

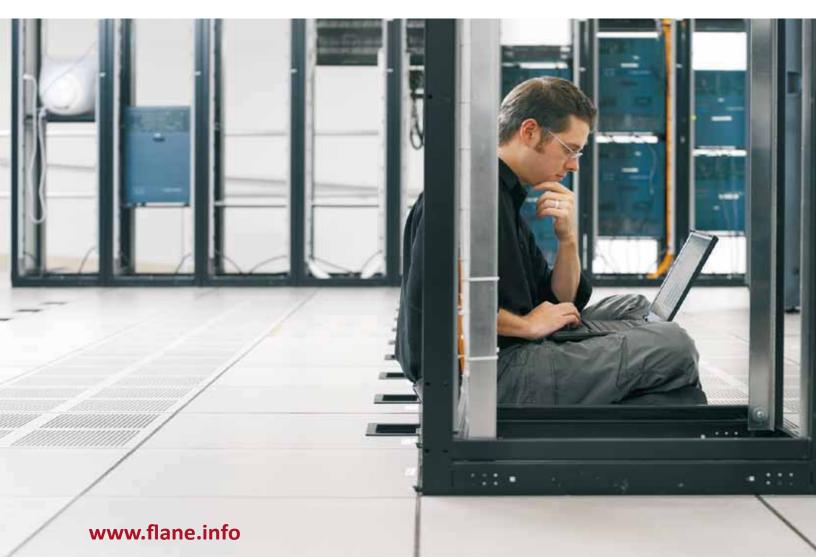






# Data Center & Virtualization Training 2011

- Multi Vendor Data Center
- Cisco Unified Computing
- Cisco Data Center Switching
- Cisco Storage Networking
- Cisco Application Networking
- NetApp Storage & Data Center



## Cisco Data Center & Virtualization *Fast Lane* Training2011



Fast Lane's training offerings are as multifaceted as the diverse Cisco data center technologies and specialised 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 specialisation.

### **CERTIFIED WORLDWIDE**

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

### ADVANCED DATA CENTER & VIRT UALIZATION LABS

Puttinghands-on exercises and the latest Cisco equipment to good use, we convey the knowledge you need to operate complex data centers. Our infrastructure comprises multi vendor data center labs equipped with Cisco's Unified Computing System (UCS), Cisco Nexus 7000 and 5000 switches, Nexus 2000 Fabric Extenders, VMware ESX servers including Nexus 1000V, redundant NetApp clusters and much more.

### MULTI VENDOR DATA CENTER TRAINING

Fast Lane is the training provider of choice when it comes to virtualised data center solutions. As an authorised training partner of Cisco, NetApp, VMware, and Symantec, we get you ready to rise to the challenges of planning and making the most of futurefocused data center solutions.

### TOP COACHES

Whatever specialised insight, skills, and consultingyou may need, Fast Lane has the right data center expert and training for you. All our instructors are Cisco-certified specialists with extensive practical experience in their specialty fields.

### **RIGHT THERE ON SITE**

We offer regularlyscheduled trainingin many European locations to help you plan and implement your training programme to your best benefit. Our certified instructors will also conduct every type of trainingsession on site at your company's premises.

### TAILORED COURSES

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

### CISCO EUROPEAN LEARNING PARTNER OF THE YEAR 2009 & 2010

Fast Lane received the 'Cisco European Learning Partner of the Year' award for the second year in a row.

### CISCO EDUCATION SPECIALISATIONS

Fast Lane acquired all six available Cisco Education Specialisations: Advanced Data Center Network Infrastructure, Advanced Data Center Storage Networking, Advanced Security, Advanced Wireless LAN, Advanced Routing and Switching, and Advanced Unified Communications.

### CISCO LEARNING CREDITS

Cisco Learning Credits are a convenient and efficient way to purchase and manage Cisco authorised training. They enable customers to increase productivity and improve network optimisation while safeguarding training budget and monitoring training expenditures.







