR (excl. VAT) **Duration** 2 Days

## PREREQUISITES

- Basic understanding of the following topics: The TCP/IP protocol, the HTTP and SSL protocols, N-tier application architecture, Server load-balancing

## COURSE CONTENT

- Application Security
- Introducing the ACE XML Gateway
- Deploying the ACE XML Gateway
- Securing Communications with SSL

- Message Level Security
- Advanced Deployment Options
- Troubleshooting the ACE XML Gateway

### SCHEDULE Germany

Hamburg	12.02.-13.02.09
Berlin	<b>E</b> 02.04.-03.04.09
Berlin	07.05.-08.05.09
Frankfurt	18.06.-19.06.09
Munich	03.09.-04.09.09
Berlin	<b>E</b> 17.09.-18.09.09
Hamburg	29.10.-30.10.09

Frankfurt	26.11.-27.11.09
Frankfurt	<b>E</b> 10.12.-11.12.09

### SCHEDULE Switzerland

Zurich	26.03.-27.03.09
Zurich	<b>E</b> 28.05.-29.05.09
Zurich	03.09.-04.09.09

**E** Training in English  
Further English dates on request



## Catalyst 6500 & Cisco 7600 Series Routers Firewall Services Module Deployment (FWSMD)

**ID** FL-FWSMD **Price** 2.990,00 EUR (excl. VAT) **Duration** 5 Days

### PREREQUISITES

- Experience of configuring Cisco IOS Software
- CCNA certification or similar knowledge
- Basic knowledge of Windows Operating systems
- Familiarity with Network and Security Concepts

### COURSE CONTENT

- Catalyst 6500 Family and overview over Advanced Services Modules
- Firewall Services
- Configuration of the switch for the FWSM
- Implementing the FWSM
- Translations and Connections
- Access Control Lists and Content Filtering
- Grouping of objects
- IP Routing
- Cisco Modular Policy Framework
- Advanced Protocol Handling
- Transparent Firewall Mode
- Cisco Adaptive Security Device Manager
- Authentication, Authorization and Accounting
- Deployment of the FWSM within multiple contexts
- Failover
- FWSM Management
- Site-to-Site and Remote Access VPN for FWSM Remote Management
- FWSM Troubleshooting
- Cisco Security Manager



SCHEDULE Germany		SCHEDULE Switzerland	
Berlin	E 09.02.-13.02.09	Frankfurt	E 05.10.-09.10.09
Munich	02.03.-06.03.09	Hamburg	19.10.-23.10.09
Berlin	30.03.-03.04.09	Munich	09.11.-13.11.09
Frankfurt	04.05.-08.05.09	Hamburg	E 23.11.-27.11.09
Frankfurt	E 11.05.-15.05.09	Berlin	07.12.-11.12.09
Hamburg	22.06.-26.06.09	Zurich	23.03.-27.03.09
Hamburg	E 20.07.-24.07.09	Zurich	09.11.-13.11.09
Duesseldorf	27.07.-31.07.09		
Hamburg	31.08.-04.09.09		
Frankfurt	28.09.-02.10.09		
			E Training in English Further English dates on request

## CCIE Storage Networking Power Workshop (CCIESAN)

**ID** FL-CCIESAN **Price** 6.795,00 EUR (excl. VAT) **Duration** 10 Days

### PREREQUISITES

- Understanding of storage concepts and components
- Two years of experience in storage environments

SCHEDULE Germany		SCHEDULE Switzerland	
Hamburg	02.03.-13.03.09	Hamburg	E 23.11.-04.12.09
Hamburg	E 15.06.-26.06.09		
Hamburg	21.09.-02.10.09		
			E Training in English Further English dates on request

### COURSE CONTENT

This Power Workshop contains the topics of the following courses in a comprehensive form:

- Designing Cisco Storage Networking Solutions (DCSNS)
- Implementing Cisco Storage Networking Solutions (ICSNS)
- Implementing Cisco Advanced Storage Networking Solutions (IASNS)

## CCIE Storage Networking Power Lab (CCIESANPL)

**ID** FL-CCIESANPL **Price** 4.990,00 EUR (excl. VAT) **Duration** 5 Days

### PREREQUISITES

- CCIE Storage Networking Power Workshop (CCIESAN)

### COURSE CONTENT

The CCIE Storage Networking Power Lab is an intensive, hands-on course which prepares the students for the challenging CCIE Storage Networking Lab exam.

