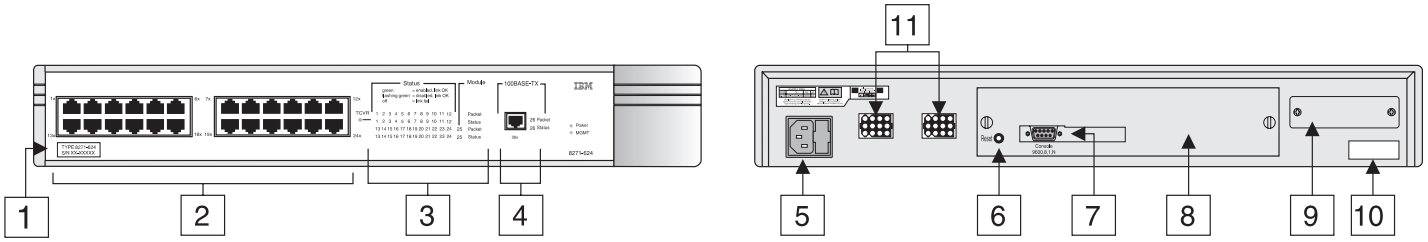
8271 NWAYS ETHERNET LAN SWITCH MODELS 612 AND 624 QUICK REFERENCE GUIDE

8271 Model 612/624 Switch Features



The illustration shows 8271 Model 624 (24 port). The port and LED layout is different for 8271 Model 612 (12 port).

1 Unit Serial Number You may need this serial number for fault reporting purposes.

2 24 (or 12) x 10BASE-T Ports Connect up to 24 (or 12) devices over a maximum length of 100m (328ft) using data grade category 3, 4, or 5 UTP cable. Each port is configured as MDIX (cross-over).

3 Status LEDs Provide a quick source of fault diagnosis. Refer to "Checking Status Using the LEDs" overleaf.

4 100BASE-TX Port Connect a single local server or use as a 100Mbps backbone link. Use data grade category 5 UTP or STP cable over a maximum length of 100m (328ft). This port is configured as MDIX (cross-over).

5 IEC Power Inlet Connect the power cord to supply mains power to the Switch. Note that there is no ON/OFF switch.

6 Reset Button Pressing the Reset button simulates a power-off/on cycle for the Switch.

7 Console Port Connect a local terminal to access the VT100 interface for out-of-band management. Configuration is set to auto-baud, 8 data bits, no parity, and 1 stop bit.

8 Plug-in Module Slot Remove the blanking plate to install an optional Plug-in Module and so provide an additional Fast Ethernet or ATM link.

9 Transceiver Module Slot Remove the blanking plate to install a Transceiver Module and so provide a 10Mbps backbone link.

10 Ethernet Address This label shows the unique Ethernet (or MAC) Address assigned to the unit.

11 Redundant Power System (RPS) Sockets Use *one* of these sockets to connect an RPS. For further information, refer to the documentation that accompanies the RPS.

Checking Status Using the LEDs

LED	Color	Indicates
TCVR	Yellow	Port 1 is a Transceiver Module fitted to the rear of the unit.
Port Status LEDs		
Packet	Yellow	Frames are being transmitted/received on the port.
Status	Green	Link is present; port is enabled.
	Green flashing	Link is present; port is disabled.
	Off	Link is not present.
Plug-in Module Status LEDs		
Packet	Yellow	Frames are being transmitted/received on the Plug-in Module port.
Status	Green	Link is present; port is enabled.
	Green flashing	Link is present; port is disabled.
	Green flashing (long on, short off)	Refer to the "*IBM 8271 Nways Ethernet LAN Switch ATM OC-3c Module User's Guide*".
	Yellow	Plug-in Module has failed its Power On Self Test (if the MGMT LED is flashing yellow), or the agent software of the Plug-in Module is not installed correctly.
	Yellow flashing	Plug-in Module is not recognized.
	Off	Link is not present or Plug-in Module is not installed in the Switch.
Unit Status LEDs		
Power	Green	Switch is powered-up.
MGMT	Green	Switch is operating normally.
	Green flashing	Switch or Plug-in Module is either downloading software or initializing (which includes a Power On Self Test).
	Yellow	Switch has failed its Power On Self Test.
	Yellow flashing	Plug-in Module has failed its Power On Self Test.