# Contents



### CISCO UNIFIED COMPUTING TRAINING

Unified Computing Systems Architectural Overview (UCSAO) Data Center Unified Computing Design (DCUCD) Data Center Unified Computing Implementation (DCUCI)

### CISCO DATA CENTER SWITCHING TRAINING

Data Center Architectural Overview (DCAO) Cisco Nexus Overview Workshop (CNOW) Implementing Cisco Data Center Network Infrastructure 1 (DCNI-1) Implementing Cisco Data Center Network Infrastructure 2 (DCNI-2) Data Center Network Infrastructure Design (DCNID) Implementing Data Center Networks Using the Cisco Nexus 1000V Switch (IDCN1V) Implementing Data Center Networks Using the Cisco Nexus 5000 Switch & 2000 Fabric Extender (IDCN5K) Implementing Data Center Networks Using the Cisco Nexus 7000 Switch (IDCN7K)

### CISCO APPLICATION NETWORKING TRAINING

Cisco Wide Area Application Services (CWAAS) Implementing the ACE Service Module (ACESM) Global Site Selector Operation & Configuration (GSSOC) Designing Data Center Application Services (DCASD) Implementing Data Center ApplicationServices (DCASI) Designing an Enterprise Application Infrastructure with the ACE Family (ACEDES) Implementing the Cisco ACE Appliance (ACEAP) Content Services Switch Operation & Configuration(CSSOC) Application & Content Networking System (ACNS)

### CISCO STORAGE NETWORKING TRAINING

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

### MULTI VENDOR DATA CENTER TRAINING

What's New vSphere 4 on Nexus 1000V Data Center Networks (WNNDC) Install, Config & Manage vSphere 4 on Nexus 1000V Data Center Networks (ICMNDC) Implementing Vblock (VBLOCK-TECH) Selling Vblocks (VBLOCK-SALES) Virtual Dynamic Data Center (VDDC) Implementing Enhanced Secure Multi-Tenancy Solutions (IESMT)

### NETAPP TRAINING

VMWARE TRAINING





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

# **Cisco Data Center Training**



### Data Center Architectural Overview (DCAO)

### ID FL-DCAO Price 895,00 USD Duration 1 Day

### PREREQUISITES

 An understanding of Data Center LAN and SAN architectures would be an advantage



### COURSE CONTENT

- Data Center Architecture
- Nexus 7000 Core Switch
- Nexus 5000 Access Layer Switch
- Nexus 2000 Fabric Extender(FEX)
- Nexus 4000 FCoE Blade Switch
- Nexus 1000V
- Unified Computing System
- · Case Study Building a Data Center with Nexus and UCS

### Cisco Nexus Overview Workshop (CNOW)

### ID FL-CNOW Price 795,00 USD Duration 1 Day

### **PREREQUISITES**

CCNA Certification or equivalent knowledge

### COURSE CONTENT

- Cisco Nexus Family Overview:Nexus 7000; Nexus 5000; Nexus 2000; Nexus 1000V; NX-OS
- The Nexus 5000 Series Switch: Data Center challenges; I/O Consolidation; Nexus 5000 Architecture Overview; FCoE Server Adapters; Managementof the Nexus 5000
- The Nexus 2000 Fabric Extender: Architecture of the Access Switch; Nexus 2000 Access Layer Design
- The Nexus 1000 V VirtualSwitch: Overview of the Virtual Environment; VN-Link; VM Provisioning
- The Nexus 7000 Core Switch: Data Center Core Requirements; Nexus 7000 Deployment, Nexus 7000 IntegratedCore
- Virtual Data Center Architecture: Data Center Network Overview; Access Layer Designs



