

AsterNOS Feature List - Campus Version

| Level 1 | Level 2 | Level 3 | Level 4 | Lastet | Next | Plan | | |
|--------------------------------------------------------|---------------------------------------|----------------------------------------|----------------------------------|------------------------|-----------------|---------|---|---|
| | | | | R11P3 Dec.2024 | R12 Jan.2025 | Feature | | |
| Management | Login | Console terminal service | | ✓ | ✓ | ✓ | | |
| | | Telnet terminal service | SSH | ✓ | ✓ | ✓ | | |
| | | SSH | Telnet | ✓ | ✓ | ✓ | | |
| | License | In-band/Out band | | ✓ | ✓ | ✓ | | |
| | | License Management | | ✓ | ✓ | ✓ | | |
| | ZTP (Zero Touch Provisioning) | Expiration limit | | ✓ | ✓ | ✓ | | |
| | Cluster Management | Batch management of clustered devices | | ✓ | ✓ | ✓ | | |
| | | Jump to any device in the cluster | | ✓ | ✓ | ✓ | | |
| | | Configuration synchronisation | | ✓ | ✓ | ✓ | | |
| | | Cluster Scenario Configuration | | ✓ | ✓ | ✓ | | |
| | | Hostname | | ✓ | ✓ | ✓ | | |
| | System time configuration | | ✓ | ✓ | ✓ | | | |
| | DNS Client | | ✓ | ✓ | ✓ | | | |
| | FTP/FTTP | | ✓ | ✓ | ✓ | | | |
| | Alarm | BGP status | | * | ✓ | ✓ | | |
| MC-LAG status | | | ✓ | ✓ | ✓ | | | |
| Docker status | | | * | ✓ | ✓ | | | |
| High CPU utilization | | | ✓ | ✓ | ✓ | | | |
| High Memory utilization | | | ✓ | ✓ | ✓ | | | |
| Interface Management | Ethernet Breakout | 4x10G | | ✓ | ✓ | ✓ | | |
| | | 4x25G | | ✓ | ✓ | ✓ | | |
| | | 4x1G | | ✓ | ✓ | ✓ | | |
| | Interface Management | startup | | ✓ | ✓ | ✓ | | |
| | | shutdown | | ✓ | ✓ | ✓ | | |
| | PoE | POE power supply | | ✓ | ✓ | ✓ | | |
| | | POE power supply status diagnosis | | ✓ | ✓ | ✓ | | |
| | Startup-delay | | ✓ | ✓ | ✓ | | | |
| | Interface statistics | Packets count | | ✓ | ✓ | ✓ | | |
| | | Error packets count | | ✓ | ✓ | ✓ | | |
| | | Loss packets count | | ✓ | ✓ | ✓ | | |
| | Optical module information | Rate statistics | | ✓ | ✓ | ✓ | | |
| | Interface bandwidth utilization alarm | | ✓ | ✓ | ✓ | | | |
| | L2Switching | MAC | Static MAC address | | ✓ | ✓ | ✓ | |
| | | | Dynamic MAC address learning | | ✓ | ✓ | ✓ | |
| MAC address aging | | | | ✓ | ✓ | ✓ | | |
| blackhole MAC address | | | | ✓ | ✓ | ✓ | | |
| MAC Flapping | | | | ✓ | ✓ | ✓ | | |
| MAC address learning limiting based on ports and VLANs | | | | ✓ | ✓ | ✓ | | |
| VLAN | | 4K VLANs simultaneously | | ✓ | ✓ | ✓ | | |
| | | Access mode, Trunk mode | | ✓ | ✓ | ✓ | | |
| | | Batch vlan | VLAN group | | ✓ | ✓ | ✓ | |
| | | | IGMP/MLD Snooping | | ✓ | ✓ | ✓ | |