Default Settings

Port Status	Enabled
Forwarding Mode	Fast Forward
Intelligent Flow Management	Enabled
Duplex Mode	Half duplex on all relevant ports
Virtual LANs	All ports use Port VLAN Mode and belong to the Default VLAN (VLAN 1)
PACE	Disabled
Spanning Tree (STP)	Disabled
Power On Self Test (POST)	Normal (Fast Boot)
System Alarm (broadcast bandwidth used)	Enabled ■ High threshold: 20% — Notify and Blip ■ Low threshold: 10% — No action
System Alarm (errors per 10,000 packets)	Enabled ■ High threshold: 2% — Notify ■ Low threshold: 1% — No action
System Alarm (bandwidth used)	Enabled ■ High threshold: 85% — No action ■ Low threshold: 50% — No action
System Alarm (percentage of frames forwarded)	Enabled ■ High threshold: 85% — No action ■ Low threshold: 50% — No action

Network Configurations

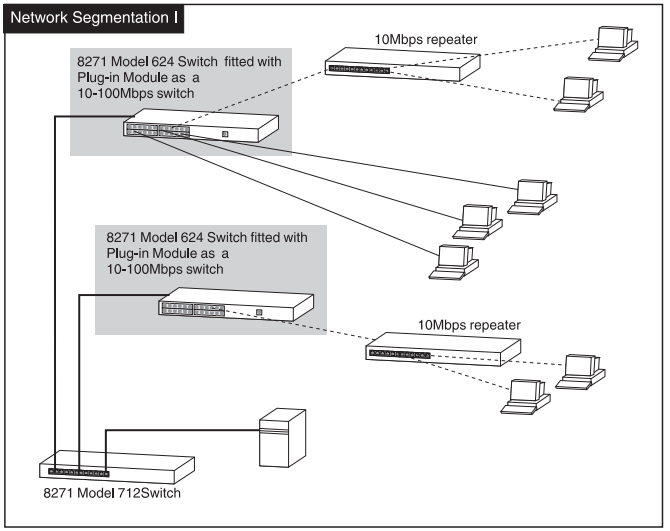
Network Segmentation I Shows how the Switch fits into a large corporate network with a Fast Ethernet infrastructure. A Switch is positioned on each floor and servers are centralized in the basement.

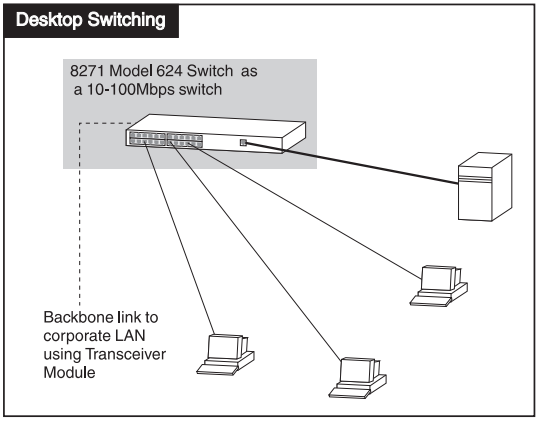
Network Segmentation II Shows the Switch in a small office within a large corporation or part of a larger corporate network. Most of the switch ports have multiple endstations.

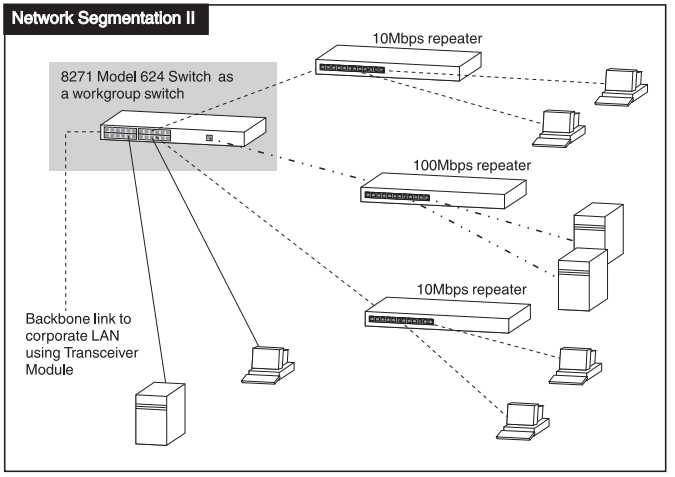
Desktop Switching Shows the Switch used for a group of heavy-traffic users in a large corporate network. Here, switching is brought to the desktop with a single endstation per switch port. A local server is connected to the 100Mbps Fast Ethernet link.

