Managed Switch Solutions
from NETGEAR

As businesses approach 50 users or more, they need a new level of network functionality. While some small operations can literally peer over the cube wall to monitor network activity, this is impractical in organizations with dozens or hundreds of users. With unmanaged hubs and switches, it's difficult to troubleshoot problems and all but impossible to determine which users or applications are using more than their share of bandwidth.

Typically employed by larger enterprise networks, management functionality brings additional control, configuration, and troubleshooting capabilities to the network — at a much higher cost than unmanaged devices. While mid-size businesses need enterprise network features and performance, they don't want the associated price and complexity.

Now, NETGEAR offers a complete line of affordable managed network switches, targeted at businesses with 50 to 250 or more users. These high-performance products provide a reliable solution at the lowest cost for any environment, from 10 Mbps to Gigabit. Now, growing businesses can have enterprise functionality in an inexpensive and easy-to-use package.

Key Benefits

• Superior Value: NETGEAR managed switches offer a lower cost per port than leading competitors, in addition to two stacking and two Gigabit Ethernet ports. 48 auto-sensing/auto-negotiating ports deliver 10/100 Mbps to each network connection. NETGEAR managed switches are a trusted brand with leading features in an affordable, complete, and easy-to-use package.

• High Performance: Two Gigabit Ethernet ports, with either copper or GBIC (fiber) interfaces, offer connectivity to servers and the network backbone. A nonblocking backplane means wirespeed throughput at all ports.

• Easy to Use: NETGEAR managed switches are ready to work, right out of the box. Everything necessary for setup comes in the box, including uplinks, stacking ports, stacking cables, console cables, and rack mount hardware. Auto Uplink™ enables the right connection with either straight or crossover cables.

• Stacking Configuration: Managed switches can be stacked to provide more ports to accommodate growth, including additional Gigabit Ethernet ports. No stacking modules are required, as NETGEAR stacking ports come with stacking ports. Stacked switches can be managed as a single device, easing administration efforts.

• Remote Management: NETGEAR managed switches can be administered from local or remote locations, using telnet, web browser, or command line interfaces. Firmware can be upgraded using tftp. Management capabilities are password protected, preventing unauthorized access. Remote management reduces the need for on-site expertise by enabling outsourced administration.

Why Switch Management?

Network-centric and high-bandwidth applications are increasing demands on the network. Adding management capabilities to a network switch optimizes configuration and performance, and can help diagnose problems. NETGEAR managed switches offer a number of benefits over unmanaged network products:
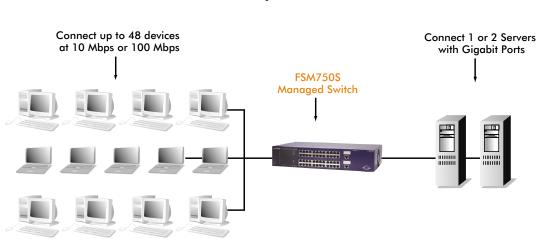
- Configuration: Management features enable networks to be precisely configured according to business goals and resource requirements. Administrators can tune switch ports to accommodate each application or device. Users get the network capabilities they need — while businesses maximize network capabilities.

- Troubleshooting: Management features isolate and track troubles in the network. Packet errors, faulty transmissions, port status, and traffic congestion can affect all users. Support for SNMP and RMON means these devices can automatically signal when there's trouble, to either local or remote locations. NETGEAR managed switches help keep small problems from becoming big ones.

- Planning and Status: Business networks are dynamic. Managed switches analyze workloads, traffic patterns, and reserve capacity — information that can be used to estimate future requirements or the viability of new applications. NETGEAR managed switches help businesses stay ahead of their networking needs, justifying purchases as required, and configuring solutions more efficiently.

- Scalability: Using the stacking capabilities, the users can expand as needed, connecting switches with dedicated stacking ports to increase the number of ports in a stack. Stacked switches may be managed as one, simplifying administration.

- Advanced capabilities:
  - Trunking: By aggregating multiple ports to act as a single, high-speed connection, trunking is a cost-effective way to deliver faster bandwidth where it's needed.
  - Class of Service (CoS): Enables businesses to prioritize network traffic according to business needs. For example, CoS rules ensure that servers receive priority over downloaded video, or accounting and manufacturing applications receive required bandwidth at the end of the month.
  - Virtual LAN (VLAN): Enables companies to segment different areas of the network to meet business requirements. VLANs block direct access between various network groups, such as engineering and sales, from each other. VLANs offer an increased measure of security and bandwidth control.
  - Spanning Tree Protocol (STP): Provides redundancy in the event of a connection failure. For critical links, STP offers safety, availability, and protection from accidental loops.

NETGEAR managed switches are ideal for growing businesses, delivering optimal performance, proven reliability, ease of use, and affordability. They can be installed in any environment — alone, stacked together, or connected through a high-performance, Gigabit network backbone. NETGEAR managed switches offer tremendous scalability — they can be deployed in environments with up to 8,000 users. Typical scenarios include:
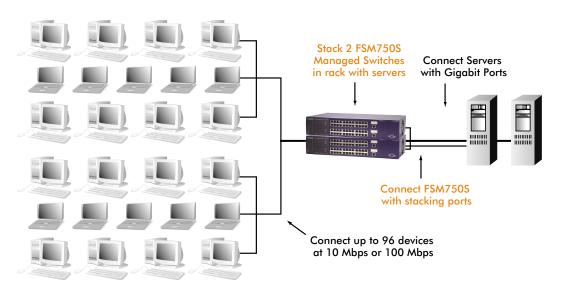
50-person Office
The FSM750S is the ideal product for offices with up to 50 people. Up to 48 devices can be connected using 10/100 Mbps links. Some environments contain a mix of older and newer systems, and each port on this managed switch will auto-negotiate configuration parameters and optimal connection speeds. Dedicated Gigabit links connect one or two servers to the network. The FSM750S is a progressive solution—it can be easily set up and connected as an unmanaged device, and management features can be brought online as they are needed. To round out the solution, a NETGEAR FVL328 ProSafe VPN Firewall Router can be used to connect the LAN to the Internet.

