





Fast Lane and NetApp present a complete program of NetApp courses for the 2009.

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## Data ONTAP Fundamentals (DOTF)

5 Días

#### WHO SHOULD ATTEND

Anyone who performs basic support and administrative functions on a NetApp® storage appliance running the Data ONTAP operating system.

#### **PREREQUISITES**

- •Introduction to NetApp Products Web Based Training
- •Basic knowledge of client/server and networking terminology and management including TCP/IP
- •Background in administrating one of the following: UNIX, Windows®, or SAN system

#### **COURSE CONTENT**

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

## SÃO PAULO

04/05/09 - 08/05/09 14/08/09 - 18/08/09

## Data ONTAP CIFS Administration (CIFS)

2 Días

#### WHO SHOULD ATTEND

For those who provide support and administration for a CIFS environment on NetApp storage systems running the Data ONTAP operating system.

#### **PREREQUISITES**

The following pre-requisites or equivalent knowledge are required for this course:

•Data ONTAP Fundamentals

#### **COURSE CONTENT**

CIFS Administration on Data ONTAP® is an instructor-led course designed for those who provide support and administration for a CIFS environment on NetApp storage systems running the Data ONTAP operating system. The 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 and options; administering a storage system including creating and managing shares, users, and groups; and troubleshooting CIFS problems.

## SÃO PAULO

18/05/09 - 19/05/09 28/06/09 - 29/06/09

## Data ONTAP NFS Administration (NFS)

1 Día

#### WHO SHOULD ATTEND

For those who provide support and administration for an NFS environment on NetApp storage systems running the Data ONTAP operating system.

#### **PREREQUISITES**

The following pre-requisites or equivalent knowledge are required for this course:

- Data ONTAP Fundamentals (DOTF)
- •Working knowledge of UNIX® or equivalent experience
- ·Familiarity with networking concepts

#### **COURSE CONTENT**

NFS Administration on Data ONTAP® 7.3 is an instructor-led course designed for those who provide support and administration for an NFS environment on NetApp® storage systems running the Data ONTAP operating system. The course covers the NFS protocol and implementation criteria; configuration, administration, and monitoring options; and troubleshooting NFS problems.

### SÃO PAULO

01/06/09 26/10/09

# Data ONTAP SAN Administration (SAN)

3 Días

#### WHO SHOULD ATTEND

Individuals who provide support and administration for FC and IP SAN environments running the Data ONTAP operating system.

#### **PREREQUISITES**

The following pre-requisites or equivalent knowledge are required for this course:

•Data ONTAP Fundamentals (DOTF)

#### **COURSE CONTENT**

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.

### SÃO PAULO

02/06/09 - 04/06/09 27/10/09 - 29/10/09

## NetApp Protection Software Administration (NPSA)

#### WHO SHOULD ATTEND

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

#### **PREREQUISITES**

The following pre-requisites or equivalent knowledge are required for this course:

Data ONTAP Fundamentals (DOTF)

#### **COURSE CONTENT**

This 3-day 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.

### SÃO PAULO

20/05/09 - 22/05/09 30/09/09 - 02/10/09

# NCDA Power Workshop (NCDAPW)

10 Días

#### WHO SHOULD ATTEND

Network Professionals seeking the NetApp Certified Data Management Administrator (NCDA) certification.

### **COURSE CONTENT**

This 10-day boot camp will prepare you to pass all the NetApp exams required to achieve the NetApp Certified Data Management Administrator (NCDA)certification.

The hands-on course covers the required knowledge from the following courses:

- Data ONTAP Fundamentals (DOTF)
- •Data ONTAP CIFS Administration (CIFS)
- •Data ONTAP NFS Administration (NFS)
- •Data Protection and Retention (DPR)
- •Data ONTAP SAN Administration (SAN)
- High Availability (HA)

### SÃO PAULO

27/07/09 - 07/08/09 23/11/09 - 04/12/09

5 Días

#### WHO SHOULD ATTEND

•Network Professionals seeking the NCDA certification.

#### **PREREQUISITES**

The following course is a prerequisite to the advanced boot camp:

Data ONTAP Fundamentals

#### **COURSE CONTENT**

This 5-day intensive, advanced boot camp will prepare you for all required NetApp exams to achieve the NetApp Certified Data Management Administrator (NCDA) certification, assuming you have met the prerequisites.