| | | | STP | | ✓ | ✓ | ✓ | |
| Loopback Detection | | | | ✓ | ✓ | ✓ | | |
| QinQ | | Basic QinQ | | ✓ | ✓ | ✓ | | |
| | | Flexibly QinQ | | ✓ | ✓ | ✓ | | |
| Voice VLAN | | VLAN stacking | | ✓ | ✓ | ✓ | | |
| | | | | ✓ | ✓ | ✓ | | |
| Port-Channel | | Port-Channel Mode | Static aggregation | | ✓ | ✓ | ✓ | |
| | | | LACP | | ✓ | ✓ | ✓ | |
| | | LACP Parameter | System Priority | | ✓ | ✓ | ✓ | |
| | | | Interface Priority | | ✓ | ✓ | ✓ | |
| Loopback Detection | | Mode | System Id | | ✓ | ✓ | ✓ | |
| | | | Fast Rate | | ✓ | ✓ | ✓ | |
| | | | Fallback | | ✓ | ✓ | ✓ | |
| MSTP | | Action | Strict | | ✓ | ✓ | ✓ | |
| | | | Loose | | ✓ | ✓ | ✓ | |
| LLDP | MSTP | Shutdown Port | | ✓ | ✓ | ✓ | | |
| | | Only alarm | | ✓ | ✓ | ✓ | | |
| IP Routing | Static routing | BPDU Guard | | ✓ | ✓ | ✓ | | |
| | | BPDU Filter | | ✓ | ✓ | ✓ | | |
| | VRF | LLDP-MED | LLDP | | ✓ | ✓ | ✓ | |
| | | | LLDP-MED | | ✓ | ✓ | ✓ | |
| | BGP / MP-BGP | Policy-Based routing | Port isolation | | ✓ | ✓ | ✓ | |
| | | | Static routing | | ✓ | ✓ | ✓ | |
| | | Default | Blackhole routing | | ✓ | ✓ | ✓ | |
| | | | MGMT | | ✓ | ✓ | ✓ | |
| | | | SSH | | ✓ | ✓ | ✓ | |
| | | | SNMP | | ✓ | ✓ | ✓ | |
| | | | Syslog | | * | ✓ | ✓ | |
| | | | NTP | | ✓ | ✓ | ✓ | |
| | | | User-defined VRF | | ✓ | ✓ | ✓ | |
| | | | ACL | | ✓ | ✓ | ✓ | |
| | OSPF v2/v3 | PBR | ACL | | ✓ | ✓ | ✓ | |
| IBGP / EBGP | | | | ✓ | ✓ | ✓ | | |
| BGP Neighbor | | BGP Neighbor | | ✓ | ✓ | ✓ | | |
| | | Peer Group | | ✓ | ✓ | ✓ | | |
| | | BGP Listen | | ✓ | ✓ | ✓ | | |
| | | Redistribute | | ✓ | ✓ | ✓ | | |
| | | Routing aggregation | | ✓ | ✓ | ✓ | | |
| | | BGP Route Reflector | | ✓ | ✓ | ✓ | | |
| | | Graceful restart | | ✓ | ✓ | ✓ | | |
| | | Routing Policy | | ✓ | ✓ | ✓ | | |
| OSPF v2/v3 | UCMP | OSPF version | | ✓ | ✓ | ✓ | | |
| | | v2 | | ✓ | ✓ | ✓ | | |
| | Area | v3 | | ✓ | ✓ | ✓ | | |
| | | Stub | | ✓ | ✓ | ✓ | | |
| | Network type | NSSA | | ✓ | ✓ | ✓ | | |
| | | Broadcast | | ✓ | ✓ | ✓ | | |
| | | Non-Broadcast | | ✓ | ✓ | ✓ | | |
| | | P2P | | ✓ | ✓ | ✓ | | |
| Routing Policy | Route redistribution | P2MP | | ✓ | ✓ | ✓ | | |
| | | MDS | | ✓ | ✓ | ✓ | | |
| | Authentication | | ✓ | ✓ | ✓ | | | |
| | RFC1583 | | ✓ | ✓ | ✓ | | | |
| ECMP/UCMP | Route Map | Graceful restart | | ✓ | ✓ | ✓ | | |
| | | OSPF multi-instance | | ✓ | ✓ | ✓ | | |
| | IP Prefix List | Match rule | | ✓ | ✓ | ✓ | | |
| | | Match prefix list | | ✓ | ✓ | ✓ | | |
| MPLS LDP | Enable Global MPLS | Set | | ✓ | ✓ | ✓ | | |
| | | IPv4 / IPv6 | | ✓ | ✓ | ✓ | | |