### Data Center Unified Computing Design (DCUCD)

### ID CI-DCUCD Price 2.695,00 USD Duration 5 Days

### PREREQUISITES

- CCNA certification
- MDS 9x00, Nexus 5000, Nexus 7000, Catalyst6500, and ACE Engineer Level Knowledge
- VMware Certified Professional (VCP)
- Designing Cisco Storage Networking Solutions (DCSNS) and Data Center NetworkInfrastructure Design (DCNID) courses

- Data Center Computing Solutions
- Cisco Data Center Unified Computing Solution Components
- Cisco Data Center Unified Computing Solution Benefits
- Unified Computing System Implementation Aspects
- Evaluate Existing Data Center Computing Solutions
- Design Cisco Data Center Unified Computing Solutions
- Evaluate Cisco Data Center Unified Computing Solutions

### Data Center Unified Computing Implementation (DCUCI)

### ID CI-DCUCI Price 2.695,00 USD Duration 5 Days

### PREREQUISITES

- CCNA certification
- MDS 9x00, Nexus 5000, Nexus 7000, Catalyst6500, and ACE Engineer Level Knowledge
- VMware Certified Professional (VCP)
- Implementing Cisco Storage Networking Solutions (ICSNS) and Implementing Cisco Data Center Network Infrastructure 2 (DCNI-2) courses

### COURSE CONTENT

Understanding how Cisco UCS Benefits today's Data Center

- Cisco's Unified Computing System: UCS Hardware Components & UCS Features
- Understanding User Management
- Understanding the Chassis Array Manager(CAM) Conceptual Overview
- Explaining the Implementation of Server Resources via the Unified Computing System
- Maintaining a Cisco Unified Computing System
- Monitoring, Diagnostics & Troubleshooting the Cisco Unified Computing System
- Designing Cisco Unified Computing System Deployment

### Implementing Cisco Data Center Network Infrastructure1 (DCNI-1)

### ID CI-DCNI-1 Price 2.695,00 USD Duration 5 Days

### PREREQUISITES

 CCNP or CCIE Routing & Switching certification status or equivalent knowledge

### COURSE CONTENT

- Implementing the Catalyst6500, 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)

Real Nexus Hardware for all Lab Activities!

### ID CI-DCNI-2 Price 2.695,00 USD Duration 5 Days

### PREREQUISITES

 Interconnecting Cisco Network Devices 2 (ICND2), Implementing Cisco IP Switching(SWITCH), Implementing Cisco IP Routing(ROUTE) and Troubleshooting & Maintaining Cisco IP Networks (TSHOOT) courses

- Using the Cisco Nexus 7000 in Data Center Networks
  - Understanding the Cisco Nexus 7000 Series Switches
  - Overview of the Cisco Nexus 7000
  - Introducing the Virtual Device Contexts in the Cisco Nexus 7000
  - Managing the Cisco Nexus 7000
  - Cisco Nexus 7000 & Cisco NX-OS Layer2 Protocols & Features

- Cisco Nexus 7000 & Cisco NX-OS Quality of Service
- Cisco Nexus 7000 & Cisco NX-OS Security
- Troubleshooting
- Using the Cisco Nexus 5000 & 2000 in Data Center Networks
  - Overview of the Cisco Nexus 5000 & Cisco Nexus 2000
  - Understanding Fibre Channel
  - Implementing an FCoE NetworkUsing Cisco Nexus 5000 Switches



### Data Center Network Infrastructure Design (DCNID)

### ID CI-DCNID Price 2.695,00 USD Duration 5 Days

#### PREREQUISITES

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

### 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: HardwareArchitecture; Software Architecture; Continual Availability; Network Management; Security Overview; QoS implementationon 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

# Implementing Data Center Networks Using the Cisco Nexus 1000V Switch (IDCN1V)

### ID FL-IDCN1V Price 1.795,00 USD Duration 2 Days

### PREREQUISITES

 Intermediate knowledge of switching, routingand data center architectures and protocols, as well as an understanding of server virtualisation techniques