SCHEDULE Germany		SCHEDULE Switzerland	
Hamburg	E 02.02.-06.02.09	Frankfurt	E 24.08.-28.08.09
Stuttgart	23.02.-27.02.09	Munich	28.09.-02.10.09
Frankfurt	23.03.-27.03.09	Duesseldorf	19.10.-23.10.09
Munich	E 04.05.-08.05.09	Berlin	E 02.11.-06.11.09
Berlin	15.06.-19.06.09	Stuttgart	16.11.-20.11.09
Hamburg	13.07.-17.07.09		
			E Training in English Further English dates on request

Fast Lane offers original Symantec training covering storage and server administration, high availability, as well as data and system protection:

- **Storage Foundation**
  - Storage Foundation 5.x for Windows (SFW)
  - Storage Foundation 5.x for Solaris (SFS)
  - Storage Foundation 5.x High Availability for Windows (SFHAW)
  - Storage Foundation 5.x for Oracle 10g RAC for Solaris (SFOS)
  - Volume Manager Troubleshooting Workshop for Solaris (VMT)
  - Veritas Volume Replicator (Solaris) (VRS)
- **Veritas Cluster Server**
  - Cluster Server 5.x Suite for Solaris (CSS)
  - Cluster Server 5.x Suite for Windows (CSW)
  - Cluster Server Troubleshooting for Solaris Workshop (CSTS)
  - Veritas Cluster Server Global Clustering (Solaris) (CSGC)
  - Veritas Cluster Server und Solaris 10 Zones (Solaris, WS) (CSZS)
- **Backup Exec**
  - Backup Exec 11d to 12 Upgrading for Windows (BEWU)
  - Backup Exec 12.5 for Windows Servers: Administration Part I & II (BEWS12)
  - Backup Exec System Recovery 8 (BEWSR)
- **NetBackup**
  - NetBackup 6.5 for Windows Suite (NBUW)
  - NetBackup 6.5 for UNIX Administration (NBUS)
  - NetBackup 6.x Troubleshooting Techniques for Solaris (NBTTSS)
  - NetBackup 6.x Troubleshooting Techniques for Windows (NBTTW)
  - NetBackup Bare Metal Restore 6.0 for Windows (NBBMRW)
  - NetBackup Pure Disk 6.5 (NBUPD)
- **Enterprise Vault**
  - Enterprise Vault 2007: Administration I & II (EVA1, EVA2)
  - Enterprise Vault 2007: Troubleshooting and Maintenance (EVTS)



## Sun Storage Training



An authorized Sun Learning Services Partner, Fast Lane offers original Sun courses covering the subject of storage:

- Sun StorageTek Operations Manager - Administration (STK-2742)
- Sun StorageTek Business Analytics Software - Administration (STK-2702)
- Solaris Volume Manager Administration (ES-222)
- Sun StorEdge Availability Suite 3.1: Installation, Configuration & Troubleshooting (ES-476)
- Sun StorageTek 6000 Installation & Configuration (LSI-6000)
- Sun StorEdge 6920-System (NWS-3312)
- Sun StorageTek VTL Plus - Administration & Configuration (NWS-3503)
- Sun StorageTek 5000 NAS - Administration (NWS-3400)
- SL3000 Operators Course for Customers (NWS-2542)
- SL8500 Operators Course for Customers (STK-2023)
- ACSLS System Administration (STK-0457)
- Sun SPARC Enterprise MX000 Server: Administration (ES-411)



### CONTACT US.

Feel free to get in touch if you have any questions about our training offerings - we'll be delighted to hear from you. You can reach us any time by calling +49 (0)40 25334610 or sending an e-mail to [info@flane.de](mailto:info@flane.de).

## VMWARE INFRASTRUCTURE:

### TRANSFORM IT INFRASTRUCTURE WITH ENTERPRISE-CLASS VIRTUALIZATION

Create a self-optimizing IT infrastructure with the most widely deployed virtual infrastructure suite. VMware Infrastructure 3 virtualizes servers, storage and networks, to transform your IT infrastructure into an automated, always-on computer "utility plant".

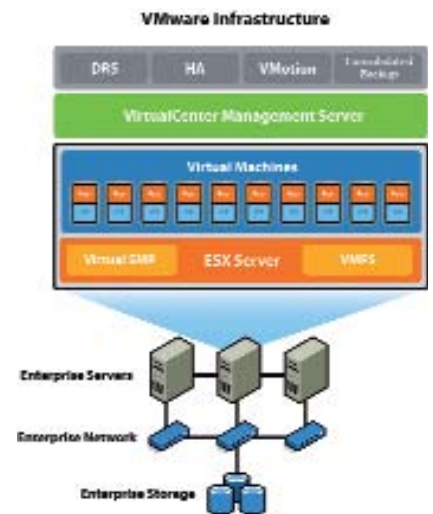
- Reduce IT costs and improve flexibility with server consolidation
- Decrease planned and unplanned downtime for improved business continuity
- Run fewer servers and dynamically power down unused servers to reduce your energy costs

### ORIGINAL VMWARE TRAINING

Fast Lane is an authorized VMware Training Center and delivers original VMware education programs. We can also deliver VMware courses as customized on-site programs for your company.

### VCP CERTIFICATION: DEMONSTRATE YOUR VIRTUALIZATION EXPERTISE

The VMware Certified Professional (VCP) Program is designed for any technical individual - partners, end-users, resellers, and consultants - who wants to demonstrate his or her expertise in virtual infrastructure and increase his or her potential for career advancement. Please note that participation in a VMware authorized training class is required for VCP certification. Candidates who take the VCP exam without a class will not be certified or confirmed by VMware. Fast Lane delivers the courses you need to prepare for the VCP certification.



