

Port Settings on 200/300 Series Smart Switches

Objective

Port Settings can be modified to help control traffic flow through a managed network. The default settings of most ports should be sufficient for your network, however, when you want to get the most out of your device, you can manually select different options to configure the ports.

The objective of this document is to show you how to configure port settings on 200/300 Series Managed Switches.

Applicable Devices

- SF/SG 200 Series Managed Switches
- SF/SG 300 Series Managed Switches

Software Version

- 1.3.0.62

Configure Port Settings

Step 1. Log in to the Switch Configuration Utility and choose **Port Management > Port Settings**. The *Port Settings* page opens:

Port Settings

Jumbo Frames: Enable

Jumbo frames configuration changes will take effect after saving the configuration and rebooting the switch.

| Port Setting Table | | | | | | | | | | | Showing 1-28 of 28 | | All | per page |
|----------------------------------|-----------|------|-------------|--------------|--------------------|------------|-------|------------|-------------|-----|--------------------|--|-----|----------|
| | Entry No. | Port | Description | Port Type | Operational Status | Time Range | | Port Speed | Duplex Mode | LAG | Protection State | | | |
| | | | | | | Name | State | | | | | | | |
| <input checked="" type="radio"/> | 1 | FE1 | | 100M-copper | Up | | | 100M | Full | | Unprotected | | | |
| <input type="radio"/> | 2 | FE2 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 3 | FE3 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 4 | FE4 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 5 | FE5 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 6 | FE6 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 7 | FE7 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 8 | FE8 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 9 | FE9 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 10 | FE10 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 11 | FE11 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 12 | FE12 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 13 | FE13 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 14 | FE14 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 15 | FE15 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 16 | FE16 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 17 | FE17 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 18 | FE18 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 19 | FE19 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 20 | FE20 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 21 | FE21 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 22 | FE22 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 23 | FE23 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 24 | FE24 | | 100M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 25 | GE1 | | 1000M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 26 | GE2 | | 1000M-copper | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 27 | GE3 | | 1000M-ComboC | Down | | | | | | Unprotected | | | |
| <input type="radio"/> | 28 | GE4 | | 1000M-ComboC | Down | | | | | | Unprotected | | | |

Step 2. (Optional) Check the **Jumbo Frames** check box to enable Jumbo Frames on the interfaces. Jumbo Frames are Ethernet frames with a size of 1500 bytes or more.

Step 3. In the *Port Setting Table*, click the radio button of the port you wish to configure.

Step 4. Click **Edit**. The *Port Settings* window appears:

| | | | |
|---|---|-------------------------------|-----------------------------------|
| Interface: | Port <input type="text" value="FE1"/> | Port Type: | 100M-Copper |
| Port Description: | <input type="text" value="GUIPort"/> (7/64 Characters Used) | | |
| Administrative Status: | <input checked="" type="radio"/> Up <input type="radio"/> Down | Operational Status: | Up |
| Time Range: | <input type="checkbox"/> Enable | Operational Time-Range State: | N/A |
| Time Range Name: | <input type="text" value=""/> Edit | | |
| Reactivate Suspended Port: | <input type="checkbox"/> | | |
| Auto Negotiation: | <input checked="" type="checkbox"/> Enable | Operational Auto Negotiation: | Enable |
| Administrative Port Speed: | <input type="radio"/> 10M <input checked="" type="radio"/> 100M | Operational Port Speed: | 100M |
| Administrative Duplex Mode: | <input type="radio"/> Half <input checked="" type="radio"/> Full | Operational Duplex Mode: | Full |
| Auto Advertisement: | <input checked="" type="checkbox"/> Max Capability <input type="checkbox"/> 10 Half <input type="checkbox"/> 10 Full <input type="checkbox"/> 100 Half <input type="checkbox"/> 100 Full <input type="checkbox"/> 1000 Full | Operational Advertisement: | 10 Half 10 Full 100 Half 100 Full |
| Neighbor Advertisement: | 10 Half 10 Full 100 Half 100 Full | | |
| Back Pressure: | <input type="checkbox"/> Enable | | |
| Flow Control: | <input checked="" type="radio"/> Enable <input type="radio"/> Disable <input type="radio"/> Auto-Negotiation | | |
| MDI/MDIX: | <input type="radio"/> MDIX <input type="radio"/> MDI <input checked="" type="radio"/> Auto | Operational MDI/MDIX: | MDIX |
| Protected Port: | <input checked="" type="checkbox"/> Enable | | |
| MDI/MDIX: | <input type="radio"/> MDIX <input type="radio"/> MDI <input checked="" type="radio"/> Auto | Operational MDI/MDIX: | MDIX |
| Protected Port: | <input checked="" type="checkbox"/> Enable | | |
| Member in LAG: | | | |
| <input type="button" value="Apply"/> <input type="button" value="Close"/> | | | |

Step 5. (Optional) To change the chosen port, choose a port from the drop-down list in the *Interface* field.

