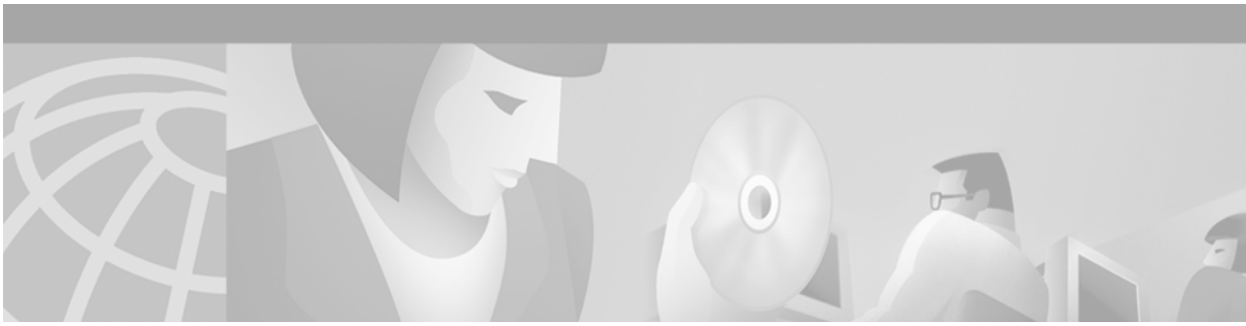

System Controller and Managed Shelves Commands

This chapter describes the commands used to configure a system controller and managed shelves.

For system controller configuration tasks, refer to the "System Management Using System Controllers" chapter in the *Cisco IOS Configuration Fundamentals Configuration Guide*.

attach shelf

To start a session on a manager dial or router shelf, use the **attach shelf** EXEC command.

attach shelf *shelf-number*

Syntax Description

shelf-number	Number of the shelf to attach to. The number can range from 0 to 9999.

Command Modes

EXEC

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

If you are connected to a system controller, use this command to start a session with a managed shelf. In a session, you can execute commands specifically on the specified shelf.

If you are already connected to a shelf unit, this command disconnects from the current shelf and connects to the specified shelf.

Examples

In the following example, a user connects to a managed shelf from the system controller from user EXEC mode. Notice that the user connects to the shelf at the current user privilege level.

```
systemcont> show syscon
Shelf# 2  172.23.66.102 SDB update  09:09:16 PST Jan 27 1998
systemcont> attach shelf 2
Trying 172.23.66.102 ... Open

shelf2> show syscon
Current uptime 09:10:00 PST Jan 27 1998, system controller 172.23.66.100
Last hello packet received at 09:09:16 PST Jan 27 1998
8625 Total SDP packets
    0 packets with bad MD5 hash
    4311 Hello packets received
    4314 Hello packets sent
    0 Command packets received
    0 Command packets sent
shelf2> quit

[Connection to 172.23.66.102 closed by foreign host]
systemcont>
```

Related Commands

Command	Description
execute-on	Allows the executing of commands directly on a line card.
syscon address	Specifies the system controller for a managed shelf.
syscon shelf-id	Specifies a shelf ID for a managed shelf.

enable (poll-group)

To start data collection for a performance data set, use the **enable** command in system controller poll-group configuration mode. The **no** form of this command disables data collection.

enable

no enable

Syntax Description

This command has no arguments or keywords.

Defaults

The system controller does not collect data.

Command Modes

System controller poll-group configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

Use the **enable** command as the last entry in a system contoller poll-group configuration mode sequence to enable data collection for a specific poll group. This command is required for performance data collection. You must also set the transfer mode with the **transfer-mode** command in order to collect data.

The **no** form of this command disables data collection, but it does not delete the poll-group configuration. To reenable data collection, reconfigure the **enable** system controller poll-group configuration command. You do not need to reenter the other poll-group configuration commands.