## VMware Infrastructure 3: Overview v3.5

ID VM-VIO Price 750,00 EUR (excl. VAT) Duration 1 Day

### COURSE OBJECTIVES

This hands-on training course introduces the most compelling features of VMware Infrastructure 3. This course demonstrates VMware Infrastructure 3 features capable of reducing your IT costs while improving efficiency, availability, flexibility, and manageability.



### COURSE CONTENT

- Virtual Infrastructure Overview
- Create a Virtual Machine
- CPU and Memory Resource Pools
- Migrate Virtual Machines Using VMotion
- VMware Distributed Resource Scheduler (DRS) Clusters
- Monitoring Virtual Machine Performance
- Performance Alarms
- VMware High Availability (HA) Clusters
- VMware Infrastructure 3 Product and Feature Overview

### SCHEDULE Germany

Munich	09.02.-09.02.09	Frankfurt	E 03.08.-03.08.09
Hamburg	E 16.02.-16.02.09	Stuttgart	10.08.-10.08.09
Berlin	23.02.-23.02.09	Berlin	E 17.08.-17.08.09
Frankfurt	02.03.-02.03.09	Munich	24.08.-24.08.09
Duesseldorf	09.03.-09.03.09	Hamburg	31.08.-31.08.09
Munich	E 16.03.-16.03.09	Duesseldorf	07.09.-07.09.09
Stuttgart	23.03.-23.03.09	Munich	E 14.09.-14.09.09
Hamburg	30.03.-30.03.09	Hamburg	05.10.-05.10.09
Frankfurt	13.04.-13.04.09	Frankfurt	E 12.10.-12.10.09
Munich	E 04.05.-04.05.09	Berlin	19.10.-19.10.09
Berlin	11.05.-11.05.09	Duesseldorf	E 26.10.-26.10.09
Frankfurt	E 25.05.-25.05.09	Munich	02.11.-02.11.09
Frankfurt	15.06.-15.06.09	Stuttgart	09.11.-09.11.09
Munich	E 22.06.-22.06.09	Frankfurt	E 16.11.-16.11.09
Hamburg	29.06.-29.06.09	Duesseldorf	23.11.-23.11.09
Berlin	06.07.-06.07.09	Munich	30.11.-30.11.09
Munich	13.07.-13.07.09	Hamburg	07.12.-07.12.09
Hamburg	E 20.07.-20.07.09	Berlin	14.12.-14.12.09
Berlin	27.07.-27.07.09		

# VMware Infrastructure 3: Install & Configure v3.5

**ID VM-VIIC Price 2.800,00 EUR (excl. VAT) Duration 4 Days**

**COURSE OBJECTIVES**

This hands-on training course explores installation, configuration, and management of VMware Infrastructure 3, which consists of VMware ESX Server and VMware VirtualCenter. Upon completion of this course, you can take the examination to become a VMware Certified Professional.

- VM Creation and Management
- Virtual Infrastructure Access Control
- Resource Management
- Resource Monitoring
- Data and Availability Protection
- Planning VI Deployment

**COURSE CONTENT**

- Virtual Infrastructure Overview
- ESX Server Installation
- Networking
- Storage
- VirtualCenter Installation



**SCHEDULE Germany**

Munich	10.02.-13.02.09	Munich	27.04.-30.04.09	Frankfurt	E 04.08.-07.08.09	Munich	03.11.-06.11.09
Hamburg	E 24.02.-27.02.09	Munich	E 05.05.-08.05.09	Stuttgart	11.08.-14.08.09	Stuttgart	09.11.-12.11.09
Berlin	24.02.-27.02.09	Berlin	12.05.-15.05.09	Berlin	E 18.08.-21.08.09	Frankfurt	E 17.11.-20.11.09
Frankfurt	E 03.03.-06.03.09	Frankfurt	E 26.05.-29.05.09	Munich	25.08.-28.08.09	Duesseldorf	24.11.-27.11.09
Duesseldorf	10.03.-13.03.09	Duesseldorf	02.06.-05.06.09	Hamburg	E 01.09.-04.09.09	Munich	01.12.-04.12.09
Munich	E 17.03.-20.03.09	Frankfurt	16.06.-19.06.09	Duesseldorf	08.09.-11.09.09	Hamburg	08.12.-11.12.09
Stuttgart	24.03.-27.03.09	Munich	E 23.06.-26.06.09	Munich	E 15.09.-18.09.09	Berlin	E 15.12.-18.12.09
Hamburg	E 31.03.-03.04.09	Hamburg	30.06.-03.07.09	Frankfurt	22.09.-25.09.09		
Frankfurt	06.04.-09.04.09	Berlin	E 07.07.-10.07.09	Hamburg	06.10.-09.10.09		
Hamburg	13.04.-16.04.09	Munich	14.07.-17.07.09	Frankfurt	E 13.10.-16.10.09		
Berlin	E 21.04.-24.04.09	Hamburg	E 21.07.-24.07.09	Berlin	20.10.-23.10.09		
		Berlin	28.07.-31.07.09	Duesseldorf	E 27.10.-30.10.09		

