

# Quality of Service (QoS) Policy Binding Configuration on Sx500 Series Stackable Switches

## Objective

Policy Binding is used to bind a policy to ports. It is mainly used to apply a QoS defined policy on the port so that the ingress traffic can be filtered in accordance to the flows in the defined policy. It cannot be applied to the egress traffic for the same port. Any packets received on the port that do not meet the requirements of the policy are discarded. This article explains how to configure policy binding on the Sx500 Series Stackable Switches.

**Note:** A configured policy can be edited only when it is removed from all the ports to which it was bound. Either a policy or an ACL can be bound to a port, but both cannot be done together.

In order to configure policy binding a policy class map has to be created prior to being able. Please refer to the article *Quality of Service (QoS) Policy Class Maps Configuration on Sx500 Series Stackable Switches* for more information on how to create a policy class map.

## Applicable Devices

- Sx500 Series Stackable Switches

## Software Version

- 1.3.0.62

## Policy Binding

Step 1. Log in to the web configuration utility and choose **Quality of Service > QoS Advanced Mode > Policy Binding**. The *Policy Binding* page opens:

**Policy Binding**

A port can be bound with either a policy or an ACL, but not both. The default action is to discard (Deny Any) all the packets that do not meet the rules in a policy. You can override the default action of a policy to forward those packets by configuring Permit Any on the desired ports.

Filter: Policy Name equals to Policy 1

AND Interface Type equals to Port of Unit 1/1

Interface	GE1	GE2	GE3	GE4	GE5	GE6	GE7	GE8	GE9	GE10	GE11	GE12	GE13	GE14	GE15	GE16	GE17	GE18	GE19	GE20	GE21	GE22	GE23	GE24
Binding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permit Any	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interface	GE25	GE26	GE27	GE28	GE29	GE30	GE31	GE32	GE33	GE34	GE35	GE36	GE37	GE38	GE39	GE40	GE41	GE42	GE43	GE44	GE45	GE46	GE47	GE48
Binding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permit Any	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interface	XG1	XG2																						
Binding	<input type="checkbox"/>	<input type="checkbox"/>																						
Permit Any	<input type="checkbox"/>	<input type="checkbox"/>																						

Step 2. Choose the policy to which you want to bind ports from the Policy Name drop-down

list.

Step 3. Choose an interface type from the Interface Type drop-down list.

- Port of Unit/Slot — The appropriate Unit/Slot. The unit identifies whether the switch is active or a member in the stack. The slot identifies which switch is connected to which slot (slot 1 is SF500 and slot 2 is SG500). If you are unfamiliar with the terms used, check out [Cisco Business: Glossary of New Terms](#).
- LAG — A Link Aggregate Group (LAG) is used to link multiple ports together. LAGs multiply bandwidth, increase port flexibility, and provide link redundancy between two devices to optimize port usage

Step 4. Click **Go**. This is used to configure the interfaces on the chosen device in regards to the chosen policy.

**Policy Binding**

A port can be bound with either a policy or an [ACL](#), but not both. The default action is to discard (Deny Any) all the packets that do not meet the rules in a policy. You can override the default action of a policy to forward those packets by configuring Permit Any on the desired ports.

Filter: Policy Name equals to Policy 1

AND Interface Type equals to Port of Unit 1/1 **Go**

Interface	GE1	GE2	GE3	GE4	GE5	GE6	GE7	GE8	GE9	GE10	GE11	GE12	GE13	GE14	GE15	GE16	GE17	GE18	GE19	GE20	GE21	GE22	GE23	GE24
Binding	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permit Any	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interface	GE25	GE26	GE27	GE28	GE29	GE30	GE31	GE32	GE33	GE34	GE35	GE36	GE37	GE38	GE39	GE40	GE41	GE42	GE43	GE44	GE45	GE46	GE47	GE48
Binding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permit Any	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interface	XG1	XG2																						
Binding	<input type="checkbox"/>	<input type="checkbox"/>																						
Permit Any	<input type="checkbox"/>	<input type="checkbox"/>																						

**Apply** **Cancel** **Show Policy Binding Per Port**

Step 5. Check the desired check boxes in the Binding field to bind the policy to the port. All the packets that do not meet the rules of the policy are discarded.

**Policy Binding**

A port can be bound with either a policy or an [ACL](#), but not both. The default action is to discard (Deny Any) all the packets that do not meet the rules in a policy. You can override the default action of a policy to forward those packets by configuring Permit Any on the desired ports.

Filter: Policy Name equals to Policy 1

AND Interface Type equals to Port of Unit 1/1 **Go**

Interface	GE1	GE2	GE3	GE4	GE5	GE6	GE7	GE8	GE9	GE10	GE11	GE12	GE13	GE14	GE15	GE16	GE17	GE18	GE19	GE20	GE21	GE22	GE23	GE24
Binding	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permit Any	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interface	GE25	GE26	GE27	GE28	GE29	GE30	GE31	GE32	GE33	GE34	GE35	GE36	GE37	GE38	GE39	GE40	GE41	GE42	GE43	GE44	GE45	GE46	GE47	GE48
Binding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permit Any	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interface	XG1	XG2																						
Binding	<input type="checkbox"/>	<input type="checkbox"/>																						
Permit Any	<input type="checkbox"/>	<input type="checkbox"/>																						

**Apply** **Cancel** **Show Policy Binding Per Port**

Step 6. (Optional) If you wish to forward any packets on the interface that do not match any policy, check the corresponding check box in the Permit Any field.

Step 7. Click **Apply**.

Step 8. (Optional) To bring up a list of ports that the policies are bound to, click **Show Policy**

**Binding Per Port.** The *Policy Binding* window appears.

**Policy Binding**

**Policy Binding Table**

Filter: *Interface Type* equals to Port of Unit 1/1 ▼

☒ *Policy Name* equals to Policy 1 ▼ **Go**

Interface	Policy Name	Permit All
GE1	Policy 1	Disabled

**Back**

**Note:** If Show Policy Binding Per Port is clicked in Step 8, follow the steps below.

Step 9. Choose an interface type from the Interface Type drop-down list.

- Port of Unit/Slot — The appropriate Unit/Slot. The unit identifies whether the switch is active or a member in the stack. The slot identifies which switch is connected to which slot (slot 1 is SF500 and slot 2 is SG500).
- LAG — A Link Aggregate Group (LAG) is used to link multiple ports together. LAGs multiply bandwidth, increase port flexibility, and provide link redundancy between two devices to optimize port usage.

Step 10. (Optional) In order to choose a name for the policy, check the check box in the Policy Name field and choose a policy from the Policy Name drop-down list.

Step 11. Click **Go**. This is used to view the interfaces on the chosen device in regards to the chosen policy.

Step 12. (Optional) To return to the *Policy Binding* page, click **Back**.