



## Configuring VLANs

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This chapter describes how to configure VLANs on the CSM-S and contains these sections:

- [Configuring Client-Side VLANs, page 4-2](#)
- [Configuring Server-Side VLANs, page 4-3](#)

To configure VLANs on the SSL daughter card, see the “[Configuring VLANs on the SSL Daughter Card](#)” section on page 7-2.

When you install the CSM-S in a Catalyst 6500 series switch, you need to configure the client-side and server-side VLANs. (See [Figure 4-1](#).)

Client-side or a server-side VLAN terminology logically distinguishes the VLANs facing the client-side and the VLANs connecting to the servers or destination devices. However, the CSM-S client and server VLANs function very similarly. For example, new connections can be received on a server VLAN and then be load-balanced to a client VLAN.

The differences between the client-side and server-side VLANs are as follows:

- When configuring bridge mode, you cannot bridge two server VLANs or two client VLANs. You can only bridge a client and a server VLAN.
- Denial of service (DoS) protection features are more aggressive on the client-side VLANs, especially when rate limiting control traffic is sent to the central processing unit.



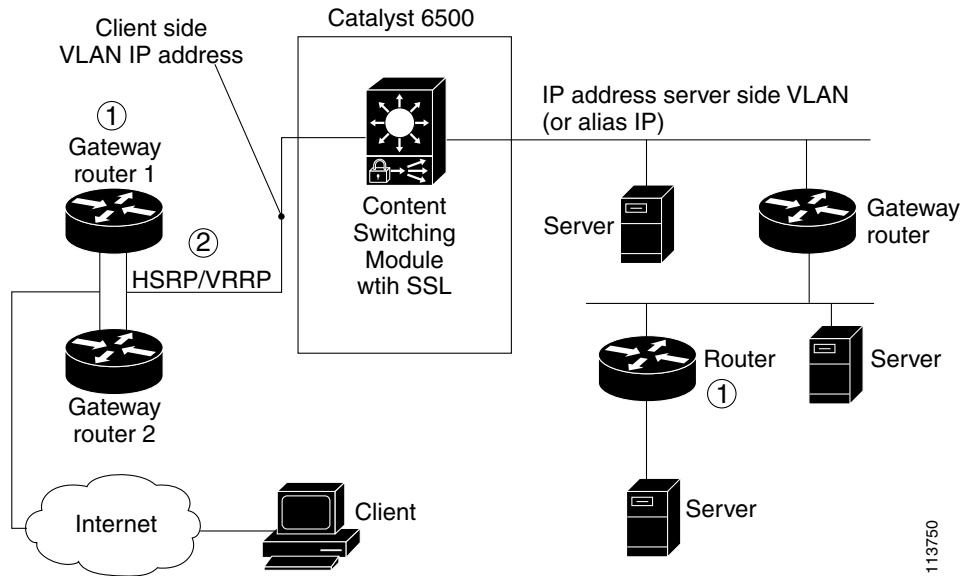
**Note**

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You must configure VLANs on the Catalyst 6500 series switch before you configure VLANs for the CSM-S. The VLAN IDs must be the same for the switch and the module.

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Figure 4-1 Configuring VLANs

**Note**

The numbers in [Figure 4-1](#) correspond to the numbers in the following operation.

1. The CSM-S does not perform a Layer 3 lookup to forward traffic; the CSM-S cannot respond to ICMP redirects.
2. You can configure up to 7 gateways per VLAN for up to 511 client and server VLANs and up to 224 gateways for the entire system. If an HSRP gateway is configured, the CSM-S uses 3 of the 224 gateway entries because traffic can come from the virtual and physical MAC addresses of the HSRP group. The fault-tolerant VLAN does not use an IP interface, so it does not apply toward the 512 VLAN limit.

## Configuring Client-Side VLANs

To configure the client-side VLANs, perform this task:

**Caution**

You cannot use VLAN 1 as a client-side or server-side VLAN for the CSM-S.

	Command	Purpose
Step 1	Router(config-module-csm)# <b>vlan</b> <i>vlanid</i> <b>client</b>	Configures the client-side VLANs and enters the client VLAN mode <sup>1</sup> .
Step 2	Router(config-slb-vlan-client)# <b>ip</b> <i>ip-address netmask</i>	Configures an IP address to the CSM-S used by probes and ARP requests on this particular VLAN <sup>2</sup> .
Step 3	Router(config-slb-vlan-client)# <b>gateway</b> <i>ip-address</i>	Configures the gateway IP address.

1. Enter the **exit** command to leave a mode or submenu. Enter the **end** command to return to the menu's-top level.
2. The **no** form of this command restores the defaults.

This example shows how to configure the CSM-S for the client-side VLANs:

```
Router(config-module-csm)# vlan 130 client
Router(config-slb-vlan-client)# ip addr 123.44.50.6 255.255.255.0
Router(config-slb-vlan-client)# gateway 123.44.50.1
Router(config-slb-vlan-client)# exit
Router# show module csm vlan 1
```

## Configuring Server-Side VLANs

To configure the server-side VLANs, perform this task:

	Command	Purpose
Step 1	Router(config-module-csm)# <b>vlan</b> <i>vlanid</i> <b>server</b>	Configures the server-side VLANs and enters the server VLAN mode <sup>1</sup> .
Step 2	Router(config-slb-vlan-server)# <b>ip</b> <i>ip-address</i> <i>netmask</i>	Configures an IP address for the server VLAN <sup>2</sup> .
Step 3	Router(config-slb-vlan-server)# <b>alias</b> <i>ip-address netmask</i>	(Optional) Configures multiple IP addresses to the CSM-S as alternate gateways for the real server <sup>3</sup> .
Step 4	Router(config-slb-vlan-server)# <b>route</b> <i>ip-address netmask gateway gw-ip-address</i>	Configures a static route to reach the real servers if they are more than one Layer 3 hop away from the CSM-S.
Step 5	Router # <b>show module csm slot vlan</b> [ <b>client</b>   <b>server</b>   <b>ft</b> ] [ <b>id</b> <i>vlan-id</i> ] [ <b>detail</b> ]	Displays the client-side and server-side VLAN configurations.

1. Enter the **exit** command to leave a mode or submenu. Enter the **end** command to return to the menu's-top level.
2. The **no** form of this command restores the defaults.
3. The alias is required in the redundant configuration. See [Chapter 9, "Configuring Connection Redundancy."](#)

This example shows how to configure the CSM-S for the server-side VLANs:

```
Router(config-module-csm)# vlan 150 server
Router(config-slb-vlan-server)# ip addr 123.46.50.6 255.255.255.0
Router(config-slb-vlan-server)# alias 123.60.7.6 255.255.255.0
Router(config-slb-vlan-server)# route 123.50.0.0 255.255.0.0 gateway 123.44.50.1
Router(config-slb-vlan-server)# exit
```