E Training in English  
Further English dates on request

# VMware Infrastructure 3: Deploy, Secure & Analyze v3.5

**ID VM-VIDSA Price 2.800,00 EUR (excl. VAT) Duration 4 Days**

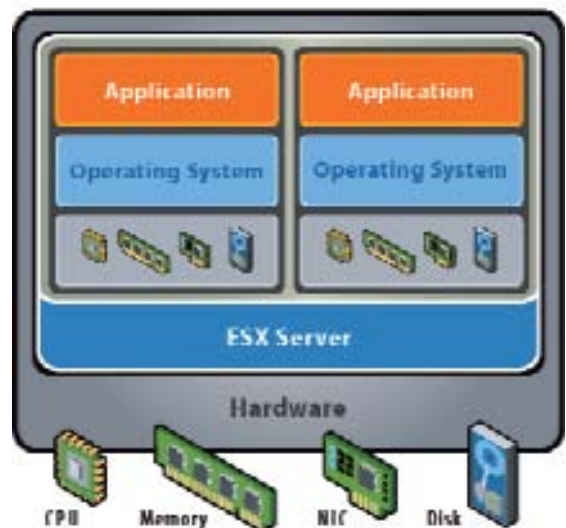
**COURSE OBJECTIVES**

This hands-on training course, aimed at experienced VMware Infrastructure administrators, has been updated to reflect ESX Server 3.5 and VirtualCenter 2.5. It focuses on ESX Server 3.5 rather than ESX Server 3i. On completion of this course, you can take the examination to become a VMware Certified Professional.

**COURSE CONTENT**

- Storage Administration
- Network Administration
- DRS Configuration and Performance Monitoring
- Business Continuity and Data Protection
- Operational Maintenance
- Modify Logging Behavior
- Service Console Security
- Rapid Deployment of ESX Servers

**VMware ESX Server**



**SCHEDULE Germany**

Hamburg	17.02.-20.02.09	Hamburg	15.09.-18.09.09
Frankfurt	14.04.-17.04.09	Frankfurt	E 27.10.-30.10.09
Munich	E 02.06.-05.06.09	Munich	24.11.-27.11.09
Berlin	21.07.-24.07.09		E Training in English Further English dates on request

## VMware Infrastructure 3: Fast Track v3.5

**ID** VM-VIFT **Price** 4.700,00 EUR (excl. VAT) **Duration** 5 Days

### COURSE OBJECTIVES

This intensive, extended-hours training course covers the installation, management, and use of VMware ESX Server, VMware VirtualCenter, VMware DRS, VMware HA, VMware Consolidated Backup (VCB), VMware Converter, Storage VMotion, and VMware Update Manager. It combines the content from the 3.5 versions of the VMware Infrastructure 3: Install & Configure and Deploy, Secure & Analyze training courses. Upon completion of this course, you can take the examination to qualify as a VMware Certified Professional.

### COURSE CONTENT

- VMware Overview
- ESX Server Installation
- Networking
- Storage
- VirtualCenter Installation
- VM Creation & Management
- VM Access Control
- VM Resource Management
- VM Resource Monitoring
- High Availability
- Data Protection
- VMware Update Manager
- Service Console Security
- Scripted Install

### SCHEDULE Germany

Hamburg	02.03.-06.03.09	Hamburg	12.10.-16.10.09
Munich	04.05.-08.05.09	Munich	<b>E</b> 30.11.-04.12.09
Berlin	<b>E</b> 22.06.-26.06.09	<b>E</b> Training in English	
Frankfurt	31.08.-04.09.09	Further English dates on request	



## VMware Capacity Planner

**ID** VM-VCP **Price** 1.200,00 EUR (excl. VAT) **Duration** 2 Days

### COURSE CONTENT

- Introducing VMware Capacity Planner
- Before the Engagement
- During the On-site
- During the Data Collection Period
- Troubleshooting Capacity Planner

- Creating Customer Deliverables
- After the Engagement

### SCHEDULE Germany

Munich	08.06.-09.06.09
Frankfurt	03.02.-04.02.09
Berlin	01.09.-02.09.09
Hamburg	06.04.-07.04.09
English dates on request	

## VMware Virtual Desktop Manager

**ID** VM-VVDA **Price** 2.800,00 EUR (excl. VAT) **Duration** 4 Days

### COURSE CONTENT

- VDI/VDM Overview
- Configuring Active Directory for VDM
- Group Policy Objects and Roaming Profiles for VDM
- Best Practices for XP and Vista Virtual Machines
- Remote Desktop Protocol
- Installing VDM
- Using VDM Clients
- VDM Administration

- VDM Persistent and Non-Persistent Pools
- VDM Security Server
- VDM Tunneled and Direct Connections
- VDM Load-Balancing and Multi-Server
- VDM Logs and Troubleshooting

