PSD Configuration for the CSG

Communicating Between the PSD and the CSG

This appendix offers one example of how to configure a CSG to communicate with the Cisco Persistent Storage Device (PSD). There are other variations that also work.

Before you configure the CSG to communicate with the PSD, you must determine the following configuration details:

- PSD VLAN number
- PSD IP address
- CSG IP address
- VLAN interface IP address

Note

The PSD, the CSG, and VLAN interface IP addresses must be unused addresses in the same subnet. Additionally, if you want to perform software upgrades and FTP recovery of data files, the selected IP addresses must be in the same subnet as your default gateway.

If you plan to configure a Domain Name System (DNS) on the PSD, you must determine the following configuration details.

- PSD host name
- Domain name
- Domain name server addresses

There are additional CSG commands that are used to set up user groups, agents, quota servers, inservice, and so on. This appendix presents a minimal sample of what is required to configure the CSG that the PSD is to use.

This appendix provides the following information:

- Setting up the CSG to Communicate with the PSD, page A-2
- Setting Up the PSD to Communicate with the CSG, page A-3
Setting up the CSG to Communicate with the PSD

To enable the CSG to communicate with the PSD, perform the following tasks on the Supervisor:

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**Step 1**
If you have not already done so, create a VLAN on which the CSG and PSD can communicate, using the following commands:

1. `Router> enable`
2. `Router# vlan database`
3. `Router(vlan)# vlan 55`
4. `Router(vlan)# exit`

**Note**
You can use an existing client VLAN on the CSG rather than creating a client VLAN, but we do not recommend doing so. If you do so, you tie communication with the PSD to a virtual server whose configuration (or unconfiguration) is driven by content billing requirements. If that VLAN is disabled to meet content billing requirements, communication with the PSD is interrupted.

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**Step 2**
Use the following commands to associate a specific PSD to a CSG accounting group. This is the same IP address that is to be assigned to the PSD.

1. `Router(config)# ip csg accounting name`
2. `Router(config-csg-acct)# record-storage local-port 2000`
3. `Router(config-csg-acct)# record-storage 172.18.12.1 255.255.255.0`
4. `Router(config-csg-acct)# exit`
5. `Router(config)#`

You must use a `record-storage` command to specify the `local-port` before you use a second `record-storage` command to specify the `ip address` and `port` of the record-storage server.

In this example, the first `record-storage` command sets the local port, which is the source port from which the CSG sends packets to the record-storage server and the port on which it listens for responses. You can set this local-port to any available port.

The second `record-storage` command sets the destination address for packets going to the PSD.

Unless you are using a record-storage server other than the PSD, you need not specify the `port` parameter. However, if you omit the `port` argument in the second `record-storage` command, the CSG defaults to port 3386. (The PSD listens only on port 3386.) If you are using a record-storage server other than the PSD, and that server is listening on another port, then you must specify that port in the first `record-storage` command.

**Step 3**
Use the following commands to define a client VLAN over which the CSG and PSD can communicate.

1. `Router(config)# module csg number`
2. `Router(config-csg-module)# vlan 55 client name`
3. `Router(config-csg-vlan-client)# ip address 172.18.12.2 255.255.255.0`
4. `Router(config-csg-vlan-client)# end`

When you define the client VLAN, keep the following considerations in mind:

- The client VLAN on the CSG must have the same VLAN number as the corresponding VLAN interface on the Supervisor, and their IP addresses must be in the same subnet.
- Do not target billable client traffic to client VLAN on the CSG.
- If you are configuring more than one CSG, you must allow enough IP addresses to cover the number of CSGs in your chassis, plus two—one for the PSD IP address, and one for the VLAN interface IP address. Additionally, the subnet you choose must have room for all of the CSGs, plus one.
Step 4  (Optional) Use the following commands to allow traffic to be routed from the VLAN on which the PSD is configured to your default gateway. This step, which requires access to an FTP server, is necessary if you intend to upgrade the software on the PSD. In addition, if you are using DNS, this configuration allows you to perform name resolution to your name servers:

```
Router# conf t
Router(config)# interface FastEthernet 5/12
Router(config-if)# no ip address
Router(config-if)# switchport
Router(config-if)# switchport access vlan 55
Router(config-if)# switchport mode access
Router(config-if)# exit
Router(config)# interface vlan 55
Router(config-if)# ip address 172.18.12.3 255.255.255.0
Router(config-if)# end
```

### Setting Up the PSD to Communicate with the CSG

To enable the PSD to communicate with the CSG, perform the following tasks on the Supervisor:

#### Step 1
Assign the PSD to a VLAN, using the following commands:

```
Router# config term
Router(config)# persistent-store module 3 vlan 55
```

#### Step 2
Assign an IP address to the PSD, using the following commands:

```
Router# session slot 3 proc 1
root@localhost.localdomain# ip address 172.18.12.2 255.255.255.0
root@localhost.localdomain# ip gateway 172.18.12.3
root@localhost.localdomain# ip host psd1 *
root@psd1.localdomain# ip domain cisco.com *
root@psd1.cisco.com# ip nameserver 64.11.22.1 64.11.22.2 *
root@psd1.cisco.com# exit
```

When assigning an IP address to the PSD, keep the following considerations in mind:

- This IP address must be in the same subnet as the IP address of the VLAN configured in Step 3 in the “Setting up the CSG to Communicate with the PSD” section on page A-2.
- The IP address used in the `ip gateway` command must be the same IP address that was assigned to the VLAN interface configured in Step 3 in the “Setting up the CSG to Communicate with the PSD” section on page A-2.

**Note**

If you change the PSD address, and you are already billing on your CSGs, you must also change the record storage destination.