Step 6. Enter a description for the port in the *Port Description* field.

Note: The *Port Type* field displays the type of physical connection currently used.

Step 7. Click the desired radio button in the *Administrative Status* field to choose an administrative status. The available options are:

- Up — Enable the port so it can be accessed by a PC or any other device.
- Down — Disable or shutdown the port so it cannot be accessed.

Note: The current status of the port is displayed in the *Operational Status* field.

Step 8. Check the **Enable** check box in the *Time Range* field to designate a time when the port should be enabled.

Step 9. If you enabled the time range in step 8, then choose a pre-configured time range from the *Time Range Name* drop-down list.

Note: The current operational state of the time range is displayed in the *Operational Time-Range State* field.

Note: Time Range is only available for SF/SG 300 Series Managed Switches. For more information on how to configure a time range, refer to the article [802.1X Time Range Configuration on 300 Series Managed Switches](#).

Step 10. Check the **Enable** check box in the *Reactivate Suspended Port* field to reactivate a port that has been suspended. A port can be suspended by any other security configuration previously done in the switch.

Step 11. Check the **Enable** check box in the *Auto Negotiation* field to enable Auto Negotiation. This enables a port to advertise its transmission parameters to the other end of the connection.

Note: If you leave the Auto Negotiation check box unchecked, you can then choose the transmission speeds and the duplex mode from the *Administrative Port Speed* field and *Administrative Duplex Mode* field.

Note: The *Operational Auto-Negotiation* field displays the current auto-negotiation status on the port.

Step 12. Click one of the available radio buttons from the *Administrative Port Speed* menu to configure speed on your port:

- 10 — This options sets the transmission speed of the port to 10Mbps
- 100 — This option sets the transmission speed of the port to 100Mbps

Note: The *Operational Port Speed* field displays the current port speed that is the result of negotiation.

Step 13. Choose a radio button from the *Administrative Duplex Mode* field. This field is configurable

only when auto-negotiation is disabled, and the port speed is set to 10M or 100M. At port speed of 1G, the mode is always full duplex. The available options are defined as follows:

- Full — The port can transmit and receive at the same time.
- Half — The port can either transmit or receive, but cannot do both at the same time.

Note: The *Operational Duplex Mode* field displays the current duplex mode of the port.

Step 14. Check the check box of the desired option in the *Auto Advertisement* field. The options in this area are available only when auto negotiation is enabled. The available options are defined as follows:

- Max Capability — All port speeds and duplex mode settings can be accepted.
- 10 Half — 10 Mbps speed and Half Duplex mode.
- 10 Full — 10 Mbps speed and Full Duplex mode.
- 100 Half — 100 Mbps speed and Half Duplex mode.
- 100 Full — 100 Mbps speed and Full Duplex mode.
- 1000 Full — 1000 Mbps speed and Full Duplex mode.

Note: The *Operational Advertisement* field displays the capabilities currently advertised to the neighbor.

Note: The *Neighbor Advertisement* field displays the capabilities advertised by the neighbor device, that is, the device at the other end of the connection.

Step 15. Check the **Enable** check box to in the *Back Pressure* field to slow down the reception of data when the port switch is congested. This option can only be used on half duplex mode.

Step 16. Choose a radio button from the *Flow Control* field. The available options are defined as follows:

- Enable — Enables 802.3x Flow Control.
- Disable — Disables 802.3x Flow Control.

- Auto Negotiation — Enable the auto–negotiation of Flow Control on the port. This only works on full duplex mode.

Step 17. Click a radio button in the *MDI/MDIX* field. MDI/MDIX stands for Media Dependent Interface/Media Dependent Interface with Crossover. The available options are defined as follows:

- MDIX — Swaps the transmit and receives pairs of the port.
- MDI — Connects this switch to a station with a straight through cable.
- Auto — Configures this switch to automatically detect the correct pinouts for the connection to another device.

Note: The *Operational MDI/MDIX* field displays the current MDI/MDIX status.

Step 18. Check the **Enable** check box in the *Protected Port* field to provide enhanced security to the port.