### COURSE CONTENT

- Modern Server Architecture Scalability & Consolidation
- Network Virtualisation & Consolidation in DC Bridging Networks
- Data Center Application High-Availability
- NIV on ESX using Cisco Nexus Hardware Switches
- Nexus 1000 VEM (NX-OS) Features & Functions
- Nexus 1000V Switching Mechanisms
- Overview of the Nexus 1000 VSM
- VM Policy-based Connectivity & Mobility using Nexus 1000V
- Utilize Cisco NX-OS based End-to-EndQoS Concepts & Enforcement
- Configure the Nexus 1000V System Management & Monitoring Features
- Configure VM Security Features Using the Nexus 1000V

### Implementing Data Center Networks Using the Cisco Nexus 5000 Switch & 2000 Fabric Extender (IDCN5K)

### ID FL-IDCN5K Price 2.695,00 USD Duration 3 Days

### PREREQUISITES

 Intermediate knowledge of switching, routing and data center architectures and protocols, as well as an understanding of server virtualisation techniques

- Fibre Channel Protocol Implementationon the Cisco Nexus 5000
- FCoE & DCB Protocols & Applicability to a Unified Fabric Environment
- DCB/FCoE Network Design Considerations
- Configure the Nexus 5000 in Converged Network Environments
- Nexus 5000 System Hardware & Software Architecture

- Nexus 5000 SoftwareFeatures&Licensing
- Configure Server Connectivityto the FCoE/DCB NetworkUsing Converged Network Adapters
- Nexus 5000 High-Availability Features
- Configure the Nexus 5000 Management & Monitoring Features
- Nexus 2000 HardwareArchitecture & Operational Features
- Relationship Between the Nexus 5000 & 2000 Product Families
- Configure Advanced Features Including Congestion Avoidance, Traffic Management, Static & Dynamic Pinning
- Utilize the Fabric & Device Manager Products to Perform Discovery, Configuration, Management & Troubleshooting

# Implementing Data Center Networks Using the Cisco Nexus 7000 Switch (IDCN7K)

ID FL-IDCN7K Price 2.795,00 USD Duration 3 Days

### PREREQUISITES

 Intermediate knowledge of switching, routing and storage architectures and protocols, as well as an understanding of server virtualisation techniques

### COURSE CONTENT

Understanding the Cisco Nexus 7000 Series Switches

- Introducing the Virtual Device Contexts in the Cisco Nexus 7000
- Managing the Cisco Nexus 7000
- Cisco Nexus 7000 & Cisco NX-OS Layer 2 Protocols and Features
- Cisco Nexus 7000 & Cisco NX-OS Layer 3 Protocols and Features
- Cisco Nexus 7000 and Cisco NX-OS Quality of Service
- Cisco Nexus 7000 and Cisco NX-OS Security
- Troubleshooting

### Cisco Wide Area Application Services (CWAAS)

### ID CI-CWAAS Price 2.995,00 USD Duration 5 Days

### PREREQUISITES

CCNA certification or equivalent knowledge

### COURSE CONTENT

- Cisco Wide-Area Application Services
- Introducing Cisco WAAS
- Understanding WAN Optimization
- Understanding Application Acceleration
- Cisco WAAS Quick Start
  - Introducing Traffic Interception
  - Installing and Configuring Cisco WAAS Using Quick Start
- Implementation, Integration, and Management
  - Performing an Advanced Cisco WAE Installation and Configuration
  - Configuring Traffic Interception
  - Implementing Cisco WAAS Central Management
  - Configuring Application Traffic Policies
  - Configuring Cisco WAAS Virtualisation

- Cisco WAAS Application Optimizers
- Configuring CIFS Optimization
- Configuring Cisco WAAS Windows Network Printing
- Configuring NFS Optimization
- Configuring HTTP Optimization
- Configuring Streaming Video Optimization
- Configuring MAPI Optimization
- Configuring SSL Optimization
- Cisco WAAS Design and Troubleshooting
- Planning a Cisco WAAS Network Design
- Troubleshooting Introduction
- Troubleshooting Network Interception
- Troubleshooting WAN Optimization
- Cisco WAAS Mobile Client Solution
  - Installing Cisco WAAS Mobile
- Configuring Cisco WAAS Mobile Options
- Troubleshooting Cisco WAAS Mobile