Examples

The following example configures and enables data collection for the cmlineinfo poll group:

```
SysCont# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
SysCont(config)# syscon poll-group cmlineinfo
SysCont(config-poll-gr)# oid cmLineInfo.1.*
SysCont(config-poll-gr)# oid cmLineInfo.2.*
SysCont(config-poll-gr)# oid cmLineInfo.3.*
SysCont(config-poll-gr)# oid cmLineInfo.4.*
SysCont(config-poll-gr)# transfer-mode bulk
SysCont(config-poll-gr)# enable
SysCont(config-poll-gr)# exit
SysCont(config)# exit
SysCont#
Jan 23 17:47:05: %SYS-5-CONFIG_I: Configured from console by console
```

Related Commands

Command	Description
oid	Specifies MIB variables for the system controller to collect.
poll-interval	Changes the interval for data collection by system controller.
samples	Specifies the maximum number of performance data sets to store on the disk for a poll group.
shelf-type	Specifies which shelf types the system controller collects data from.
show syscon perfdata	Displays information about performance data collection.
syscon poll-group	Specifies a performance data set for the system controller to collect.
transfer-mode	Specifies the transfer method for collecting performance data from shelves.

ftp-server enable

To enable the File Transfer Protocol (FTP) server, use the **ftp-server enable** global configuration command. The **no** form of this command disables the FTP server.

ftp-server enable

no ftp-server enable

Syntax Description

This command has no arguments or keywords.

Defaults

Disabled

Command Modes

Global configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

When the FTP server is enabled, you can use FTP to transfer files to and from the router. For example, you can FTP performance data sets or syslog data subfiles to a network management station.

In order for clients to access files on the FTP server, you must configure both this command and the **ftp-server topdir** command.

Examples

The following example enables the FTP server and limits client access to the syslogd.dir directory on disk0:

```
ftp-server enable
ftp-server topdir disk0:/syslogd.dir
```

Related Commands

Command	Description
ftp-server topdir	Restricts the region where FTP clients can read or write files.

ftp-server topdir

To restrict the region where FTP clients can read or write files, use the **ftp-server topdir** global configuration command. The **no** form of this command disables access completely.

ftp-server topdir *directory*

no ftp-server topdir

Syntax Description

directory	Top-level directory path for FTP server client operations.

Defaults

Denies read and write access to any location.

Command Modes

Global configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

You must specify a top-level directory in order for clients to use the FTP server. If you do not configure this command, clients will not be able to access any files or directories on the router.

You must also configure the **ftp-server enable** command to enable the FTP server on the router.

Examples

The following example enables the FTP server and limits client access to the syslogd.dir directory on disk0:

```
ftp-server enable
ftp-server topdir disk0:/syslogd.dir
```

Related Commands

Command	Description
ftp-server enable	Enables the FTP server.

logging syslog-server

To create subfiles for syslog-server logging, use the **logging syslog-server** command in global configuration mode. Use the **no** form of this command to stop storage of syslog messages in the subfiles.

logging syslog-server *size number dir-name*

no logging syslog-server

Syntax Description

size	Maximum size of a syslog-server subfile in kilobytes (KB). The range is from 10 to 10000.
number	Maximum number of syslog-server subfiles. The range is from 2 to 10.
dir-name	Root name of the subfile directory.

Defaults

No subfiles are created.

Command Modes

Global configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

Use this command to create subfiles to store syslog messages the system controller receives from its managed shelves. The system controller will create subfiles using the name specified with a different extension to differentiate the subfiles. The current subfile is *name*.cur. The first archived subfile is *name*.1; the second is *name*.2. The last (oldest) archived subfile's extension is one less than the maximum number of subfiles.

After the subfiles are created, the system controller will add any syslog messages it receives to the current subfile. If the current subfile is full, all of the subfiles are renamed to use the next (higher) extension and a new current subfile is created.

The **no** form of this command stops the storage of syslog messages in the subfiles. However, the subfiles are not erased and remain on the disk.

Examples

The following example creates five subfiles. Each subfile has a maximum size of 2000 KB. Thus, the total available size is 10000 KB. The subfiles are named mysyslog.cur, mysyslog.1, mysyslog.2, mysyslog.3, and mysyslog.4.

```
Router# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)# logging syslog-server 2000 5 mysyslog
Router(config)# end
%SYS-5-CONFIG_I: Configured from console by console
Router# dir disk0:
Directory of disk0:/
  3  drw-           0   Jan 17 1998 07:03:53  syslogd.dir
  4  drw-           0   Jan 12 1998 11:02:29  performance
 12  drw-           0   Jan 12 1998 11:56:37  configs
242  drw-           0   Jan 21 1998 17:51:29  mysyslog.dir
340492288 bytes total (336560128 bytes free)
Router# dir disk0:/mysyslog.dir
Directory of disk0:/mysyslog.dir/
  0  -rw-           0   Jan 21 1998 17:51:29  mysyslog.1
  0  -rw-           0   Jan 21 1998 17:51:29  mysyslog.2
  0  -rw-           0   Jan 21 1998 17:51:29  mysyslog.3
  0  -rw-           0   Jan 21 1998 17:51:31  mysyslog.4
  0  -rw-           0   Jan 21 1998 17:51:31  mysyslog.cur
340492288 bytes total (336560128 bytes free)
```