### SCHEDULE Germany

Berlin	29.09.-02.10.09
Munich	10.02.-13.02.09
Munich	17.11.-20.11.09
Frankfurt	31.03.-03.04.09
Hamburg	14.12.-17.12.09
Hamburg	16.06.-19.06.09
Frankfurt	18.08.-21.08.09
English dates on request	

## VMware Site Recovery Manager

**ID** VM-VSRM **Price** 1.300,00 EUR (excl. VAT) **Duration** 2 Days

### COURSE CONTENT

- SRM Overview
- Introduction to Disaster Recovery
- SRM Planning
- SRM Installation
- Array Managers
- Inventory Mappings
- Protection Groups
- Recovery Plans

- SRM Alarms & Site Status
- Troubleshooting
- Failover Testing & Failover
- Failback

### SCHEDULE Germany

Munich	25.06.-26.06.09
Frankfurt	05.02.-06.02.09
Berlin	03.09.-04.09.09
Hamburg	08.04.-09.04.09
English dates on request	

# Brocade Training

Fast Lane delivers Brocade classes designed to help optimize your IT infrastructure and utilize Brocade solutions to solve critical business challenges.

## CUSTOMIZED TRAINING

Fast Lane can deliver Brocade courses as customized on-site programs for your company.

## TOP INSTRUCTORS

Our highly experienced Brocade instructors teach the knowledge you need to support, manage and troubleshoot Brocade storage solutions.

## WORLDWIDE BROCADE REMOTE LAB

Our Brocade lab ensures first-class hands-on training.

## PROOF OF KNOWLEDGE AND SKILLS

We deliver the courses you need to prepare for the Brocade certification you desire.

## BROCADE CERTIFIED FABRIC PROFESSIONAL (BCFP)

As a Brocade Certified Fabric Professional, you must demonstrate an ability to install, configure, and troubleshoot various Brocade products and exhibit proficiency in the intricacies of Brocade hardware.

Test	Recommended Training
Brocade Certified Fabric Professional 8 Gbit/sec Test # 143-060	<ul style="list-style-type: none"><li>• Brocade 8 Gbit/sec Fundamentals (BRF)</li><li>• Brocade 8 Gbit/sec Advanced Topics (BRA)</li></ul>



## Brocade 8 Gbit/sec Fundamentals (BRF)

**ID** FL-BRF **Price** 2.650,00 EUR (excl. VAT) **Duration** 3 Days

### WHO SHOULD ATTEND

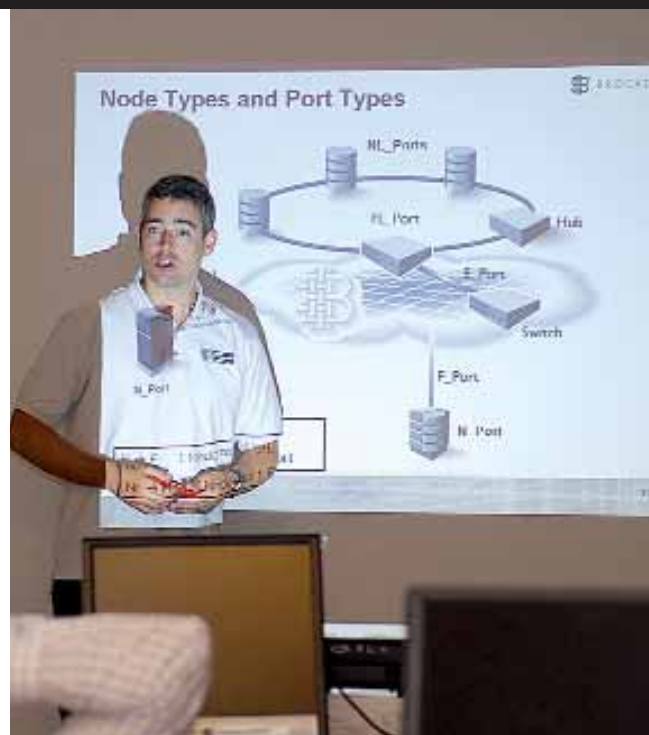
- Brocade switch administrators, system integrators, field/system engineers and support personnel
- Candidates preparing for the Brocade Certified Fabric Professional (BCFP) 8 Gbit/sec exam

### PREREQUISITES

- Experience with SCSI storage and LANs

### COURSE CONTENT

- Overview of actual 4 and 8 Gbps Switches Platforms
- Overview Fibre Channel Theory and Concepts
- Initial Installation, Configuration and Verification of Brocade's B-Series Switches
- Maintenance Tasks; i.e. Firmware Upgrade and Configuration Management
- Concepts and Configuration of Zoning on Brocade's B-Series Switches
- Overview of Interoperability between Brocade's B-Series, Brocade's M-Series and Cisco Switches
- Overview of Brocade's Concept of Routing within a Fabric (Routing Policies, FSPF, Load Balancing)
- Overview of Brocade's Concept of Trunking
- Overview of Brocade's Long Distance Solutions
- Overview of Local and Remote User Authentication (e.g. RADIUS/LDAP)
- Overview of Fundamental Troubleshooting Steps and Commands (e.g. Error Logs, SAN Health etc.)