### Implementing the Application Control Engine Service Module (ACESM)

### ID CI-ACESM Price 2.395,00 USD 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

- 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



### Global Site Selector Operation & Configuration (GSSOC)

#### ID CI-GSSOC Price 2.595,00 USD **Duration 3 Days**

### PREREQUISITES

 Basic understanding of the following topics: TCP/IP protocol, DNS background, Server load-balancing, MPLS

#### COURSE CONTENT

- **Basic DNS Review**
- GSS Setup
- **GSS** Keepalives
- GSS / CNR Interaction
- GSS Deployment Model Overview
- Global Server Load Balancing
- GSS Load Balancing Methods
- GSS Network Proximity · GSS DDos Protection



### Designing Data Center Application Services (DCASD)

#### ID CI-DCASD Price 2.695,00 USD **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 AccelerationSolutions**
- Designing Site-to-Site Load Balancing Solutions
- Optimizing the DCAS Solution

### Implementing Data Center Application Services (DCASI)

#### ID CI-DCASI Price 2.695,00 USD **Duration 5 Days**

#### PREREQUISITES

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



### COURSE CONTENT

- Data Center Application Services Overview
- Implementing Server Load Balancing
- Implementing Web Application Acceleration
- Implementing Site-to-SiteLoad Balancing

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

ID CI-ACEDES Price 3.495,00 USD **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

- 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

### Implementing the Cisco ACE Appliance (ACEAP)

### ID CI-ACEAP Price 2.995,00 USD Duration 4 Days

### PREREQUISITES

 Basic understanding of: TCP/IP protocol, 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

### **Content Services Switch Operation & Configuration (CSSOC)**

### ID CI-CSSOC Price 3.095,00 USD Duration 5 Days

#### PREREQUISITES

• Basic understanding of TCP/IP, HTTP, IP Routing, DNS and network design/configuration

### COURSE CONTENT

- Cisco Content Switching Product Overview
- CLI and Initial ConfigurationServices
- Owners and Content Rules
- Load Balancing
- Domain Name Services and Global Server Load Balancing
- VIP and Interface Redundancy
- Adaptive Session Redundancy
- SSL Basics
- SSL Advanced: Backend SSL and URL Rewrite

CSM CLI, Basic Functions and Configuration

CSM NetworkDesign



### Application & Content Networking System Operation & Configuration (ACNS)

### ID CI-ACNS Price 2.595,00 USD Duration 3 Days

#### PREREQUISITES

- A basic understanding of TCP/IP, HTTP, and IP routing
- Basic understanding of Content Networking fundamentals

- Product Overview
- Initial Configuration and Activation
- CMS Configuration
- Network Integration
- ACNS Proxy-caching
- Prepositioning
- Request Routing with the Content Router
- Streaming

### **Designing Cisco Storage Networking Solutions (DCSNS)**

#### ID CI-DCSNS Price 2.695,00 USD **Duration 5 Days** PREREQUISITES COURSE CONTENT

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



- MDS 9000 Platform Overview
- **Designing SAN Fabrics**
- Securing the SAN
- **Designing SAN Extension Solutions** •

### Implementing Cisco Storage Networking Solutions (ICSNS)

### ID CI-ICSNS Price 2.695,00 USD Duration 5 Days

### PREREQUISITES

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

### COURSE CONTENT

- . MDS 9000 Platform Overview
- System Installation and Initial Configuration •
- **Building VirtualSANs** •
- Implementing FCIP
- Troubleshooting Tools and Scenarios