Related Commands

Command	Description
show syslog-server	Displays certain syslog messages in the syslog history table.

oid

To specify MIB variables for the system controller to collect, use the **oid** system controller poll-group configuration command. The **no** form of this command disables collection of the specified MIB variable.

oid *object-id*

no oid [*object-id*]

Syntax Description

object-id	Object ID of the data to collect.

Defaults

Only the sysUptime MIB variable is collected.

Command Modes

system controller poll-group configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

Use this command to specify which MIB variables to collect for a specific data collection set. Enter this command once for each MIB variable you wish to collect. In order for the system controller to collect data, you must specify at least one object ID.

For descriptions of supported MIBs and how to use MIBs, see Cisco's MIB website on CCO at http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml.

The **no** form of this command disables data collection for the specified MIB variable. If you do not specify an object ID, data collection is disabled for every variable except sysUptime.

Use the following guidelines when specifying object IDs:

- Scalar MIB objects are specified with a ".n.0" instance. For example, **oid lsystem.57.0** or **oid 1.3.6.1.4.1.9.2.1.57.0** specifies avgBusy1.
- Columns and tables are specified with ".n.*" object IDs. For example, **oid ifEntry.2.*** specifies the ifDescr column of the ifTable, and **oid interfaces.2.*** specifies the ifTable.

Note Columns are retrievable only in poll transfer mode.

- Tables for bulk transfer must be specified using the object ID with the table-defining "SEQUENCE OF ...." SYNTAX statement.

Examples

The following example configures the system controller to collect the rows specified by cmLineInfo.1.*, cmLineInfo.2.*, cmLineInfo.3.*, and cmLineInfo.4.* using the bulk transfer mode:

```
SysCont# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
SysCont(config)# syscon poll-group cmlineinfo
SysCont(config-poll-gr)# oid cmLineInfo.1.*
SysCont(config-poll-gr)# oid cmLineInfo.2.*
SysCont(config-poll-gr)# oid cmLineInfo.3.*
SysCont(config-poll-gr)# oid cmLineInfo.4.*
SysCont(config-poll-gr)# transfer-mode bulk
SysCont(config-poll-gr)# enable
SysCont(config-poll-gr)# exit
SysCont(config)# exit
SysCont#
Jan 23 17:47:05: %SYS-5-CONFIG_I: Configured from console by console
```

Related Commands

Command	Description
enable (poll-group)	Starts data collection for a performance data set.
poll-interval	Changes the interval for data collection by system controller.
samples	Specifies the maximum number of performance data sets to store on the disk for a poll group.
shelf-type	Specifies which shelf types the system controller collects data from.
show syscon perfdata	Displays information about performance data collection.
syscon poll-group	Enables the configuration of a performance data set for the system controller to collect.
transfer-mode	Specifies the transfer method for collecting performance data from shelves.

poll-interval

To change the interval for data collection by system controller, use the **poll-interval** command in system controller poll-group configuration mode. The **no** form of this command returns the data collection interval to the default value.

poll-interval *minutes*

no poll-interval

Syntax Description

minutes	Data collection interval, in minutes. The range is from 1 to 10080. The default is 10.

Defaults

10 minutes

Command Modes

System controller poll-group configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

Use this command to specify how often the system controller collects data for a particular performance data set from its managed shelves.

When the poll group is enabled or the first shelf in a poll group is discovered, the system controller acts as if the data collection started at midnight. The system controller will then collect data at the next scheduled data collection time. The data collection for a poll group is synchronized; the system controller collects data from all managed shelves for a poll group at the same time.