| | Static LSP | LDP Session | Local LDP session | | ✓ | ✓ | ✓ | |
| | | | Remote LDP session | | ✓ | ✓ | ✓ | |
| | MPLS LDP | Configure the LSR transmission address | Link-Hello send timer | | ✓ | ✓ | ✓ | |
| | | | Link-Hello hold timer | | ✓ | ✓ | ✓ | |
| | | Timers | Keepalive send timer | | ✓ | ✓ | ✓ | |
| | | | keepalive hold timer | | ✓ | ✓ | ✓ | |
| | | Label Advertisement Mode | Label Distribution Control Modes | Downstream Unsolicited | | ✓ | ✓ | ✓ |
| | | | | Ordered Mode | | ✓ | ✓ | ✓ |
| Label Retention Modes | | Label Retention Modes | Liberal mode | | ✓ | ✓ | ✓ | |
| | | | Conservative mode | | ✓ | ✓ | ✓ | |
| | | Liberal Label retention mode | | ✓ | ✓ | ✓ | | |

| | | | | | | | | | |
|--------------------------------|-----------------------------|----------------------|------------------------------|-----------------------|------------|------------|---|---|---|
| MPLS | | PHP | implicit-null | ✓ | ✓ | ✓ | | | |
| | | TTL process mode | non-null | ✓ | ✓ | ✓ | | | |
| | LDP security mechanisms | | LDP MDS | ✓ | ✓ | ✓ | | | |
| | | | LDP GTSm | ✓ | ✓ | ✓ | | | |
| | MPLS QoS | | Uniform | ✓ | ✓ | ✓ | | | |
| | | | Pipe | ✓ | ✓ | ✓ | | | |
| | VPWS | | Enable | ✓ | ✓ | ✓ | | | |
| | | | AC | ✓ | ✓ | ✓ | | | |
| | | | PW type | Static PW | ✓ | ✓ | ✓ | | |
| | VPLS | | Enable | Dynamic PW | ✓ | ✓ | ✓ | | |
| | | | AC | ✓ | ✓ | ✓ | | | |
| | | | PW Type | Static PW | ✓ | ✓ | ✓ | | |
| | MPLS L3VPN | | VPN Instance | Dynamic PW | ✓ | ✓ | ✓ | | |
| | | | | RD | ✓ | ✓ | ✓ | | |
| | | Tunnel Type | RT | ✓ | ✓ | ✓ | | | |
| | | Inter-AS option | LSP | ✓ | ✓ | ✓ | | | |
| IPServices | Router interface | Router interface | Option A | ✓ | ✓ | ✓ | | | |
| | | | Option B | ✓ | ✓ | ✓ | | | |
| | ARP/NDP | | Ethernet | ✓ | ✓ | ✓ | | | |
| | | | VLANif | ✓ | ✓ | ✓ | | | |
| | | | LAG | ✓ | ✓ | ✓ | | | |
| | | | DHCP Client | ✓ | ✓ | ✓ | | | |
| | | | Static ARP | ✓ | ✓ | ✓ | | | |
| | | | Dynamic ARP | ✓ | ✓ | ✓ | | | |
| | ARP-To Host | | ARP aging | ✓ | ✓ | ✓ | | | |
| | | | ARP/NDP detection | ✓ | ✓ | ✓ | | | |
| | IPv6 | | ARP Proxy | ✓ | ✓ | ✓ | | | |
| | | | ARP/ND Log | ✓ | ✓ | ✓ | | | |
| | DHCPv4 Server | | Filter rule | ✓ | ✓ | ✓ | | | |
| | | | SLAAC | ✓ | ✓ | ✓ | | | |
| DHCPv4 Relay | | DHCP Pool | ✓ | ✓ | ✓ | | | | |
| | | DHCP Class | ✓ | ✓ | ✓ | | | | |
| DHCPv6 Server | | DHCP Failover | ✓ | ✓ | ✓ | | | | |
| | | Option82/No-option82 | ✓ | ✓ | ✓ | | | | |
| DHCPv6 Relay | | DHCP Pool | ✓ | ✓ | ✓ | | | | |
| | | MAC Trigger | ✓ | ✓ | ✓ | | | | |
| IPMulticast | IGMP Snooping | | Static IGMP snooping | ✓ | ✓ | ✓ | | | |
