WeOS 5

Westermo Operating System

⊞ Future proofed solution from Westermo
  • Available on current and future platforms
  • Layer 2 and Layer 3 functionality
  • Constant validation and update releases

⊞ Resilient secure multiple media network solutions
  • Ethernet and fibre
  • Layer 2 ring solutions for network resilience
  • Encrypted VPN tunnels

⊞ Easy to use
  • WeConfig, web screens and CLI
  • Advanced diagnostic capability
  • Simplified cross product training

⊞ Industrial application solutions
  • Allows a switch to become a security device
  • Secure remote access functionality

The WeOS operating system has been developed by Westermo for its current as well as future range of Ethernet hardware products. This layer 2 and layer 3 switching solution enables Westermo to create complex multimedia ring networks and routing solutions. WeOS not only provides solutions to many challenging industrial networking issues, but also helps to protect investments by ensuring the future availability of fully compatible solutions. WeOS is the core of our latest ranges of Ethernet hardware allowing complex multimedia ring networks and routing solutions to be created.

Westermo has many years of experience developing products for industrial applications. At the heart of all Westermo networking solutions is the need for ease of use. By standardising on a single operating system for all Westermo Ethernet products this helps to simplify the installation, operation and maintenance of individual devices and complete networks. Once a user is familiar with a Westermo product, that knowledge can be readily applied to all our other devices. A web screen simplifies the configuration of many functions, whilst a command line interface allows for fine tuning.

Protocols and Functionality

Resilience and High Availability
Fast Reconfiguration of Network Topology (ring with fast failover (FRNT)), Bridging of two or more FRNT rings (Ring Coupling), FRNT Horseshoe Topology, IEEE 802.1D/802.1w (RSTP), IEEE 802.AX/802.3ad Link Aggregation (LACP and Static)

Layer 2 Switching
IEEE 802.1D MAC Bridges, IEEE 802.1Q Static VLAN and VLAN Tagging, IEEE 802.1AB LLDP, IGMPv1/v2/v3 Snooping, Static Multicast MAC filters

Layer 2 QoS
IEEE 802.1p Class of Service with flexible classification (VLAN tag priority, IP DSCP/ToS, Port ID), Ingress and Egress Rate limiting

IP Host Services
Static IP Address, DHCP Client, DNS Client, ZeroConf (mDNS and SSDP), NTP Client (NTPv4), IP Interfaces (Ethernet, VLAN, SSL VPN*, GRE*, Loopback and Blackhole)

IP Routing, Cyber Security and VPN*
Static IP Routing, Floating Static Routes, Multinetting, Proxy ARP, Dynamic IP routing (OSPFv2 , RIPv1/v2), VRRPv2/v3, Static Multicast Routing, Stateless NAT (1-1 NAT), SSL VPN (Client and Server, Certificate Authentication, Pre-shared Key (PSK) Point-to-Point Mode, Layer-2 and Layer-3 VPN, Layer-2 VPN bridging, Address pool and address per CN, TLS Authentication), Generic Routing Encapsulation (GRE)

Train Protocols**
IEC 61375-2-5 (TTDP), IEC 61375-2-3 Annex E Inhibition Control

Network Servers
DHCP Server (including options 1, 3, 6, 12, 15, 42, 61 and 82), DHCP Relay Agent (including options 54 and 82), DNS Proxy Server (DNS forwarder and Host records), NTP server (NTPv4)

Management Tools
Westermo configuration tool WeConfig, Web interface (HTTP and HTTPS), Command Line Interface (CLI) via console port, SSHv2 and Telnet, SNMPv2c/v3, Secure Copy (SCP) for remote file upload and download, Local file management (via HTTP, FTP, TFTP and SCP), Load/save files from/to external memory, Configuration and Deployment using external memory, Tech support button, Flexible alarm and event handling system, Syslog (log files), Port monitoring

SNMP MIB Support (read-only)
RFC 1213 MIB-2, RFC 2787 VRRPv2 MIB, RFC 2819 RMON MIB, RFC 2863 Interface MIB, RFC 3433 Entity Sensor MIB, RFC 3635 Ether-like Interface MIB, RFC 4133 Entity MIB, RFC 4188 Bridge MIB, RFC 4318 RSTP MIB, RFC4363 Q-BRIDGE MIB, RFC 4836 MAU MIB, RFC 6527 VRRPv3 MIB, IEEE 802.1AB LLDP MIB, IEEE 802.1AX LAG MIB, IEC 61375-2-5 TTDP MIB, WESTERMO PRIVATE DDM SFP MIB

* Available in products with Layer 3 functionality

**Available in Viper-TBN