### SCHEDULE Germany

Hamburg	04.02.-06.02.09
Frankfurt	18.03.-20.03.09
Berlin	<b>E</b> 22.04.-24.04.09
Hamburg	03.06.-05.06.09
Munich	08.07.-10.07.09

Hamburg	09.09.-11.09.09
Frankfurt	<b>E</b> 21.10.-23.10.09
Berlin	25.11.-27.11.09

**E** Training in English  
Further English dates on request

## Brocade 8 Gbit/sec Advanced Topics (BRA)

Optimal  
Preparation  
for BCFP  
8 Gbit/sec  
certification!

**ID** FL-BRA **Price** 2.650,00 EUR (excl. VAT) **Duration** 3 Days

### WHO SHOULD ATTEND

- Brocade switch administrators, system integrators, field/system engineers and support personnel
- Candidates preparing for the Brocade Certified Fabric Professional (BCFP) 8 Gbit/sec exam

### PREREQUISITES

- **Brocade 8 Gbit/sec Fundamentals (BRF)** course

### COURSE CONTENT

- Concepts and Configuration of QoS, TI-Zones and Ingress Limiting on a Brocade Switch
- Overview of the Top Talker Feature
- Overview and Configuration of Routing between different Fabrics with Brocade's Switches/Router Platforms
- Concept and Configuration of FCIP Solutions with Brocade's Platforms
- New Concepts of Licensing with Brocade B-Series Switches

- Overview of Brocade's FC FastWrite
- DCC- and SCC-Policies, ACLs and DH-CHAP
- Concept and Configuration of a Brocade Access Gateway including AG F-Port-Trunking
- Advanced Troubleshooting Concepts and Tools



### SCHEDULE Germany

Hamburg	25.02.-27.02.09
Frankfurt	01.04.-03.04.09
Berlin	<b>E</b> 06.05.-08.05.09
Hamburg	08.06.-10.06.09
Munich	13.07.-15.07.09

Hamburg	14.09.-16.09.09
Frankfurt	<b>E</b> 26.10.-28.10.09
Berlin	30.11.-02.12.09

**E** Training in English  
Further English dates on request

## PLANNING AND ROLLING OUT FUTURE-ORIENTED DATA CENTER SOLUTIONS

Our consulting services help enterprises design and implement forward-looking storage and data center solutions. We provide the support you need to select components and technologies, and develop your solution further. Rolling out a storage solution is a complex challenge, and the effort of integrating the various components is often underestimated. A storage solution needs a new network design. What's more, selecting suitable products demands foresight because they must interoperate and enable the disparate systems to interconnect. We can help you introduce intelligent storage solutions and prepare your IT people to handle the new technology.

Our consultation services are there for you every step of the way. They include:

- Conducting feasibility studies (ROI analysis)
- Planning and designing comprehensive storage and data center solutions
- Selecting components
- Consulting during the implementation phase
- On-the-job training

## RENT A SPECIALIST

In times when your workforce is stretched thin - during the vacation season, when human resources are devoted to projects, or when you need more peoplepower to introduce new systems – we can help you bridge the gap. Call on us if you need one or several of our specialists to support and operate your storage infrastructures.

## CONTACT US

To learn more about our consulting services for storage solutions and other specialty fields such as security, unified communications, and wireless, call us on +49 (0)40 25334610 or e-mail us at [info@flane.de](mailto:info@flane.de).





# Other Fast Lane Courses



## NETWORK FOUNDATIONS

Networking & TCP/IP Fundamentals (NWF) (3 Days)

Troubleshooting TCP/IP (TTCP) (2 Days)

VPN Design & Implementation (VDI) (3 Days)

## PACKET ANALYSIS

Packet Analysis with Ethereal/Wireshark Analyzer (PAE) (2 Days)

Advanced Packet Analysis with Ethereal/Wireshark (APAE) (3 Days)

Packet Analysis Power Workshop (PAPW) (5 Days)

Analysing MS-Windows Networking (AWN) (3 Days)

## CISCO ROUTING & SWITCHING

Interconnecting Cisco Network Devices 1 (ICND1) (5 Days)

Interconnecting Cisco Network Devices 2 (ICND2) (5 Days)

Building Scalable Cisco Internetworks (BSCI) (5 Days)

Building Cisco Multilayer Switched Networks (BCMSN) (5 Days)

Implementing Secure Converged Wide Area Networks (ISCW) (5 Days)

Optimizing Converged Cisco Networks (ONT) (5 Days)

Advanced Cisco Catalyst 6500 Switching (CAT6KS) (5 Days)

Configuring BGP on Cisco Routers (BGP) (5 Days)

Advanced OSPF Workshop (AOSPF) (3 Days)

Implementing Cisco MPLS (MPLS) (5 Days)

Implementing Cisco MPLS Traffic Engineering (MPLST) (5 Days)