Examples

The following example configures the system controller to collect data every 20 minutes. The system controller will store a maximum of five data sets for this poll group. Thus, data will be stored for 100 minutes after it is collected.

```
SysCont# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
SysCont(config)# syscon poll-group cmlineinfo
SysCont(config-poll-gr)# oid cmLineInfo.1.*
SysCont(config-poll-gr)# oid cmLineInfo.2.*
SysCont(config-poll-gr)# oid cmLineInfo.3.*
SysCont(config-poll-gr)# oid cmLineInfo.4.*
SysCont(config-poll-gr)# transfer-mode bulk
SysCont(config-poll-gr)# poll-interval 20
SysCont(config-poll-gr)# samples 5
SysCont(config-poll-gr)# enable
SysCont(config-poll-gr)# exit
SysCont(config)# exit
SysCont#
Jan 23 17:47:05: %SYS-5-CONFIG_I: Configured from console by console
```

Related Commands

Command	Description
enable (poll-group)	Starts data collection for a performance data set.
oid	Specifies MIB variables for the system controller to collect.
samples	Specifies the maximum number of performance data sets to store on the disk for a poll group.
shelf-type	Specifies which shelf types the system controller collects data from.
show syscon perfdata	Displays information about performance data collection.
syscon poll-group	Specifies a performance data set for the system controller to collect.
transfer-mode	Specifies the transfer method for collecting performance data from shelves.

samples

To specify the maximum number of performance data sets to store on the disk for a poll group, use the **samples** poll-group configuration command. The **no** form of this command returns the value to the default.

samples *number*

no samples

Syntax Description

number	Maximum number of performance data log files to store on the system controller disk for a particular poll group. The value ranges from 2 to 1000. The default is 10.

Defaults

A maximum of 10 performance data sets are stored.

Command Modes

Poll-group configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

Use this command to limit the number of performance data log files residing on the system controller disk for that poll group. Once the limit is reached, the oldest file will be deleted after a new file is successfully written.

Use this command and the **poll-interval** command to determine how long it will take for a file to be deleted and how much disk space the files will require. If you set the sample number too low, files will be deleted soon after they are created, leaving you with little time to transfer the files to a network management station. If you set the sample number too high, the files may fill the disk.

Examples

The following example configures the system controller to store a maximum of five data sets for this poll group. The system controller will collect data every 20 minutes. Thus, data will be stored for 100 minutes after it is collected.

```
SysCont# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
SysCont(config)# syscon poll-group cmlineinfo
SysCont(config-poll-gr)# oid cmLineInfo.1.*
SysCont(config-poll-gr)# oid cmLineInfo.2.*
SysCont(config-poll-gr)# oid cmLineInfo.3.*
SysCont(config-poll-gr)# oid cmLineInfo.4.*
SysCont(config-poll-gr)# transfer-mode bulk
SysCont(config-poll-gr)# poll-interval 20
SysCont(config-poll-gr)# samples 5
SysCont(config-poll-gr)# enable
SysCont(config-poll-gr)# exit
SysCont(config)# exit
```

Related Commands

Command	Description
enable (poll-group)	Starts data collection for a performance data set.
oid	Specifies MIB variables for the system controller to collect.
poll-interval	Changes the interval for data collection by system controller.
shelf-type	Specifies which shelf types the system controller collects data from.
show syscon perfdata	Displays information about performance data collection.
syscon poll-group	Specifies a performance data set for the system controller to collect.
transfer-mode	Specifies the transfer method for collecting performance data from shelves.

shelf-type

To specify which shelf types the system controller collects data from, use the **shelf-type** command in system controller poll-group configuration mode. The **no** form of this command removes the command from the configuration.

shelf-type *sysObjectID*

no shelf-type *sysObjectID*

Syntax Description

sysObjectID	CISCO-PRODUCTS-MIB sysObjectID. This argument can have the following values: • 108—Cisco 7206 • 109—Cisco AS5200 • 125—Cisco 7204 • 162—Cisco AS5300 • 188—Cisco AS5800 Although you can enter other values for this argument, the system controller will only collect data from devices that can be managed by the system controller.

Defaults

The system controller collects data from all discovered shelves.