#### NETAPP CERTIFIED DATA MANAGEMENT ADMINISTRATOR (NCDA).

Exam	Training
NSO 153: Storage Networking	Data ONTAP Fundamentals (DOTF)     Data ONTAP CIFS Administration (CIFS)
NSO 163: Data Protection Solutions	<ul> <li>Data ONTAP NFS Administration (NFS)</li> <li>Data ONTAP SAN Administration (SAN)</li> <li>Protection Software Administration (NPSA)</li> <li>High Availability (HA)</li> </ul>

### SÃO PAULO

03/08/09 - 07/08/09 30/11/09 - 04/12/09

## Accredited Storage Architech Program (ASAP)

3 Días

#### **COURSE DESCRIPTION**

The ASAP program is for NetApp pre-sales and technical partners, including systems engineers and storage architects. The target audience for ASAP is new or novice presales engineers. This course will focus on the technical information and presentation skills that are needed in the field. It is an intensive three day instructor led course that includes specific product information, case study exercises, and hands-on presentation practice. When completed the students will be able to evaluate a basic customer environment and decide what NetApp products are appropriate for the customer's desired outcome.

#### **COURSE OBJECTIVES**

Upon completion of this program you will be able to:

- •Present the most common whiteboard topics required of an SE and
- •Deliver many of the key product demonstration.
- •Doing presentations in front of customers.
- Articulate the key product competitive differentiators.
- •Key technical differentiators.

### SÃO PAULO

17/08/09 - 19/08/09 09/12/09 - 11/12/09

1 Día

#### WHO SHOULD ATTEND

·Windows, Exchange and SQL Server administrators

#### **PREREQUISITES**

- Data ONTAP Fundamentals (DOTF)
- Data ONTAP SAN Administration (SAN)
- Clustering experience
- ·High availability (web based training)

#### **COURSE CONTENT**

This intermediate level, hands-on course introduces students to clustering Microsoft servers with SnapDrive. This course also introduces students to implementing MS Exchange and MS SQL on a MS Cluster.

SÃO PAULO

03/09/09

# MS Exchange on NetApp Storage Systems (MSEXC)

4 Días

#### WHO SHOULD ATTEND

Customers, Direct and Partner Sales Representatives and System Engineers, Professional Services

#### **PREREQUISITES**

The following pre-requisites or equivalent knowledge are required for this course:

- Data ONTAP Fundamentals (DOTF)
- •Neap Protection Software Admininstration (NPSA)
- •Microsoft course 2400: Implementing and Managing Microsoft® Exchange Server 2007
- •Microsoft course 2011: Troubleshooting Microsoft® Exchange Server 2007
- •Microsoft Seminar: Microsoft Exchange Server 2007 Disaster Recovery.

#### **COURSE CONTENT**

This 4-day solution-based course focuses on the optimization of Microsoft® Exchange 2007 in a NetApp storage environment. This course takes students through the entire system integration process of architecture planning, data migration, backup and restore, disaster recovery, clustering and troubleshooting.

### SÃO PAULO

07/07/09 - 10/07/09 31/08/09 - 03/09/09

# MSSQL Server on NetApp Storage Systems(MSSQL)

4 Días

#### WHO SHOULD ATTEND

An administrator who is 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**

The following pre-requisites or equivalent knowledge are required for this course:

- Data ONTAP Fundamentals (DOTF)
- •NetApp Protection Software Administration (NPSA)
- •Data ONTAP SAN Administration (SAN)

At least one of the following:

- •Microsoft Course 2072A: Administering a Microsoft SQL Server 2000 Database
- •Microsoft Exam 70-228: System Administration for Microsoft SQL Server 2000
- •One year of Microsoft SQL Server 2005 experience

#### **COURSE CONTENT**

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.

## Fundamentals of Performance Analysis (FPA)

2 Días

#### WHO SHOULD ATTEND

Administrators and support personal of Network Appliance storage systems

#### **PREREQUISITES**

- Data ONTAP Fundamentals (DOTF)
- •Introduction to NetApp Products (web based training)
- •1 year experience with NetApp hardware & software recommended

#### **COURSE CONTENT**

- •NetApp Hardware Architecture
- NetApp Software Architecture
- •Performance Monitoring Tools and Commands
- Fragmentation
- Volume & RAID Sizing
- •Expected Performance
- Tuning for Performance
- •Helpful Options
- •Bottleneck Analysis of Storage Appliance Performance
- Performance Case Studies

### SÃO PAULO

10/06/09 - 12/06/09 07/12/09 - 08/12/09

#### 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**

Before taking this course you should have the following:

