# Supporting Cisco Data Center Networking Devices v3.0 (010-151)

**Exam Description:** Supporting Cisco Data Center Networking Devices v3.0 (DCTECH 010-151) is a 90-minute exam that consists of 65–75 questions and validates a technician's competency in the following areas; basic Cisco NX-OS configuration, features of UCS Manager and Cisco Integrated Management Controller (CIMC), and Cisco Data Center products and hardware components with an emphasis on the Cisco Unified Computing System (UCS).

The curriculum covers remedial services (HW break fix) on Cisco Data Center products, including hardware replacement, software and configuration backup and restore, check safety and environmental requirement, recognize connection type and cable requirement, and perform basic physical layer troubleshooting. The Cisco Certified Technician Data Center (CCT Data Center) should be competent in the following areas; basic Cisco NX-OS configuration, Cisco Data Center products and hardware components.

The Cisco Certified Technician Data Center (CCT Data Center) should be able to perform remedial services (HW break fix) on Cisco Data Center products, including software and configuration backup and restore, check safety and environmental requirement, recognize connection type and cable requirement, and perform basic physical layer troubleshooting.

The following topics are general guidelines for the content likely to be included on the exam. However, other related topics may also appear on any specific delivery of the exam. To better reflect the contents of the exam and for clarity purposes, the guidelines below may change at any time without notice.

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| **17%** | **1.0** | **Data Center Basics** |
| | 1.1 | Describe a data center |
| | 1.2 | Describe cloud computing |
| | 1.3 | Describe virtualization (server, network and storage) |
| | 1.4 | Describe PCIe SSDs and NVMe |
| | 1.5 | Describe raid storage |
| | 1.6 | Differentiate between these Layer 2 technologies (Ethernet, Fast Ethernet, Gigabit Ethernet) |
| | 1.7 | Describe SAN technology (SAN network type) |
| | 1.8 | Describe SAN cabling (FCoE, PCIe) |
| | 1.9 | Describe UTP and connectors |
| | 1.10 | Describe fiber and connectors |
| | 1.11 | Describe twinaxial and connectors |
| | 1.12 | Describe SFP and QSFP transceivers |
| **25%** | **2.0** | **Cisco Equipment and Related Hardware** |
| | 2.1 | Describe the Cisco Unified Computing System (UCS) components |
| | 2.2 | Describe the Cisco UCS B-series Blade servers components and chassis layout |

2.3 Describe the Cisco UCS C-series rack mount servers components and chassis layout
2.4 Describe Cisco UCS fabric interconnects and fabric extenders
2.5 Identify the Cisco UCS LED and chassis layout
2.6 Describe the Cisco UCS network adapters and expansion modules
2.7 Describe the Cisco UCS S-series Storage servers components and chassis layout
2.8 Describe the Cisco UCS E-series servers components and chassis layout
2.9 Describe the Cisco Nexus switches family components
2.10 Describe Cisco ACI and NX-OS mode
2.11 Describe the Cisco MDS 9700 product family components
2.12 Identifying the MDS 9700 Family Storage networking modules

**25% 3.0 Cisco UCS and Cisco NX-OS software operation**

3.1 Describe the Cisco Integrated Management Controller (CIMC)
3.2 Describe features and functionality of Cisco UCS Manager
3.3 Describe the different command modes for Cisco NX-OS software
3.4 Determine the current mode of the device
3.5 Verify the device configuration
3.6 Know how to use and interpret the basic Cisco NX-OS commands
3.7 Identify a configuration file from a Cisco device
3.8 Using the device file systems, directories, and files
3.9 Perform password recovery on a Cisco NX-OS switch device

**33% 4.0 Service-Related Information**

4.1 Use the hardware tools needed for repair
4.2 Make a physical connection from laptop to Cisco console port
4.3 Perform installation process steps and expected outcomes
4.4 Perform initial setup tasks
4.5 Service restoration verification
4.6 Perform remedial procedures on Cisco devices
4.7 Upgrade the BIOS on a Cisco UCS Server Blade with the GUI
4.8 Perform Cisco UCS Fabric Interconnect (FI) upgrade/downgrade procedure
4.9 Firmware Automatic Synchronization
4.10 Upgrade Cisco Integrated Management Controller firmware on a Cisco UCS Server C-Series
4.11 Troubleshoot Cisco UCS servers