Command Modes

System controller poll-group configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

If this command is not configured, the system controller will collect data from all known shelves. However, if you configure this command with a particular shelf type, the system controller will only collect data from the specified shelves. To collect data from multiple shelf types, enter this command once for each shelf type.

The **no** form of this command removes the corresponding command from the configuration. If no other **shelf-type** commands remain, the system controller will collect data from all known shelves. If one or more **shelf-type** commands remain in the configuration, the system controller will collect data only from the remaining configured shelf types.

In order to turn off data collection for one shelf when you are currently collecting data from all shelves, enter the **shelf-type** command for each of the remaining shelves.

Examples

The following example collects data from Cisco 7204 routers using the bulk transfer method:

```
SysCont# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
SysCont(config)# syscon poll-group cmlineinfo
SysCont(config-poll-gr)# oid cmLineInfo.1.*
SysCont(config-poll-gr)# oid cmLineInfo.2.*
SysCont(config-poll-gr)# oid cmLineInfo.3.*
SysCont(config-poll-gr)# oid cmLineInfo.4.*
SysCont(config-poll-gr)# transfer-mode bulk
SysCont(config-poll-gr)# shelf-type 125
SysCont(config-poll-gr)# enable
SysCont(config-poll-gr)# exit
SysCont(config)# exit
SysCont#
Jan 23 17:47:05: %SYS-5-CONFIG_I: Configured from console by console
```

Related Commands

Command	Description
enable (poll-group)	Starts data collection for a performance data set.
oid	Specifies MIB variables for the system controller to collect.
poll-interval	Changes the interval for data collection by system controller.
samples	Specifies the maximum number of performance data sets to store on the disk for a poll group.
show syscon perfdata	Displays information about performance data collection.
syscon poll-group	Specifies a performance data set for the system controller to collect.
transfer-mode	Specifies the transfer method for collecting performance data from shelves.

show syscon discover

To display information about discovered shelves, use the **show syscon discover** EXEC command.

show syscon discover [**brief** | **full**]

Syntax Description

brief	(Optional) Displays a list of discovered shelves. This is the default.
full	(Optional) Displays detailed information about discovered shelves.

Defaults

Brief

Command Modes

EXEC

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

The **show syscon discover full** command includes output from the **show syscon perfdata** and **show syscon monitor** commands.

Examples

The following is sample output from the **show syscon discover brief** command:

```
Syscon# show syscon discover brief

Shelf# 3  10.0.1.2 Last update  11:15:29 PST Jan 22 1998
```

Table 109 describes the fields shown in this display.

Table 111

Field	Description
Shelf# 3	The identification number for this shelf.
10.0.1.2	IP address for this shelf.
Last update	Time and date of the last update from the shelf.

The following is sample output from the **show syscon discover full** command:

```
Syscon# show syscon discover full

Shelf# 3  10.0.1.2 Last update  11:16:27 PST Jan 22 1998 type products.108
ifIndex      Type   OperStatus    Speed       Last Changed
      1       1     down             9000       249
      2       1     down             9000       249
      3       1     down             9000       249
      4       1     down             9000       249
      5       1     down             9000       249
      6       1     down             9000       249
      7       1     down             9000       249
      8       1     down             9000       249
      9       1     down             9000       249
     10       1     down             9000       249
     ...

Performance Data Collection:

          Poll        Last     Total     Get    GetBulk  Bulk Xfer
Shelf#    Group       File    Requests Requests Requests  Requests Errors
    2  chassis      886010845     151        0        0      151       0
       popmgmt      886011146    5180      148     5032        0       0


Health monitor process is not running.
```

Table 110 describes the fields shown in this display.

Table 112 show syscon discover full Field Descriptions

Field	Description
Shelf# 3	The identification number for this shelf.
10.0.1.2	IP address for this shelf.
Last update	Time and date of the last update from the shelf.
type products.108	Type of shelf. The value can be one of the following: • 108 - Cisco 7206 • 109 - Cisco AS5200 • 125 - Cisco 7204 • 162 - Cisco AS5300
ifIndex	Interface index.
Type	Type of interface, corresponding to ifType.
OperStatus	Operational status of the interface.
Speed	Speed of the interface.
Last Changed	Value of ifLastChanged.