•Knowledge on NetApp Storage Systems, VMware ESX, Linux and Windows Servers

#### Recommended:

•Completion of VMware Infrastructure 3: Install and Configure V3.5 (VIIC) or equivalent experience with VMware Infrastructure 3

#### **COURSE OBJECTIVES**

This course covers the installation, configuration, and administration of an ESX Server and focuses on optimal connectivity on NetApp Storage Systems using FCP, iSCSI, CIFS and NFS. Backup and Restore of VMware ESX Server storage LUNs with ESX and NetApp 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 the VMware virtualisation 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

### SÃO PAULO

27/07/09 - 29/07/09 14/12/09 - 16/12/09

# NetApp VTL Administration (NAVTL)

#### WHO SHOULD ATTEND

Anyone who will architect, implement, administer or work with administrators of the VTL appliance

#### **PREREQUISITES**

Knowledge of networking terminology and management, SAN administration, and at least 1 Major Backup Application (NetBackup, TSM or Networker) and a background in UNIX or Windows server administration is required before taking VTL.

#### **COURSE OBJECTIVES**

At the end of this course you will be able to:

- •Explain advanced disk-to-disk backup principles and how these apply to a virtual tape library appliance
- •Explain the features and functions of the NearStore VTL

oDirect tape creation

oSizing & architecting VTL environments

oCompression versus Tape Smart Sizing

- •Explain the features of NearStore VTL and their impact on backup environments
- •Describe different architectures and deployment options for the NearStore VTL
- •Identify and describe "Best Practice" concepts and processes
- •Install and cable a NearStore VTL
- •Implement all of the features of the VTL product in a working environment

oPerformance tuning

oPort configurations

- •Architecting & Implementing the VTL into existing SAN infrastructures
- •Architecting & Implementing the VTL into new backup environments
- •Configure a NearStore VTL to integrate with supported backup applications:

oSymantec NetBackup

oIBM Tivoli Storage Manager

oEMC Networker

- Perform administration of a NearStore VTL
- •Complete operations using the command line interface (CLI) and scripting
- •Troubleshoot and resolve errors with the operation of a NearStore VTL
- •Describe lessons learned from existing installations and avoid common pitfalls

### SÃO PAULO

14/09/09 - 16/09/09

#### **COURSE CONTENT**

Through a combination of discussion and hands-on activities, this course describes the features and functions of the NearStore VTL and how to integrate with the three leading backup applications (as measured by data center market share): Symantec NetBackup, IBM Tivoli Store Manager (TSM) and EMC Networker. A significant portion of this course is devoted to hands-on lab-centric training enabling students to setup, install and configure a VTL and then to integrate it operationally with the backup applications and tape libraries. Instructors will share case studies of complex VTL implementations and provide best practices and advanced configuration techniques.

## **NetApp Certifications**





NCIE NetApp Certified Implementation Engineer

NetApp Certified

Data Management Administrator

**NCDA** 

**NSO 501** SAN NSO 510

Backup & Recovery

NSO 520 Disaster Recovery

Release Date ctober 2009 NSO 530

Storage Security

Specialist

**NSO 153** Storage Networking Exam **NSO 163** Data Protection Solutions Exam

Professional

## **NetApp Certified Data Management Administrator (NCDA)**

Esta certificación es para administradores de gestión de datos y cualquiera que requiera realizar soporte detallado, funciones administrativas y gestión de rendimiento para soluciones y productos NetApp

Examen	Entrenamiento Recomendado
NSO - 153 Storage Networking Professional	Data ONTAP Fundamentals (DOTF) CIFS Administration on Data ONTAP (CIFS) NFS Administration on Data ONTAP (NFS) SAN Administration on Data ONTAP (SAN)
NSO - 163 Data Protection Solutiona Professional	NetApp Protection Software Administration (NPSA) High Availability (NAHA)

## **NetApp Certified Implementation Engineer (NCIE)**

Esta certificación está diseñada para ingenieros post-venta y cualquier otra persona quien implemente productos NetApp.

Examen	Entrenamiento Recomendado
NSO - 501 NetApp Certified SAN Implementation Engineer	SAN Administration on Data ONTAP (SAN)
NSO - 510 NetApp Certified Backup and Recovery Implementation Engineer	NearStore Virtual Tape Library Administration (NAVTL) NetApp Protection Software Administration (NPSA) Operations Manager 3.7. Protection Manager and Provisioning Manager (OPSMGR)
NSO - 530 NetApp Storage Security Implementation Engineer	DataFort Storage Security Administration (DSSA)



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