### Implementing Cisco Advanced Storage Networking Solutions (IASNS)

#### ID CI-IASNS Price 2.695,00 USD Duration 5 Days

### PREREQUISITES

Implementing Cisco Storage Networking Solutions (ICSNS)

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



# VMware vSphere<sup>™</sup> and Cisco Nexus 1000V Integration



### What's New vSphere<sup>™</sup> 4 on Nexus 1000V Data Center Networks (WNNDC)

### ID FL-WNNDC Price 2.795,00 USD Duration 4 Days

### PREREQUISITES

- VMwareInfrastructure3: Install& Configure (VIIC) or equivalent experience with VMwareESX and vCenterServer
- Intermediate knowledge of switching, routingand data center architectures and protocols, as well as an understanding of server virtualisationtechniques

### COURSE CONTENT

- Overview of the Nexus 1000 VEM and VSM
- NetworkVirtualisation and consolidation in Data Center Bridging Networks
- Upgrading VMware deployments
- Data Center Application High-Availability
- Nexus 1000 VEM (NX-OS) Features and Switching Mechanisms
- Deploying distributed virtual switches to simplify datacenterwide network management

- Migrating virtual machines' storage while they are live with Storage vMotion
- · Growing virtual disks and VMFS volumes while they are live
- Employing VMware's new Pluggable Storage Architecture
- Ensuring application availability with VM ware Fault Tolerance
- Saving energy with VM ware DistributedPower Management
- Saving disk space with thin provisioning
- NIV on ESX using Cisco Nexus switches
- Virtual Machine Policy-based Connectivity and Mobility
- Utilize Cisco NX-OS based End-to-EndQoS Concepts and Enforcement
- Configure the Nexus 1000V System Managementand Monitoring Features
- Configure VM Security Features Using the Nexus 1000V
- Save disk space with thin provisioning
- Administer virtual appliances consisting of more than one VM

# Install, Config & Manage vSphere<sup>™</sup> 4 on Nexus 1000V Data Center Networks (ICMNDC)

### ID FL-ICMNDC Price 3.295,00 USD Duration 5 Days

### PREREQUISITES

Administration experience on Microsoft Windows or Linux operating systems

- Intermediate knowledge of switching, routing and data center
- architectures and protocols
  VMware vSphere 4: What'sNew (VIWN) course

- Install and configure ESX and vCenter Server
- Configure and manage ESX networking and storage using
- vCenter Server
- Deploy, manage and monitor VM and their resources
- Manage user access to the VMware infrastructure Increase scalability using vCenter Server

- Apply patches using VMware vCenter Update Manager
- Overview of the Nexus 1000 VEM and VSM
- Network Virtualisation & consolidation in DC BridgingNetworks
- Data Center Application High-Availability
- Nexus 1000 VEM (NX-OS) Features and Switching Mechanisms
- NIV on ESX using Cisco Nexus switches
- Virtual Machine Policy-based Connectivity and Mobility
- Utilize Cisco NX-OS based End-to-End QoS Concepts and Enforcement
- Configure the Nexus 1000V System Management and Monitoring Features
- Configure VM Security Features Using the Nexus 1000V
- Manage higher availability & data protection using vCenter Server

# Multi Vendor Data Center Training







### Implementing Vblock (VBLOCK-TECH)

### ID FL-VBLOCK-TECH Duration 5 Days

### PREREQUISITES

 Intermediate knowledge in switching,routing, data center architectureand protocols,VMwareESX server virtualisationand vSphere, EMC<sup>2</sup> storage, backup and disaster recovery technologies

### COURSE CONTENT

- Data Center
  - Data Center Challenges
  - Data Center Solutions
  - VblockArchitecture
- Differences between the 3 Vblocks (0, 1, 2)
- Cisco Unified Computing System (UCS)
  - Introductionto the UCS System
  - Compute Node Connectivity
  - Cisco Unified Computing System Manager
  - Cisco Unified Computing System Maintenance

