

# MikroTik Certified User Management Engineer



# Online Course

**ZETLAN TECHNOLOGIES**  
[www.zetlantech.com](http://www.zetlantech.com)

# MikroTik Certified User Management Engineer

## Course Modules

### 1. PPP

- PPP Profile
  - Local and remote addresses
  - Incoming and outgoing filters
  - Address list
  - Change TCP-MSS
  - Use encryption
  - Session timeout
  - Rate-limit configuration
  - Only-one setting
- PPP Secret
  - Service and Profile
  - Local and Remote address
  - Routes configuration
  - Limit Bytes In/Limit Bytes Out configuration
- IP Pool
  - Set addresses ranges
  - Next pool options



ZETLAN TECHNOLOGIES

# MikroTik Certified User Management Engineer

## 2.PPTP, L2TP

- PPTP and L2TP
  - Theory
  - Comparison
- PPTP Client configuration
  - Client setup
  - Set profile
  - Dial on demand
  - Add default route and static routes
- PPTP Server configuration
  - Enable server
  - Setup profiles
  - Add clients to PPP secret
  - Set static interfaces for clients
- L2TP Client configuration
  - Client setup
  - Configure profile
  - Dial on demand
  - Add default route and static routes
- L2TP Server configuration
  - Enable server
  - Set profiles
  - Add clients to PPP secret
  - Set Static interfaces for clients

Zetlan Technologies



**ZETLAN TECHNOLOGIES**

# MikroTik Certified User Management Engineer

## 3. PPPoE

- PPPoE server and client
  - Theory
  - Usage environment
  - Comparison to other PPP protocols
- PPPoE client configuration
  - Client setup
  - Select interface
  - Service name
  - Configure profile
- PPPoE Server configuration
  - Enable PPPoE server
  - Set profiles
  - Add clients to PPP secret
  - Add Static interfaces for clients
  - Secure server by removg any IP addrs frm PPPoE srvr interface
- Encryption
  - Set profile without encryption
  - Set profile with encryption
  - Configure PPPoE client without encryption
- Interface ECMP
  - Set ECMP routes for PPP interfaces



# MikroTik Certified User Management Engineer

## 4.Bridging

- L2TP and EoIP
  - Set L2TP tunnel
  - Set EoIP tunnel
  - Create bridge and add necessary interfaces to ports
  - Confirm you have Ethernet connectivity between remote nodes
- L2TP and VPLS
  - Set L2TP tunnel
  - Set VPLS tunnel
  - Create bridge and add necessary interfaces to ports
- L2TP and BCP
  - Set L2TP tunnel
  - Use BCP to bridge PPP interface
  - Add to bridge necessary interface
- Multilink Protocol
  - Enable multilink by specifying correct MRRU settings
  - Disable mangle rules for MSS adjustment
- MLPPP (optional)
  - Setup client and specify multiple interfaces for one client
  - Set PPPoE server with MLPPP support



# MikroTik Certified User Management Engineer

## 5. IPsec

- Introduction
  - Theory and concepts
  - Comparison to other VPN protocols
- IPsec Peer
  - Use different authentication methods
  - IPsec exchange modes
  - Encryption and hash algorithms
  - NAT-Traversal
  - Lifetime and lifebytes
  - DPD protocol
- Policy
  - IPsec protocol and action
  - Tunnels
  - Generate dynamic Policy
- Proposal
  - Encryption and authentication algorithms
  - Lifetime
  - PFS
- Installed-SA
  - Flush SA



# MikroTik Certified User Management Engineer

- Create IPsec between two routers with NAT
  - Set peer
  - Set policy
  - Set NAT rules
  - Confirm the secure link is established

## 6. HotSpot

- Introduction
  - Concepts
  - Usage environments
  - Setup HotSpot with default settings
- HotSpot Login Methods
  - HTTP CHAP/PAP
  - MAC
  - Cookie
  - HTTPS
  - Trial
  - RADIUS
  - Users
  - Add users
  - Set MAC-address for user
  - Set MAC-address for username
  - Limit Uptime and Limit Bytes In/Out
  - Reset limits for user



Zetlan Technologies



**ZETLAN TECHNOLOGIES**

# MikroTik Certified User Management Engineer

- Monitor Users
  - Host Table
  - Active Table
  - SNMP for users
- Profile
  - Keepalive timeout
  - Shared users
  - Rate-Limit
  - Address-list
  - Incoming/Outgoing filter
  - Incoming/Outgoing Packet Mark
- Bypass HotSpot
  - Walled garden
  - Walled garden IP
  - IP binding
- Customize HotSpot
  - Advertisement
  - Customize pages

Zetlan Technologies



**ZETLAN TECHNOLOGIES**

# MikroTik Certified User Management Engineer

For Enquiry: +91 8680961847

## 7. RADIUS

- RADIUS client
  - Add radius client
  - Set service
  - Use RADIUS for the specific service
- RADIUS server
- User manager
  - Install the latest user-manager
  - Add routers
  - Add users
  - Set profile
- RADIUS incoming

Zetlan Technologies

Free Advice: +91 9600579474

[www.zetlantech.com](http://www.zetlantech.com)



**LEARN  
REMOTELY!!**

The efficiency of online learning in terms of time management, flexibility, and the ability to access resources anytime, anywhere can be compelling.



**ZETLAN TECHNOLOGIES**  
[www.zetlantech.com](http://www.zetlantech.com)

For contact: +91 8680961847  
+91 9600579474

