

IP Addressing on the Workgroup Catalyst 1200 Series

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Introduction

This document provides guidelines for IP addressing on the Workgroup Catalyst. For information about the configuration of the Workgroup Catalyst, see the Catalyst Series Workgroup Switch User's Guide (DOC-CATALYSTUG4).

These are some helpful definitions to use while you read this document:

- **SUM Port (port SC0)** An extra port on the Workgroup Catalyst that allows out-of-band management. This is a 10baseT port which does not switch or route traffic to other ports on the Catalyst. It is strictly for management purposes.
- **Routegroup** Any number of ports that are grouped under the same IP network/subnet. This grouping is virtual (VIP) so that any random number of ports can be defined to belong to a certain group. The port list does not need to be contiguous.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on the Catalyst 1200 Series Switches.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

For more information on document conventions, refer to the Cisco Technical Tips Conventions.

Define the Catalyst's IP Address

Complete these steps:

1. To assign an IP address to the Catalyst so that you can access it from the network (in-band access) using TCP/IP Telnet or SNMP, assign the desired IP address to ports 1–10 using the **set routegroup** command.

```
set routegroup 1 1-10 172.16.80.2 255.255.255.0
```



Warning: Do not assign this address to the SUM port (sc0). If you assign an IP address to the

sc0 port, you must access the Catalyst from the SUM port.

2. To assign an IP address to the Catalyst where you can access it only from the SUM port (sc0), assign the desired IP address to the sc0 interface using the **set interface** command.

```
set interface sc0 172.16.80.2 255.255.255.0
set interface sc0 up
```

3. To use the Workgroup Catalyst strictly for switching and not for any IP routing, define all ports 1–10 to be in one routegroup using the **set routegroup** command from step 1.
4. To use the Workgroup Catalyst as both a switch and a router, you can set more than one routegroup using the **set routegroup** command.

Make sure that the subnet masks are defined appropriately.

Note: When you define routegroups, make sure that you start with routegroup 1.

```
set routegroup 1 [port-list] [ip-address] [subnet-mask]
```

This defines routegroup 1.

5. If you connect the Catalyst to other routers on the network, you can enable RIP to allow the Catalyst to exchange RIP routing updates with neighboring routers every 30 seconds. Or, you can set a default route on the Catalyst switch and disable RIP on neighboring routers to prevent it from learning all the routes on the network. This method is preferred if you have many routes in your network.

```
set rip [enable | disable]
set route default [destination-address] [hop-count]
```

Note: Disabling RIP on the Catalyst does not prevent it from learning routes. It only stops RIP broadcasting. To disable RIP on a neighboring Cisco router, use the **passive-interface** sub-command under **router RIP**.

6. If you decide to assign IP addresses to ports 1–10 as well as the SUM port, the SUM port's IP address must be on a different IP network. If not, you receive a "Duplicate IP Address" message when you try to set the IP address using the **set interface** command.
7. Use the **show router** command to view all of the routegroups defined and to view the RIP status.
8. Use the **show route** command to find out if the Catalyst has the correct information to function on your IP network.
9. For all the devices that are connected to the Catalyst ports (directly or indirectly), make sure that the default gateway on these devices is the Catalyst's IP address for the corresponding routegroup ports.

Related Information

- [IP Routing Support Page](#)
 - [Technical Support – Cisco Systems](#)
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