IPv6 Fundamentals, Design & Deployment (IP6FD) (5 Days)

## CISCO WIRELESS TRAINING

Implementing Cisco Unified Wireless Networking Essentials (IUWNE) (5 Days)

Cisco Wireless LAN Fundamentals (CWLF) (4 Days)

Cisco Wireless LAN Advanced Topics (CWLAT) (4 Days)

Cisco Unified Wireless Networking (CUWN) (3 Days)

Cisco Wireless Mesh Networking (CWMN) (2 Days)

Cisco Wireless Networking Site Survey (CWNSS) (4 Days)

Aironet Wireless LAN Fundamentals & Site Survey (AWFSS) (5 Days)

Aironet Wireless LAN Advanced Topics (AWLAT) (4 Days)

Wireless LAN Solution Engine (WLSE) (2 Days)

## SECURITY

Voice Anti-Hacking Workshop (VHACK) (4 Days)

Anti-Hacking Workshop / White Hat Hacking (HACK) (5 Days)

WLAN Anti-Hacking Workshop (WHACK) (3 Days)

## CISCO SECURITY

Implementing Cisco IOS Network Security (IINS) (5 Days)

Securing Networks with Cisco Routers & Switches (SNRS) (5 Days)

Securing Networks with ASA Fundamentals (SNAF) (5 Days)

Securing Networks with ASA Advanced (SNAA) (5 Days)

Implementing Cisco Intrusion Prevention Systems (IPS) (4 Days)

Mitigating DDoS Using Cisco Guard & Traffic Anomaly Detector (DDOS) (2 Days)

Implementing Cisco Network Admission Control (NAC) (3 Days)

Implementing Cisco NAC Appliance (CANAC) (4 Days)

Implementing Cisco Security Monitoring, Analysis & Response System (MARS) (4 Days)

## IRONPORT SECURITY

Securing Your Email with IronPort C-Series (SYEPW) (3 Days)

Securing Your Web with IronPort S-Series (SYW) (2 Days)

## VOICE OVER IP

Telecommunications & VoIP Migration (2 Days)

VoIP for Enterprise & Service Provider Networks (VOIP) (5 Days)

## CISCO VOICE & UNIFIED COMMUNICATIONS

Implementing Cisco IOS Unified Communications (IIUC) (5 Days)

Implementing Cisco Quality of Service (QOS) (5 Days)

Cisco Voice over IP (CVOICE) (5 Days)

Implementing Cisco Unified Communications Manager Part 1 (CIPT1) (5 Days)

Implementing Cisco Unified Communications Manager Part 2 (CIPT2) (5 Days)

Troubleshooting Cisco Unified Communications Systems (TUC) (5 Days)

## CISCO BUSINESS VIDEO

TelePresence Installation & Configuration Training (TPICT) (5 Days)

Digital Media Systems (DMS) (2 Days)

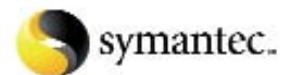
IP Video Surveillance (IPVS) (3 Days)

Implementing Cisco Unified MeetingPlace Solutions (IMPS) (5 Days)

Designing Cisco Unified MeetingPlace Solutions (DMPS) (3 Days)



Authorized Learning Partner



Fast Lane offers many courses in basic and advanced technologies. On the left is a sample of the technology courses we offer, including a subset of our Cisco courses. Visit our website for more details or contact us to discuss your specific training needs. You can find the contact details of your nearest Fast Lane location on the back cover.

# About Fast Lane



## High-end IT Training and Consulting

We can help your company gain and develop all the technology skills it needs to rise to high-end challenges. After all, technology is the tool and only those who master it can capitalize on its benefits. Our customers and partners rely on us, and for very good reasons.

**Fast Lane provides the IT know-how you need.** Voice and unified communications, security and VPN, data centers and storage networking, wireless networking or optical technologies – whatever specialized insight, skills, and consulting you may need, Fast Lane has the right expert for you.

**Fast Lane is there for you in 50 countries across all continents.** More than 400 Fast Lane employees train and advise major companies in all industries, leading service providers, and government agencies in twelve languages. Serving customers worldwide, Fast Lane head offices are sited in Berlin, Cary NC, Dubai, Sydney, and Tokyo.

**Fast Lane is one of the leading Cisco Learning Solutions Partners worldwide.** The fastest growing Cisco Learning Solutions Partner (CLSP), Fast Lane offers you the full Cisco training curriculum, from entry-level to specialized high-end courses, in all regions across the globe.

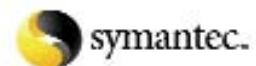
**Fast Lane is the only global NetApp Learning Partner.** An authorized NetApp training partner, Fast Lane offers original NetApp training programs worldwide. NetApp-certified specialists with extensive storage experiences conduct the training.

**Fast Lane has developed courses of its own covering all key future technologies.** What's more, our offering comprises many other vendors and organizations' training programs, for example, Brocade, CA, Check Point, Citrix, CompTIA, HP, ITIL, Lotus, LPI, Microsoft, Nokia, Novell, Oracle, PMI, PRINCE2™, Red Hat, RSA Security, SAP, Sun, Symantec, Trend Micro, and VMware.

