

Data Center Professional Training with Internship Program

Course Duration: 80 Hours

One Sky Information Technology offers Data Center Professional Training with Internship Program is designed to test a candidate's understanding of the key components of data center. This certification & training addresses how to set up and improve key operations and maintenance aspects that are required to ensure high availability.

❖ Who is this certification for?

Data Centre Professional has been created with IT facility and data center operations professionals in mind. It is ideal for those who work in and around the data center and are responsible for improving availability and manageability.

❖ Data Center Internship Program Summary course outline is given below:

Part 01: IT Support Management

- Install, Configure and Maintain Hardware & Business Software.
- Hardware Assembling & Troubleshooting
- Manage Operating System (Client & Server OS)
- Manage & Troubleshooting Organization Software
- Rack & Tower Servers Setup & Maintenance
- Rack Server Mount & Cable Management
- STP-UTP-Optical Fiber Cabling
- Patch Panel/Faceplate Cabling

- Manage Cable Manager
- IP Phone, Access Point, Finger Print, Door Lock System Configure & Maintenance
- Remote Service Configure & Support
- Virtualization Technology VMware, Hyper-V Setup & Maintenance
- Implement client virtualization and cloud computing
- Implement physical security.
- Secure workstations and data.
- Troubleshoot workstation security issues
- Install, configure, and troubleshoot print devices.
- Implement operational procedures
- Server & Client User Access Control
- Explain network infrastructure concepts.
- Manage users, workstations, and shared resources
- Explain Attacks, Threats, and Vulnerabilities

Part 02: Network Administration

- Network Basic
- OSI Model
- TCP/IP Model
- IPv4 Address Implementation
- Ipv6 Address Implementation
- Enterprise Network Design
- Implement Network Design Tools
- Network Route Details

- IP Routing
- Routing Protocols Configuration
- Switching Technology
- Switching Protocols Configuration
- Setup Private & Public Network
- Ether Chanel network
- Load Balancing
- Tunneling
- Firewall & Network Security
- Network Monitoring Tools
- Graph Network Monitoring
- Remote Technology
- Network Troubleshooting

Part 03: Server Administration

- Introduce with Server Based Network Architecture.
- Install Server Operating System (Windows/Linux)
- Install & Configure Windows Server Active Directory ADDS
- Manage Windows Server Active Directory User & Group
- Install & Configure DNS Server (Windows /Linux)
- Install & Configure DHCP Server (Windows /Linux)
- Install & Configure FTP Server (Windows /Linux)
- Install & Configure Print Server (Windows /Linux)
- Install & Configure Log Server (Linux)
- Install & Configure Remote Server (Windows /Linux)
- Install & Configure VPS Server
- Cache Server Manage

Part 04: Bandwidth Control & Management System

Lab 01: Mikrotik

❖ ISP Diagram, Networking fundamental, Types of IP,

WAN Configure 5 types:

- Auto IP receive (DHCP-client).
- Broadband dialup (PPPoE-Client).
- Static IP
- VLAN
- Wireless

Lab 02: Mikrotik

❖ **LAN Configure 7 types:**

- Auto IP distribution (DHCP-Server).
- Broadband dialup distribution (PPPoE Server).
- Static IP
- VLAN
- Wireless
- Hotspot Prepaid user
- Userman Prepaid Billing

Lab 03: Mikrotik

❖ **Bandwidth Control:**

- Simple
- PCQ Based

- Day night
- Dedicate
- Shared
- Parent Queue, Child
- Priority

Lab 04: Mikrotik

- Router Configuration
- Auto Backup and Auto Sending over
- MRTG.
- MAC restrict on
- Administrative User & Security of
- Service port default number, Port
- Web site Filter, Virus Port Block, IP lock /
- IP Black listing prevention.
- Hacker detect

Lab 05: Mikrotik

- Bandwidth Test
- Health and Resource Monitoring, Graph, Ping, Link Monitoring
- Scripting &
- NTP Client.

Lab 06: Mikrotik

- Bridge, Bonding, VRRP.
- IP Subnet Mask Calculation
- Load Balance with Fail Over (Link Redundancy).

Lab 07: Mikrotik

- Static
- OSPF.

- BGP.

Lab 08: Mikrotik

- Client's browsing history (log) view and store in
- Firewall, Different NAT, Port forwarding. Problem Diagnose and trouble
- High Priority & High Bandwidth on Ping, Game, GGC, FNA, BDIX, FTP, TV

Lab 09: Mikrotik

- VPN Server & User
- VPN windows dialer.
- Head Office to Branch Office LAN Share (Data Connectivity).
- Ethernet Over IP (EOIP).
- IPIP
- IPsec

Lab 10: Mikrotik

- MikroTik OS Installation on RouterBoard, license and package up gradation, Down
- PC and Router Based Mikrotik IOS Install,
- IPv6.