| | | | Dynamic IGMP Snooping | v1 | ✓ | ✓ | | | |
| | | | | v2 | ✓ | ✓ | | | |
| | | | | v3 | ✓ | ✓ | | | |
| | Multicast VLAN | | IGMP Snooping entry limited | ✓ | ✓ | ✓ | | | |
| | | | IGMP Snooping Porxy | ✓ | ✓ | ✓ | | | |
| | MLD Snooping | | Static MLD snooping | * | * | ✓ | | | |
| | | | Dynamic MLD Snooping | v1 | ✓ | ✓ | | | |
| | | | v2 | ✓ | ✓ | | | | |
| MLD Snooping entry limited | | | ✓ | ✓ | ✓ | | | | |
| Tunnel | GRE | Static GRE tunnel | Inner v4 - Outer v4 | ✓ | ✓ | ✓ | | | |
| | | | Inner v6 - Outer v4 | ✓ | ✓ | ✓ | | | |
| | | | Inner v4 - Outer v6 | ✓ | ✓ | ✓ | | | |
| | | | Inner v6 - Outer v6 | ✓ | ✓ | ✓ | | | |
| | VXLAN | Static VXLAN Tunnel | Mapping Type | VLAN mapping to VIN | ✓ | ✓ | ✓ | | |
| | | | | VRF mapping to VNI | ✓ | ✓ | ✓ | | |
| | | | | Centralized gateway | ✓ | ✓ | ✓ | | |
| | | | | Distributed gateway | ✓ | ✓ | ✓ | | |
| User Access and Authentication | Login user | TACACS+ | Gateway | ✓ | ✓ | ✓ | | | |
| | | | Local user | ✓ | ✓ | ✓ | | | |
| | | | Authentication | ✓ | ✓ | ✓ | | | |
| | | | Authorized | ✓ | ✓ | ✓ | | | |
| | Access User | Radius | 802.1x | Authentication | * | * | ✓ | | |
| | | | | Authorized | * | * | ✓ | | |
| | | | | 802.1x authentication | ✓ | ✓ | ✓ | | |
| | | | | MAC authentication | ✓ | ✓ | ✓ | | |
| | | | | authorization | ✓ | ✓ | ✓ | | |
| | | | | Re-authentication | ✓ | ✓ | ✓ | | |
| Security | Broadcast traffic policy | | Escape | ✓ | ✓ | ✓ | | | |
| | | | 802.1x authentication | ✓ | ✓ | ✓ | | | |
| | | | MAC authentication | ✓ | ✓ | ✓ | | | |
| | | | authorization | ✓ | ✓ | ✓ | | | |
| | ACL | ACL | Filter key | Re-authentication | ✓ | ✓ | ✓ | | |
| | | | | Unknown unicast | ✓ | ✓ | ✓ | | |
| | | | | Multicast traffic | Drop/flood | ✓ | ✓ | ✓ | |
| | | | | Broadcast traffic | Drop/flood | ✓ | ✓ | ✓ | |
| | | | | Storm suppression | Drop/flood | ✓ | ✓ | ✓ | |
| | | | | Unknown unicast | kpps/kBps | ✓ | ✓ | ✓ | |
| | | | | Multicast traffic | kpps/kBps | ✓ | ✓ | ✓ | |
| | | | | Broadcast traffic | kpps/kBps | ✓ | ✓ | ✓ | |
| | | | | DHCP v4/v6 Snooping | ✓ | ✓ | ✓ | | |
| | | | | ND Snooping | ✓ | ✓ | ✓ | | |
| High Availability | MC-LAG | Mode | DHCPv6 RA Guard | ✓ | ✓ | ✓ | | | |
| | | | SAVI | ✓ | ✓ | ✓ | | | |
| QoS | | | DAI (Dynamic ARP Inspection) | ✓ | ✓ | ✓ | | | |
| | | | IPSG v4/v6 | ✓ | ✓ | ✓ | | | |
| | | | CoPP | ✓ | ✓ | ✓ | | | |
| | | | ACL | Action | Action | IPSG v4/v6 | ✓ | ✓ | ✓ |
| | | | | | | CoPP | ✓ | ✓ | ✓ |
| | | | | | | Ingress | ✓ | ✓ | ✓ |