**Fast Lane gives you access to a lab infrastructure unrivalled worldwide.** Fast Lane customers enjoy the use of training and demo labs for all areas of high-end networking. Equipped with the latest devices and technologies, our high-end labs provide first-rate service and raise the bar for training quality. Our project consultants can access these labs from any location.

**Fast Lane services satisfy the most discerning demands.** A comprehensive evaluation system ensures Fast Lane lives up to the most rigorous quality standards. With professional experience and excellent teaching skills, all our instructors and consultants transfer knowledge efficiently and effectively.

**Fast Lane employees' response is swift and courteous.** Rest assured you will always enjoy friendly, competent service and a quick response to your every request, even at shortest notice. For example, we can deploy troubleshooting experts within a few hours and organize on-site training including a coach, equipment, and course materials within 24 hours.



# Course Booking



You can find the contact details of your nearest Fast Lane location on the back cover.

## Company Information

Company

Last Name

First Name

Job Title

Address

Post Code

Country

Phone

Fax

E-mail

Course Title / ID	Date / Location	Price (excl. VAT)

## Billing Address

Company

Last Name

First Name

Job Title

Address

Post Code

Country

Date

Signature / Company Stamp

## FAST LANE EUROPE

### Germany

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Gasstrasse 4a, D-22761 Hamburg  
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Fax +49 (0)40 23537720

Ludwig-Erhard-Strasse 3, D-65760 Eschborn  
Tel. +49 (0)6196 8820410  
Fax +49 (0)6196 8820419

Am Söldnermoos 17, D - 85399 Hallbergmoos  
Tel. +49 (0)811 99819690  
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info@flane.de / www.flane.de

### Switzerland

**Fast Lane / IFTC AG**  
Glatt Com, 1. Etage (P12)  
CH-8301 Glattzentrum (Zurich)  
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### Austria

**Fast Lane Institute for Knowledge Transfer GmbH**  
Modecenterstrasse 14/B4, A-1030 Wien  
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Zaventem (Brussels)  
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### Bulgaria

**Fast Lane OOD**  
Mladost 1, bl. 9 vh. A ap.3, 1750 Sofia  
Tel. +359 878 360 399  
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### Finland

**Fast Lane / Teleware**  
Laajalahdentie 23, FI-00330 Helsinki  
info@flane.se / www.flane.com

### France

**Fast Lane / Allies**  
2229, route des Crêtes, Sophia Antipolis  
F-06560 Valbonne  
info@flane.fr / www.flane.fr

### Greece

**Fast Lane/International Computer Training Center**  
91, Falirou str., 117-41 Athens  
info@flane.de / www.flane.com

### Hungary

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Rákóczi út 42, Regus EMKE Building, 1072 Budapest  
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**Fast Lane / atrak**  
Via Frigia 27, Milano  
info@flane.de / www.flane.it

### Ireland

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Winter Garden Complex, 2 Hanover Street East  
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### Norway

**Fast Lane / Crayon**  
Sandakerveien 114A, 0484 Oslo  
info@flane.se / www.flane.com

### Poland

**Fast Lane/Centrum Szkoleniowe Hector Sp. z o.o.**  
ul. Gwiaździsta 19, 01-651 Warszawa, Polska  
info@flane.de / www.flane.com

### Portugal

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Campo Grande, 56, P-1700-093 Lisboa  
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**Fast Lane d.o.o.**  
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info@fastlane.si / www.fastlane.si

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## FAST LANE MIDDLE EAST

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### Jordan

**Fast Lane / E-tech**  
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### Saudi Arabia

**Fast Lane / New Horizons/Al Khaleej Training & Education Co.**  
Al Wallan Building, Near Azizia Panda on Makkah  
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riyadh@flane.com / www.flane.com

## FAST LANE RUSSIA / CIS

### Russia

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## FAST LANE AFRICA

### Tunisia/Algeria/Marocco/Ivory Coast

**Fast Lane / Technical Training**  
Immeuble 3S, Lotissement Ennassim 112  
1073 Montplaisir - Tunis  
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## FAST LANE AMERICAS

### US & Canada

**Fast Lane Consulting and Education Services, Inc.**  
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### Costa Rica

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Fax +506 2011414  
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### Mexico

**Fast Lane Mexico for Training and Consulting S.A. DE C.V.**  
Uny-Il, San Lorenzo 1009 Piso 4, Colonia del Valle,  
México, D.F. 03100  
info@flane.co.cr / www.flane.co.cr

## FAST LANE ASIA PACIFIC

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australia@flane.com / www.flane.com.au

### China

**Fast Lane China**  
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china@flane.com / www.flane.com

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### Japan

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newzealand@flane.com / www.flane.com.au

### Taiwan

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Tel. +866 2 3707 3380, Fax +866 2 2702 8685  
taiwan@flane.com / www.flane.com

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30 Cecil Street, Level 27, Prudential Tower  
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