

Technical Specifications

High Availability WAN

- Multiple link auto failover media independent
- Multiple Gateway option Primary/Primary, Primary/Secondary, Primary/Primary/Secondary, Primary/Primary/CDN or DMZ/Secondary with routed IP pool or DSCP (ToS) value
- WAN optimization algorithm based on Round Robin/Overflow/Priority/Least used/Fastest response/Persistence/Enforced
- WAN Port Support from 100 Mbps to 40 Gbps support, 3G/4G LTE, PPPoE over ADSL
- WAN IP Support Static/Dynamic
- Multiple SD-WAN Client/Server with WAN optimization
- Single to Multiple IPIP Tunnel VPN with WAN optimization

DHCP Support

- DHCP Server for IPv4
- DHCP-relay including DHCP option-82
- Client Binding with MAC address

Remote Office Connectivity (site-to-site VPN) without WAN optimization

- L2TP
- PPTP
- SSTP
- SD-WAN Client
- IPIP Tunnel
- GRE Tunnel

NATing (N/W BEHIND IP)

- NAT 1:N
- NAT N:N
- NAT ONE:ONE
- NAT ONE:MANY
- NAT UDP/TCP Port Forwarding

Subscriber Management

- PAP/CHAP/MSCHAP v-1/2
- IPoE/PPPoE/MAC/Captive Portal /VLAN Type Local/Radius Authentication
- Authentication based on Service and security
- Rate Limit (Bandwidth Shaping) with FUP on base and TOS (DSCP) data transfer
- Local/Radius - Pool/Authentication
- Static IP via Radius and Local authentication
- Access based on Time and Date time restriction
- Data transfer based Quota allocation per Rate-limit per QoS
- Schedule based Rate-limit and burst
- Real time QoS User/Group Policy update
- QoS via Radius and Local authentication
- User Disconnect/Session and Change of authorisation through Standard CoA/DAE
- Per Subscriber Online Traffic Monitor Accounting/Session /Graph
- Prepaid Vouchers
- Error Handling Redirect to Expired/Disabled/unauthorised/No Money Page for Subscribers
- multiple PPPoE service name Subscriber wise
- Limited/unlimited/Fair Usage support

Captive Portal Management

- Customized User portal Based on IP Address (Multiple portal support per Interface per IP Address Gateway)
- Customized User portal with Social media Check-in and like
- Banner Management
- POP up messages
- Audio/Video Ad management
- Captive Portal combination of Mobile OTP/Voucher/Username/BYOD
- SMS integration customized and adaptive to new provider without Development need

External Radius Support

- Primary/Secondary Radius support
- Separate Authentication/Accounting Radius Support
- Separate Radius based on Service (IPoE/PPPoE) on same interface Support
- Post-paid/Prepaid Service support

Security

- Country wise IP Blocking
- IP Address/Pool Blocking
- Domain Blocking
- IP Address/Pool Domain White listing
- Content Filter Per Subscriber Group
- Subscriber IP Address Tracking
- Duplicate Address Detection
- SPAM Control filter
- Basic DDOS control



Firewall

- State-full Inspection
- Allow/Deny Protocols
Source/Destination IP Address/Pool
Port

Branding and Notification

- Static/Dynamic Advertisement
Interface wise
- In-session notification

Access Point Controller

- Access Point reachability monitoring
- Access Point Dashboard
- Change configuration, Push
Configuration
- Status of each access point
hardware
- List connected user per Access Point
- Floor plan view

QoS

- Subscriber wise
- Group wise
- Application based
- ToS/DSCP Based
- Real time Dynamic Bandwidth
- Destination Based IP address/Pool

Administration

- Role-based administration
- Multiple administrators and user
levels Per interface
- Upgrades & changes via Web UI
- Department/Franchise/Operator
Management
- Backup/Restore configuration
- International Time zone
- Config log with 100 rollbacks
- All services and Remote Radius SMS
Service alerts
- Multilingual UI

Dashboard Management

- Basic/All User Statistics
- Real time/Historical Bandwidth
Graph for External/Internal
interfaces
- Full User Statistics
- Basic System Element Statistics
- Full System Element Statistics
- Service level status
- Smart Monitoring Tools
- Hardware monitoring

LOGS

- Authentication Subscriber
- NAT Connection tracking logs
- URL Connection tracking logs
- Per session logging support
- Log Local/Syslog
- Data transfer reporting (By user,
package & IP address)

Standards Compliance

- 802.1D Bridging & Spanning Tree
Protocol
- 802.1p QOS/COS
- 802.1Q VLAN Tagging
- 802.1X Port-based Network
Access Control (PNAC)
- 802.1ah PBB (MAC in MAC)
- 802.3ab 1000 BASE-T
- 802.3z Gigabit Ethernet
- 802.3ae 10 Gigabit Ethernet
- 802.3ba 40 Gigabit Ethernet

Layer 2 Features

- Jumbo frames up to 9,216 bytes
Provide non-blocking wire speed
L2 switching
- Flow control
- IEEE 802.3x for full-duplex mode
- Back-pressure flow control in
half-duplex mode Broadcast,
unicast, and multicast storm
protection VLAN support

- IEEE 802.1Q VLANs
- 4,094 VLANs support
- Port-based VLAN support
- Port security
- Q-in-Q support
- 802.1X support

Layer 3 Features

- VLAN routing
- IP routing
- DHCP-relay including DHCP
option-82
- 802.1X support IPv6

RFC Compliance

- PPP : rfc1332, rfc1662 ,
rfc1979 , rfc3079 , rfc1334,
rfc1990, rfc5072, rfc1548,
rfc1570, rfc1877, rfc3544,
rfc1172, rfc1661, rfc1962
- AAA : rfc2138, rfc2865,
rfc3580, rfc2548, rfc2139,
rfc2866, rfc3162, rfc2869,
rfc3576
- IPv6 : rfc5006, rfc3633,
rfc3315, rfc3646, rfc6106,
rfc4861 Protocol : rfc1701,
rfc2637, rfc1702, rfc1994,
hrfc2284, rfc2661, rfc2131,
rfc2433, rfc2716, rfc3046
rfc3931, rfc791, rfc2132,
rfc2516, rfc2759, rfc3078,
rfc793, rfc4302, rfc240

Third Party

- SMS Gateway integration
customized and adaptive to
new provider without
Development need.
- Multiple Payment Gateway
Support
- Property Management System
- on Request integration