Key:

- Shared 10Mbps link
- Dedicated 10Mbps link
- Dedicated 100Mbps link
- Shared 100Mbps link







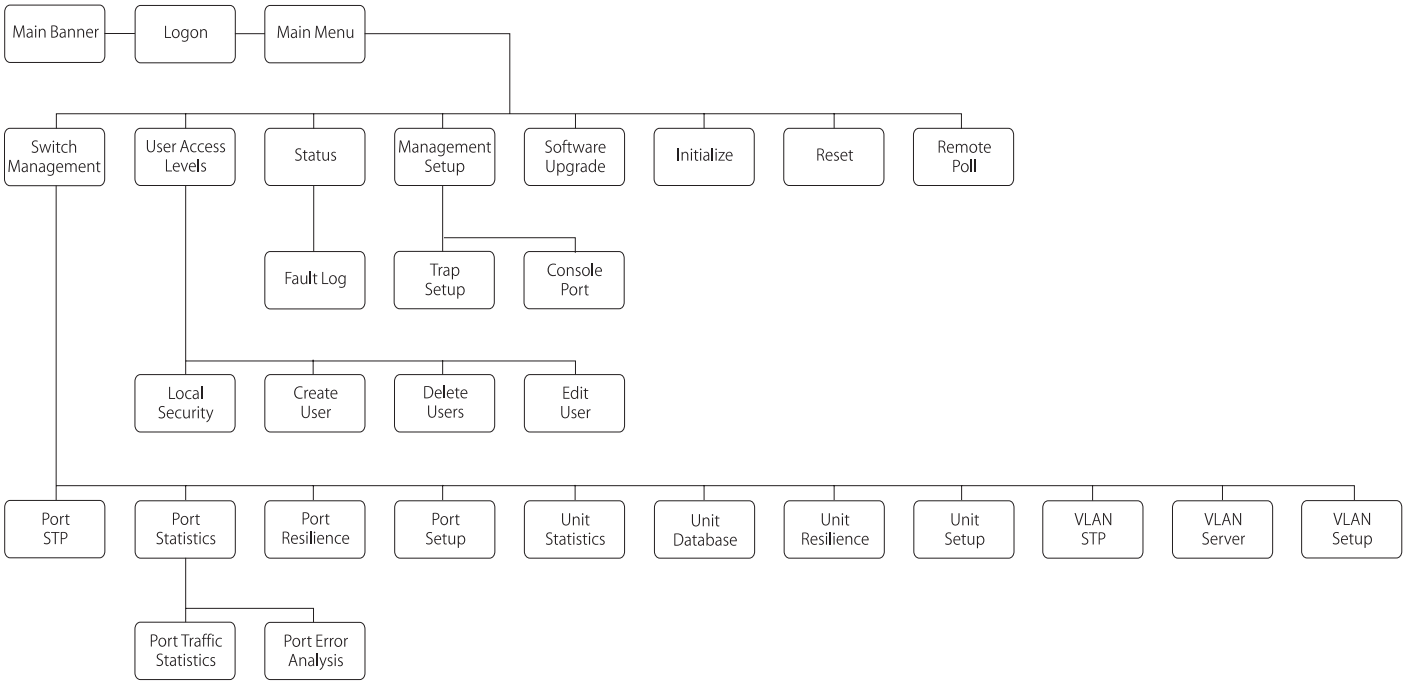
Managing the Switch

The Switch can be managed using any of the following methods:

- Accessing the VT100 interface from a local terminal connected to a Console Port on the rear of the Switch.
- Accessing the VT100 interface from a remote terminal over a TCP/IP network using a VT100 emulation facility such as Telnet.
- Using an SNMP Network Manager.

For convenience the VT100 screen map is shown below.

If an ATM OC-3c Module is installed in the Switch, extra screens are available.



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