50-person Office

Connect up to 48 devices
at 10 Mbps or 100 Mbps

FSM750S
Managed Switch

Connect 1 or 2 Servers
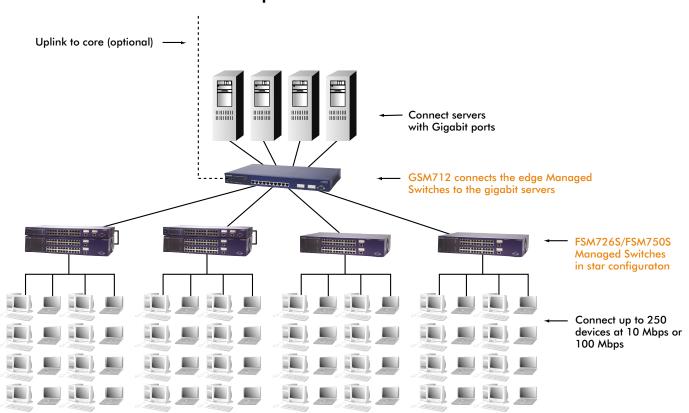with Gigabit Ports

100-person Office

NETGEAR managed switches can be stacked to support more users. Built-in stacking ports provide simple, cost-effective stacking, without the need for stacking modules. The stacking cable—provided at no extra charge—is a two-Gigabit link between each switch. The FSM750S can be stacked with the FSM726S or other FSM750S switches, providing a flexible solution for any environment. Each unit has two stacking ports separate from the Gigabit ports. In this scenario, the Gigabit ports are connected to the servers. A rack mount kit is included with every NETGEAR managed switch, offering the ability to install on the desktop or in a wiring closet.

100-person Office

Stack 2 FSM750S Managed Switches in rack with servers

Connect Servers with Gigabit Ports

Connect FSM750S with stacking ports

Connect up to 96 devices at 10 Mbps or 100 Mbps

250+ person Office

In this star configuration, the NETGEAR GSM712 Managed Gigabit Switch provides a high-speed network backbone. In combination with NETGEAR stacked or standalone managed switches and Gigabit-speed servers, the non-blocking Gigabit architecture speeds network performance. Gigabit ports link the switch to the servers, and to the Internet through a separate router unit. FSM726S and FSM750S units are connected by Gigabit links to the NETGEAR Managed Gigabit Switch. The unit is managed by command line interface or easy-to-follow browser interface. As part of an enterprise solution, NETGEAR managed switches can be used to link the edge back to the core, such as when connecting departmental domains into the corporate backbone.

250+ person Office

Uplink to core (optional) →

Connect servers with Gigabit ports

GSM712 connects the edge Managed Switches to the gigabit servers

FSM726S/FSM750S Managed Switches in star configuraton

Connect up to 250 devices at 10 Mbps or 100 Mbps

Family Line Up

NETGEAR offers a family of managed Layer 2 switches designed for mid-size business and branch offices. These products are easy to install and use, offer robust features that are normally found on enterprise-level products, and have the capacity to grow with a business. They are also affordable to buy and operate, and are built to NETGEAR's high standards of reliability and excellence.

NETGEAR Layer 2 Managed 10/100 Managed Switch—FSM726S
Quick Specs: 24 10/100 ports, 2 Gigabit ports, 2 GBIC slots, 2 stacking ports, 12.8 Gbps (non-blocking) bandwidth, stack up to 6 units.

NETGEAR's FSM726S switch boosts business networks with L2 management for 24 10/100 ports and two Gigabit ports. The Gigabit ports can use copper or fiber interfaces (GBIC), providing dedicated uplink capabilities without sacrificing stacking ports. Full management capabilities, including VLAN, prioritization (CoS), SNMP, RMON, trunking, and more.

NETGEAR Layer 2 Managed 10/100 High Density Switch—FSM750S
Quick Specs: 48 10/100 ports, 2 Gigabit ports, 2 GBIC slots, 2 stacking ports, 20 Gbps (non-blocking) bandwidth, stack up to 3 units.

NETGEAR's FSM750S switch is the 48-port version of the popular FSM726S. It boosts business networks with L2 management for 48 10/100 ports and two Gigabit ports. The Gigabit ports can use copper or fiber interfaces (GBIC). Full management capabilities, including VLAN, prioritization, SNMP, RMON, port trunking, and more. The all-inclusive FSM750S can stack with the FSM726S for a variety of network combinations—up to 144 10/100 ports and 10 Gigabit ports.

NETGEAR Managed Gigabit Switch—GSM712
Quick Specs: 10 Copper Gigabit ports, 2 GBIC slots, 24 Gbps (nonblocking) bandwidth, nonstacking.

NETGEAR's simple-to-run GSM712 supports Gigabit uplinks and servers for a powerful business network backbone. Integrated Gigabit connectivity accelerates access time for maximum productivity. The GSM712 is ideal for connecting Gigabit-speed servers to distributed managed servers in a star configuration. This high-speed switch features full management capabilities, including VLAN, prioritization, SNMP, RMON, port trunking, and more.

In addition to our managed switch product lines, NETGEAR offers a variety of unmanaged switches, routers, hubs, and wireless products in both desktop and rack mount packages.

NETGEAR®