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## Implementing and Configuring the Cisco Nexus 5000 and 6000 Switches

**Duration: 3 Days**    **Course Code: ICNX5-6K**    **Version: 1.0**    **Delivery Method: Virtual Learning**

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### Overview:

This course is delivered in partnership between Global Knowledge and Firefly Education. This partnership has enabled the Cisco market to conduct training on the latest technology addressing business relevant issues and is constantly invested in, to keep the materials up to date of any changes that happen.

In this 3-day course, you will learn how to implement access layer infrastructures, using next-generation Cisco Nexus 5000 and 6000 Series Switches and Nexus 2000 Fabric Extenders and their use cases. This course provides a technical overview with focus on the Nexus 5000 and 6000 platform features, design guidelines, deployment, and operations, including Fibre Channel over Ethernet, Layer 2, Layer3, QoS, management, and security. You will explore the features of NX-OS up to release 6.0(2N2.1) of the Nexus platform by performing hands-on labs using real Nexus 5500 and Nexus 2000 labs. Labs include basic FCoE configuration, NPV mode deployment, FEX and Virtual PortChannel configuration, security features, and monitoring, configuring Cisco Adapter-FEX and FabricPath.

### Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

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### Target Audience:

This course is designed for experienced data center engineers who are familiar with Cisco Catalyst or MDS switching products.

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### Objectives:

- Identify the architecture, features, and benefits provided by Cisco Nexus 5000 Switches and how these differ from the Nexus 3000 Series in the most common user situations
- Describe the technology benefits and challenges of 40G and 100G Ethernet in the data center
- Describe in detail the Cisco Nexus 6000 Switch architecture and data forwarding
- Discuss the Nexus 6000 and 5000 enhanced networking features
- Identify the benefits and features provided by the different models of the Cisco Nexus 2000 Fabric Extenders in the most common user situations, and explain how the switch works to provide these benefits
- Describe the key management features of Cisco NX-OS on the Cisco Nexus 6000 and 5000 and upgrading / downgrading system software
- Describe Fibre Channel networks, frames, flow control, and the various protocols used with Fibre Channel, and identify the standard fabric services and their well-known addresses
- Describe how to manage and configure QoS in the network, using the Cisco Nexus 6000 and 5000 Series Switches
- Describe how FCoE operates within SAN and LAN environments, identify the hardware components of an FCoE implementation, and explain the options available
- Describe network design and switch configuration options for reducing network threats and preventing unauthorized changes in configuration
- Identify the configuration options provided on Cisco Nexus 6000 and 5000 Switches and explain how to provision, move, add, and change Fibre Channel and Ethernet ports
- Explain how to use FCoE and Ethernet features and management tools for identifying switch and network problems

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## Prerequisites:

You will gain most from this course if you have a basic understanding of the following topics:

- Ability to configure advanced Layer 2 Ethernet services
- Basic working knowledge of Fibre Channel and Storage Networking
- Understanding of Cisco data center architecture

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## Follow-on-Courses:

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## Content:

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## Lesson 2: The Nexus 6000 Series Switches

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Lab 2: Configuring the Cisco Nexus 5000 for FCoE Connectivity

Lab 3: Configuring the Cisco Nexus 5000 in NPV Mode

Lab 4: Configuring the Nexus 2000 as a Remote Line Card

Lab 5: Configuring Nexus 2000 with vPC

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### Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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