

ISP Setup and Administration using MikroTik

Course Prerequisites

- Basic knowledge of TCP/IP and routing. We will be expanding on this during the course, but we suggest that the participants have a good working knowledge of IP addressing and routing.
- Basic knowledge of wired and wireless networking.

Course Duration

- 48 Hours, 16 Classes, 3 Hours per Class

Lesson 01: MikroTik Installation, License and Package Upgradation

- PC and Router Based MikroTik IOS Install
- License
- Version Upgrade/Downgrade
- New Package Install

Lesson 02: IP Access and NAT

- WAN IP
- Subnet
- Gateway
- DNS
- Private IP NAT

Lesson 03: Bandwidth Manage

- Bandwidth Control: Day/Night Package
- Dedicate Control
- Shared Control
- Burst Limit

Lesson 04: Bridge, NTP, VLAN Configuration

- Bridge Mode Configure (Port/VLAN)
- NTP Client (Time Server IP) Configure
- VLAN Configuration
- Sub Interface Create

Lesson 05: E-mail Backup and Restore Configuration (Automatic)

- Backup Create and Restore

Lesson 06: DHCP Server Configuration

- DHCP Server Configure
- MAC Restrict
- Bandwidth Control

Lesson 07: PPPoE Server Configuration

- PPPoE Server Configure
- Profile, User
- Windows Dialer (PPPoE-Client)

Lesson 08: Hotspot Server Solution

- Hotspot Server Configure
- Profile, User
- Package Limit

Lesson 09: VPN Configuration

- VPN Server Configure
- VPN Windows Dialer (VPN-Client)

Lesson 10: IP Restriction, User Management and MRTG

- MAC Restrict on IP
- MRTG Create
- Administrative User Restrictions
- Security
- Read Only User

Lesson 11: Firewall and Log Generate Configuration

- Client's Browsing History (IP Log) Store & View in Windows PC
- Basic Firewall
- Port monitoring
- Advance Firewall
- Mangle
- Packet Marking
- High Bandwidth on Certain Host/IP
- No Bandwidth Control on Ping/ICMP

Lesson 12: IP Routing Protocols

- Static/Specific Routing
- OSPF Configuration
- OSPF for Auto Redundancy
- BGP Configuration
- BGP for Auto Redundancy for LAN Side Real IP (Own IP and AS Number Required).

Lesson 13: Link Redundancy Solution

- Link Redundancy with Fail Over
- Load Balance Between Two Providers

Lesson 14: Proxy Server Configuration

- Web Proxy Configure
- Web Site Filter
- Virus Port Block
- IP Lock/Open

Lesson 15: Wireless Access Point, Fiber, Radio Link Solution

- Wireless Access Point Configuration
- Describe About Optical Fiber Connectivity
- Describe About Radio Link P2P, P2M