

3 BENEFITS OF USING MANAGED SWITCHES

Managed and unmanaged network switches both have their purposes. Here's a quick look at the advantages of using managed switches.

1.) Minimizing network downtime

A major advantage of managed switches is the failover redundancy they add to your network, helping to achieve less network downtime. Recent studies exploring IT downtime found that the average business loses \$159,331 per year through downtime and data recovery. It's estimated that businesses' ability to generate revenue is reduced by 29%.

Managed switches can help companies avoid these problems by allowing for failover links in the network.

Protocols, like an Alpha-Ring topology, that achieve a 30 millisecond or less failover time after a network link is broken help minimize downtime and help enable a more convenient network infrastructure with reduced cable costs. Standardized protocols like Rapid Spanning Tree (RSTP), Multiple Spanning Tree (MSTP), and Spanning Tree Protocol (STP) allow for failover links and interoperability over multiple vendor switches. In addition, features like the Link Aggregation Control Protocol (LACP) enable the user to add more bandwidth for high flow-rate applications without changing the cable type on the switch. These features of managed switches, operating alone or in combination, can create a low-downtime, low-latency network.

2.) Cutting operational expenses

Another area in which the managed switch can assist in lowering IT costs is in operational expenses.

This can be accomplished because managed switches enable you to remotely access and monitor your network, removing the need to keep staff onsite 24/7 at remote locations just to monitor network health.

Management communications tools like Telnet, RS-232, a Web browser, or SNMP (Simple Network Management Protocol) enable you to get an update on the status of your network. And they give you the ability to access and control your device remotely in order to make changes or troubleshoot issues. Managed switches feature advanced network diagnostic tools such as Port Mirroring and Remote Network Monitoring (RMON) that give you a visual breakdown of network traffic per port, as well as the ability to troubleshoot and bench test network equipment/devices.

3.) Increased security

Finally, managed switches can help increase your network security. With features such as 802.1X Port-Based Network Access Control (PNAC) and PoE (Power over Ethernet) port control, you can control switch port access for each network user individually. For example, you can set a static 24 MAC address to be associated with each port and deny access to all other MAC addresses. A managed switch enables the creation of Access Control Lists (ACLs), which can control the specific network traffic of users by using simple “allow” and “deny” statements.

In addition, managed switches let you view the MAC address table to see what devices and users have accessed your device.

This way, you can take steps to prevent unauthorized access.

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