| | | | | | | Egress | ✓ | ✓ | ✓ |
| | | | | | | smac | ✓ | ✓ | ✓ |
| | | | | | | vlanid | ✓ | ✓ | ✓ |
| | | | ACL | Filter key | Filter key | protocol | ✓ | ✓ | ✓ |
| | | | | | | sip | ✓ | ✓ | ✓ |
| | | | | | | dip | ✓ | ✓ | ✓ |
| | | | | | | sport | ✓ | ✓ | ✓ |
| | | | | | | dport | ✓ | ✓ | ✓ |
| ethertype | ✓ | ✓ | | | | ✓ | | | |
| icmp type | ✓ | ✓ | | | | ✓ | | | |
| permit | ✓ | ✓ | | | | ✓ | | | |
| High Availability | VRRP | VRRP v2 | deny | ✓ | ✓ | ✓ | | | |
| | | | trap-to-cpu | ✓ | ✓ | ✓ | | | |
| | | | copy-to-cpu | ✓ | ✓ | ✓ | | | |
| | | | Modify VLAN priority | ✓ | ✓ | ✓ | | | |
| | | | redirect action | ✓ | ✓ | ✓ | | | |
| | | | Primary backup | ✓ | ✓ | ✓ | | | |
| QoS | Priority mapping | | Dual-active | ✓ | ✓ | ✓ | | | |
| | | | BGP over MC-LAG | * | * | ✓ | | | |
| QoS | Queue scheduling algorithms | | Hash key | ✓ | ✓ | ✓ | | | |
| | | | Hash seed | ✓ | ✓ | ✓ | | | |
| | | | VRRP v3 | ✓ | ✓ | ✓ | | | |
| | | | BFD | ✓ | ✓ | ✓ | | | |
| QoS | Traffic shaping | | BGP | ✓ | ✓ | ✓ | | | |
| | | | OSPF | ✓ | ✓ | ✓ | | | |
| QoS | Traffic shaping | | Static route | ✓ | ✓ | ✓ | | | |
| | | | BGP | ✓ | ✓ | ✓ | | | |
| QoS | Queue scheduling algorithms | | Monitor Link | ✓ | ✓ | ✓ | | | |
| | | | SLA | ✓ | ✓ | ✓ | | | |
| QoS | Traffic shaping | | Track | ✓ | ✓ | ✓ | | | |
| | | | HA Route | ✓ | ✓ | ✓ | | | |
| QoS | Queue scheduling algorithms | | dot1p to tc | ✓ | ✓ | ✓ | | | |
| | | | dscp to tc | ✓ | ✓ | ✓ | | | |
| | | | tc to queue | ✓ | ✓ | ✓ | | | |
| | | | strict | ✓ | ✓ | ✓ | | | |
| QoS | Traffic shaping | | DWRR | ✓ | ✓ | ✓ | | | |
| | | | ACI | ✓ | ✓ | ✓ | | | |
| QoS | Queue scheduling algorithms | | ACL | ✓ | ✓ | ✓ | | | |
| | | | | ✓ | ✓ | ✓ | | | |

| | | | | | | |
|--------------------|-------------------------------|--------------|--------|---|---|---|
| | Traffic classification | CAR | sr-tcm | ✓ | ✓ | ✓ |
| | | | sr-tcm | ✓ | ✓ | ✓ |
| | DCB | PFC | | * | * | ✓ |
| | | ECN | | * | * | ✓ |
| Network Management | SPAN / RSPAN | | | ✓ | ✓ | ✓ |
| | ERSPAN | | | ✓ | ✓ | ✓ |
| | IP address conflict detection | | | ✓ | ✓ | ✓ |
| | | v1 | | ✓ | ✓ | ✓ |
| | SNMP | v2 | | ✓ | ✓ | ✓ |
| | | v3 | | ✓ | ✓ | ✓ |
| | sFlow | | | ✓ | ✓ | ✓ |
| | NTP | | | ✓ | ✓ | ✓ |
| | | smpte-2059-2 | | ✓ | ✓ | ✓ |
| | | 1588v2 | | ✓ | ✓ | ✓ |
| | PTP | G.8275.1 | | ✓ | ✓ | ✓ |
| | | G.8275.2 | | ✓ | ✓ | ✓ |
| | | master | | ✓ | ✓ | ✓ |
| | SyncE | slave | | ✓ | ✓ | ✓ |
| | System log | System log | | ✓ | ✓ | ✓ |
| | | Rsyslog | | ✓ | ✓ | ✓ |
| Ping | | | ✓ | ✓ | ✓ | |
| Traceroute | | | ✓ | ✓ | ✓ | |