Step 19. Click **Apply** at the bottom of the page.

Apply an Interface Configuration to Multiple Interfaces

Step 1. Click the radio button of the interface whose configuration you want to copy.

Port Settings

Jumbo Frames: Enable

Jumbo frames configuration changes will take effect after saving the configuration and rebooting the switch.

Port Setting Table Showing 1-28 of 28 per page

| Entry No. | Port | Description | Port Type | Operational Status | Time Range | | Port Speed | Duplex Mode | LAG | Protection State |
|----------------------------------|------|-------------|-----------|--------------------|------------|-------|------------|-------------|-----|------------------|
| | | | | | Name | State | | | | |
| <input checked="" type="radio"/> | 1 | FE1 | GUIPort | 100M-copper | Up | | 100M | Full | | Protected |
| <input type="radio"/> | 2 | FE2 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 3 | FE3 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 4 | FE4 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 5 | FE5 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 6 | FE6 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 7 | FE7 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 8 | FE8 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 9 | FE9 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 10 | FE10 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 11 | FE11 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 12 | FE12 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 13 | FE13 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 14 | FE14 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 15 | FE15 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 16 | FE16 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 17 | FE17 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 18 | FE18 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 19 | FE19 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 20 | FE20 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 21 | FE21 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 22 | FE22 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 23 | FE23 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 24 | FE24 | | 100M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 25 | GE1 | | 1000M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 26 | GE2 | | 1000M-copper | Down | | | | | Unprotected |
| <input type="radio"/> | 27 | GE3 | | 1000M-ComboC | Down | | | | | Unprotected |
| <input type="radio"/> | 28 | GE4 | | 1000M-ComboC | Down | | | | | Unprotected |

Step 3. Click **Copy Settings**. The *Copy Settings* window appears.

Copy configuration from entry 1 (FE1)

to: (Example: 1,3,5-10 or: FE1,FE3-FE5)

Step 4. Enter the range of interfaces that you want to apply the configuration to. You can use the interface numbers or the name of the interfaces as input. You can enter each interface separated by a comma (For example: 1, 3, 5 or GE1, GE3, GE5) or you can enter a range of interfaces (For example: 1-5 or GE1-GE5).

Step 5. Click **Apply** to save your configuration.

The image below depicts the changes after the configuration.

Port Settings

Jumbo Frames: Enable

Jumbo frames configuration changes will take effect after saving the configuration and rebooting the switch.

Port Setting Table Showing 1-28 of 28 per page

| | Entry No. | Port | Description | Port Type | Operational Status | Time Range | | Port Speed | Duplex Mode | LAG | Protection State |
|-----------------------|-----------|------|-------------|--------------|--------------------|------------|-------|------------|-------------|-----|------------------|
| | | | | | | Name | State | | | | |
| <input type="radio"/> | 1 | FE1 | GUIPort | 100M-copper | Up | | | 100M | Full | | Protected |
| <input type="radio"/> | 2 | FE2 | GUIPort | 100M-copper | Down | | | | | | Protected |
| <input type="radio"/> | 3 | FE3 | GUIPort | 100M-copper | Down | | | | | | Protected |
| <input type="radio"/> | 4 | FE4 | GUIPort | 100M-copper | Down | | | | | | Protected |
| <input type="radio"/> | 5 | FE5 | GUIPort | 100M-copper | Down | | | | | | Protected |
| <input type="radio"/> | 6 | FE6 | GUIPort | 100M-copper | Down | | | | | | Protected |
| <input type="radio"/> | 7 | FE7 | GUIPort | 100M-copper | Down | | | | | | Protected |
| <input type="radio"/> | 8 | FE8 | GUIPort | 100M-copper | Down | | | | | | Protected |
| <input type="radio"/> | 9 | FE9 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 10 | FE10 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 11 | FE11 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 12 | FE12 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 13 | FE13 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 14 | FE14 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 15 | FE15 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 16 | FE16 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 17 | FE17 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 18 | FE18 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 19 | FE19 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 20 | FE20 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 21 | FE21 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 22 | FE22 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 23 | FE23 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 24 | FE24 | | 100M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 25 | GE1 | | 1000M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 26 | GE2 | | 1000M-copper | Down | | | | | | Unprotected |
| <input type="radio"/> | 27 | GE3 | | 1000M-ComboC | Down | | | | | | Unprotected |
| <input type="radio"/> | 28 | GE4 | | 1000M-ComboC | Down | | | | | | Unprotected |