Feature / Protocol	Known As	Standard	Description
Auto-Negotiation	N-WAY Protocol	IEEE 802.3u	With Auto-Negotiation in place, Ethernet can determine the common set of options supported between a pair of "link partners." Twisted-pair link partners can use Auto-Negotiation to figure out the highest speed that they each support as well as automatically setting full-duplex operation if both ends support that mode.
Auto MDI / MDIX	Auto MDI / MDIX	-	Auto MDI/MDIX automatically detects the MDI or MDIX setting on a connecting device in order to obtain a link. This means installers can use either a straight through or crossover cable when connecting to any device.
Flow Control	Flow Control	IEEE 802.3X	Prevents congestion and overloading when a sending port is transmitting more data than a receiving port can receive.
Port Labeling	Port Labeling	-	The ability to assign names to ports through the management interface.
IP Stacking	IP Stacking	Proprietary	The capability to stack multiple switches together and manage them under one IP address.
Jumbo Frames	Jumbo Frames	-	Jumbo frames are frames larger than the standard Ethernet frame size, which is 1518 bytes (1522 if VLAN-tagged). Though this is not a standard, more and more vendors are adding support for jumbo frames.
MAC Table Size	FDB, MAC	-	MAC Table, also known as Forwarding Data Base (FDB), is where switches store learned addresses. The size of the MAC table determines how many unicast streams the switch can support without flooding.
Static MAC Entry	Static MAC Entry	-	Static MAC entry support means that users can assign MAC addresses to ports manually that never age out.
MAC-based Security	MAC Lockdown	-	MAC Lockdown is the ability to lock the learning mechanism down on a port. This means that no further MACs will be learned on those ports.
Private Virtual-LAN	PVLANs	Proprietary	Private VLANs are the non standardized way of segmenting ports into separate groups.
802.1Q Virtual-LAN	VLAN, VID, dot1Q	IEEE 802.1Q	802.1Q is a standardized way of segmenting and distributing VLAN information. Switches that support 802.1Q can recognize, forward, a tag packets upon egress.
Max VLAN Support	Max VLANs	-	The number of VLANs supported on a single switch
GVRP	GVRP	Part of IEEE 802.1Q and IEEE 802.1p	The GARP (Generic Attribute Registration Protocol) VLAN Registration Protocol (GVRP) defines a GARP application that provides the 802.1Q-compliant VLAN pruning and dynamic VLAN creation on 802.1Q ports. GVRP is an application defined in the IEEE 802.1P standard that allows for the control of 802.1Q VLANs.
Spanning-Tree	STP	IEEE 802.1D	Spanning-Tree Protocol prevents loops from being formed when switches are interconnected via multiple paths.
Rapid Spanning Tree	RSTP	IEEE 802.1w	IEEE 802.1w Rapid Spanning Tree Protocol is an improvement to 802.1D standard that provides faster spanning tree convergence after a topology change.
Link Aggregation Control Protocol	LACP	IEEE 802.3ad	Link Aggregation Control Protocol allows you to bundle several physical ports together to form a single logical channel. LACP allows a switch to negotiate an automatic bundle by sending LACP packets to the peer.
Internet Group Multicast Protocol	IGMP snooping	-	IGMP snooping allows a switch to "listen in" on the IGMP conversation between hosts and routers. Based on the query and reports being passed through the switch, a forwarding database for multicast is created.
IGMP Query Mode	IGMP Query Mode	-	IGMP Query Mode allows MILAN managed switches to advertise Multicast groups.
Port-based Authentication	802.1X	IEEE 802.1X	802.1X allows each user's access to the LAN to be conditioned on who the user is, not which Ethernet receptacle he or she happened to plug into.
L2/L3/L4 Access Control List Port Based	ACLs	-	ACLs allow administrators to create, permit and deny lists based on various traffic characteristics such as Source MAC, Destination MAC, Source IP, Destination IP, and UDP/TCP ports.
Remote Access Dial In User Services	RADIUS Authentication	RFC 2865 and RFC 2866	Allows secure centralized authentication management using UDP to the switches management.
Terminal Access Controller Access Control System Plus Authentication	TACACS + Authentication	Cisco Proprietary	TACACS+ is Cisco's proprietary implementation of centralized authentication using TCP to access switch management.
Secure Shell (Secured Telnet)	SSH	RFC 4251	SSH is used to provide a secure Telnet session to the console/command line interface of a network device through an insecure environment.

Feature / Protocol	Known As	Standard	Description
Secure Sockets Layer (HTTPS)	SSL	RFC 2818	SSL is used to manage a network device via it's web interface.
802.1p Prioritization	CoS	IEEE 802.1p	The ability to send traffic to various prioritization queues based on the 802.1q VLAN Tag priority field.
CoS Queues	CoS Queues	IEEE 802.1p	Class of Service allows traffic to be directed into different priority levels or "internal queues" in the switch on a particular network transaction. When network traffic congestion occurs, the data assigned to a higher queue will get through first.
Weighted Fair Queue Forwarding	WFQ Forwarding	-	A method of scheduling the number of forwarding packets per CoS queued.
Strict Priority Forwarding	SPF	-	A method of scheduling CoS queued traffic where high priority queues always take precedence over low priority queues.
Differentiated Services Prioritization	DSCP / DiffServ Prioritization	RFC 3290	The ability to prioritize traffic internally based on the DSCP field in the IP header of a packet.
DiffServ Modification	DSCP / DiffServ Remark	RFC 3290	The ability to change the DSCP field value on egress
IP Type of Service Prioritization	IPToS	-	The ability to prioritize traffic internally based on the IPToS field in the IP header of a packet.
TCP/UDP Port Prioritization	Layer 4 Prioritization	-	The ability to prioritize traffic internally based on the a TCP or UDP port number.
Port-Based Rate Limiting / metering	Rate Limiting	-	The ability regulate throughput per port
Simple Network Management Protocol	SNMP	RFC 1157	A set of protocols for managing complex IP networks.
Remote Monitoring	RMON	RFC 1271	A part of SNMP, RMON is a network management protocol that gathers remote network information.
Dynamic Host Configuration Protocol	DHCP	RFC 2131	DHCP lets a network administrator supervise and distribute IP addresses from a central point, and automatically sends a new address when a computer is plugged into a different place in the network.
Command Line Interface	CLI	-	Allows users to setup switch configurations by using simple command phrases through a console / telnet session.
Web-based Management	Web GUI	-	Allows users to manage the switch through a web browser.
Telnet	Telnet	RFC 854	A terminal emulation program for TCP/IP networks that runs on your computer and connects your PC to a switches management.
Event log	Event log	-	Logs events such as port link down, configuration changes, etc. in a database.
Simple Network Time Protocol	SNTP	RFC 2030	Used to synchronize times on IP devices over a network.
TFTP download/upload	TFTP	RFC 1350	The ability to load the firmware and configuration files through a TFTP server.
Auto-provisioning	-	-	Auto-provisioning is a process that enables centralized management for multiple end user devices. It uses DHCP option 60, 66 and 67 to provide centralized firmware and configuration management. The feature provides mass firmware upgrade capability as well as booting-up full end device configuration without any manual intervention. Select MILAN switches implement this solution to support automated firmware and configuration control.