- EMC<sup>2</sup> Storage
  - EMC<sup>2</sup> Storage Portfolio: Celerra ('Vblock 0'), Clariion ('Vblock 1'), Symmetrix('Vblock 2')
  - Configuring EMC<sup>2</sup> Storage
  - EMC<sup>2</sup> Storage High Availability, Backup and Disaster Recovery Options
  - Managing Data on EMC<sup>2</sup> Storage
  - EMC<sup>2</sup> Storage Management Tools
  - EMC<sup>2</sup> Storage Performance and Troubleshooting
- VMwarevSphere
  - Configuring the VM ware Virtualised Environment
  - VMware Virtual Networking
- VMwareHigh-Availability and Security

### Selling Vblocks (VBLOCK-SALES)

ID FL-VBLOCK-SALES Duration 1 Day

### **PREREQUISITES**

 Good understanding of the Data Center environmentand the challenges and solutions found within that environment

### COURSE CONTENT

- The Virtual Computing Environment: The VCE Coalition (Cisco, VMware and EMC); Inteland Acadia; Why did they gettogether?;
- Whatare they delivering?; What is of Benefit to the Customer? Whatis Vblock?: The Vblock Architecture; Vblock Components (vCenter, Nexus, VN-Link, etc.); Flavours of Vblock (0, 1 & 2);

Relationship to Cisco UCS; Why is it of interest to customers?; What challenges is it addressing?; What benefits will the customersee ?

 Selling Vblocks: Who is our target demographic?: Geographic; markets, vertical markets, customer profile; Who do we approach? Whatis our messaging?; Who/What is the Competition and why can we beatthem?: Vblock SWOTAnalysis, compare and contrast other solutions; Supporting a Sale; Sales & Marketing Tools



# Multi Vendor Data Center Training







### Virtual Dynamic Data Center (VDDC)

### ID FL-VDDC Price 795,00 EUR Duration 1 Day

### PREREQUISITES

Basic knowledge about networking, virtualisation and storage

### COURSE CONTENT

- Data Center of the Future with Cisco, NetApp and VMware
- Data Center Strategy: Consolidation, Virtualisation, Integration, Automation
- Customers Requirements
- Cisco Data Center 3.0
- Unified Fabric Concept
- Dynamic Data Center (DDC): NetApp Unified Storage & Cisco
  Unified Computing
- Virtualisation (Server and Desktop with VMware, Storage with NetApp), Cloud Infrastructures
- Market Trends



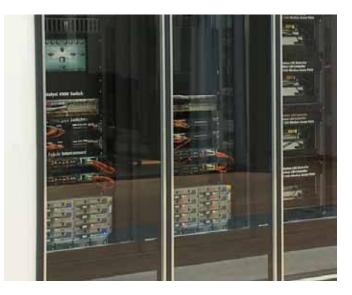
### Implementing Enhanced Secure Multi-Tenancy Solutions (IESMT)

### ID FL-IESMT Price 2.250,00 USD Duration 5 Days

### PREREQUISITES

 Intermediate knowledge in switching, routing, data center architecture and protocols, VMwareESX server virtualisation and vSphere, NetApp storage, backup and disaster recovery technologies

- Understanding Secure Multi-TenantEnvironments
- Introduction to the Cisco Unified Computing System (UCS)
- Compute Node Connectivity
- Cisco Unified Computing System Manager
- Cisco Unified Computing System Maintenance
- Configuring NetApp Storage in a Multi-TenantEnvironment
- Storage High Availability, Backup and Disaster Recovery in a Multi-TenantEnvironment
- Managing Data on NetApp MultiStore
- NetApp MultiStore Management Tools
- NetApp MultiStore Performance and Troubleshooting
- · Configuring the VMwareVirtualised Environment
- VMware Virtual Networking
- VMware High Availabilityand Security in a Multi-Tenant Environment
- Integration: Putting It All Together



# **Authorized NetApp Training**



Fast Lane is the only global NetApp Learning Partner. We offer the full NetApp curriculumin more than 60 countries and 12 languages. All our instructors are NetApp-certified specialists with extensive practical experience in the storage environment.

### NetApp Storage Basic & Intermediate Training

Data ONTAP 8.0 7-Mode Administration (DOT87M) NCDA Boot Camp (NCDABC) Accelerated NCDA Boot Camp Data ONTAP 8.0 7-Mode (ANCDABC87) Accelerated NCDA Boot Camp (ANCDABC) Data ONTAP CIFS Administration (CIFS) Data ONTAP NFS Administration (NFS) NetApp Data Protection Software Administration (NPSA8) Data ONTAP SAN Administration (SAN) SAN Implementation Workshop (SANIW) Performance Analysis on Data ONTAP (PAD) Data ONTAP 8.0 Cluster-Mode Administration (DOT8CLUSTER) Achieving Storage Efficiency with NetApp Storage Systems (ASE) Basic NetApp Configuration and Administration (BNCA)

### NetApp Storage Advanced Training

Operations Manager, Protection Manager, and Provisioning Manager Adminis tration (OPSMGR) VMware vSphere on NetApp (VVNA) DataFort Storage Security Administration (DSSA) NetApp VTL Administration (NAVTL) Oracle on NetApp Storage Systems (NAOR) NetApp SANscreen Fundamentals (SANSF)

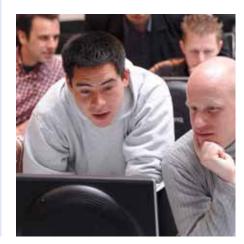
### Microsoft on NetApp Storage Systems

Microsoft Exchange on NetApp Storage Systems (MSEXC) Microsoft SQL Server on NetApp Storage Systems (MSSQL)









### CONTACT US.

Feel free to contact your nearest Fast Lane location if you have any questions about our NetApp offering- we'll be delighted to hear from you. You can find the contact details on the back cover.

# **Authorized VMware Training**

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

### Vmware vSphere Training

VMware vSphere 4: What's New (VIWN) VMware vSphere 4.1: Install, Configure, Manage (VICM) VMware vSphere 4: Troubleshooting (VSTS) VMware vSphere: Manage for Performance (VMP) VMware vSphere: Skills for Storage Administrators (VSSA) VMware vCloud: Architecting the VMware Cloud (AVC) vSphere 4: Manage and Design for Security (VMDS)

### Infraestructure Virtualization Training

VMware vSphere: Design Workshop (VDW) VMware Capacity Planner (CAPL)

### **Desktop Virtualization Training**

VMware View<sup>™</sup>: Install, Configure, Manage (VIEW) VMware View: Design Best Practices (VVD)

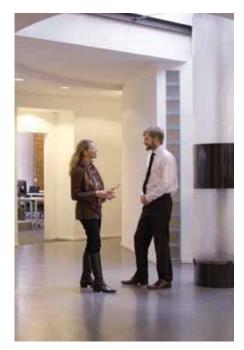
### **Business Continuity Training**

VMware vSphere: Manage Availability (VMA) VMware Site Recovery Manager (VSRM)



Feel free to contact your nearest Fast Lane locationif you have any questions about our VMware offering- we'll be delighted to hear from you. You can find the contact details on the back cover.









### Fast Lane Training Centres



# FAST LANE LATAM

#### **Costa Rica**

Centro Corporativo Plaza Roble, Edificio Las Terrazas, Piso 1 Escazú, San José Tel.: (506) 2201-9700 info@flane.co.cr

### Colombia

Avenida Carrera 45 #103-34 Ofc. 207. Bogotá Tel: (57) 311 452 2629 info@flane.co.cr

#### México

Av. San Lorenzo 1009, Piso 4. Col. Del Valle C.P. 03100 Tel.: (52) 55 5601-7343 info@flane.com.mx

#### **El Salvador**

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