Table 112 show syscon discover full Field Descriptions (continued)

Field	Description
Performance Data Collection ...	Performance data collection information. The output corresponds to the output of the **show syscon perfdata** command. Refer to the **show syscon perfdata** command for field descriptions.
Health Monitor process...	Current status of the Health Monitor process. The output corresponds to the output of the **show syscon monitor** command. Refer to the **show syscon monitor** command for field descriptions.

Related Commands

Command	Description
show syscon monitor	Displays information about monitored shelf attributes.
show syscon perfdata	Displays information about performance data collection.
show syscon sdp (system controller)	Displays information about the Shelf Discovery Protocol.
syscon community	Sets the SNMP community string the system controller uses to communicate with its managed shelves.
syscon password	Sets the password used by the system controller to communicate with its managed shelves.

show syscon mibpoll

To display information about managed shelves contained in the Health Monitor MIB, use the **show syscon mibpoll** EXEC command.

show syscon mibpoll

Syntax Description

This command has no arguments or keywords.

Command Modes

EXEC

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

This command displays the shelf statistics contained in the Health Monitor MIB on the system controller. The system controller collects this information from its managed shelves.

Examples

The following is sample output from the **show syscon mibpoll** command:

```
Router# show syscon mibpoll

Healthmon MIB count entry status:

Shelf ID 1 MIB entries last update 18:22:06 EDT Jan 12 1998.
T1E1 Lines      DS0s            Modems
Up      Down    Active  Total   Total   Inuse   Unavailable
1       1       23      46      24      0       0

IO Mem          CPU     EgressPort      EgressPort
Used    Free    Busy1   InOctetUtil     OutOctetUtil
1378476 7010132 20      0               0


Healthmon MIB summary of count entry status:

Total   Total           Total           Total
Shelves T1E1 Lines      DS0s            Modems
        Up      Down    Active  Total   Total   Inuse   Unavailable
1       1       1       23      46      24      0       0
```

Table 111 describes the fields shown in this display.

Table 113 show syscon mibpoll Field Descriptions

Field	Description
Shelf ID	Shelf ID of the managed shelf.
last update	Last time the system controller polled these MIB variables on the managed shelf.

Table 113 show syscon mibpoll Field Descriptions (continued)

Field	Description
Up	Number of TI/EI lines up.
Down	Number of TI/EI lines with operational status down and administrative status up.
DSOs	
Active	Number of active DS0's.
Total	Number of DS0's.
Modems	
Total	Number of installed modems.
Inuse	Number of modems being used.
Unavailable	Number of modems that are not being used but cannot accept calls.
IO Mem	
Used	Number of bytes of IO memory that are currently in use by applications on the managed device.
Free	Number of bytes of IO memory that are currently available to use on the managed device.
CPU Busy1	Exponentially decayed moving average of the CPU busy percentage.
EgressPort InOctetUtil	Percent utilization of total number of octets received on all the active egress interfaces, including framing characters. A port is considered to be an egress port if the port speed is greater than 1544000 bps.
EgressPort OutOctetUtil	Percent utilization of the total number of octets transmitted out on all the active egress interfaces, including framing characters. A port is considered to be an egress port if the port speed is greater than 1544000 bps.
Total Shelves	Number of shelves polled.
Total T1E1 Lines	
Up	Total number of TI/EI lines up in all managed shelves.
Down	Total number of TI/EI lines with operational status down and administrative status up in all managed shelves.
Total DSOs	
Active	Total number of active DS0's in all managed shelves.
Total	Total number of DS0's in all managed shelves.
Total Modems	
Total	Total number of installed modems in all managed shelves.
Inuse	Total number of modems being used in all managed shelves.
Unavailable	Total number of modems unavailable for use.

Related Commands

Command	Description
show syscon monitor	Displays information about monitored shelf attributes.
syscon monitor	Specifies attributes for the Health Monitor on the system controller to monitor.
syscon monitor traps	Enables Health Monitor MIB traps on the system controller.

show syscon monitor

To display information about monitored shelf attributes, use the **show syscon monitor** EXEC command.

show syscon monitor

Syntax Description

This command has no arguments or keywords.

Command Modes

EXEC

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

This command is useful in determining the current status of monitored shelves.

Examples

The following example is sample output from the **show syscon monitor** command. The first group of lines show attributes being monitored separately on each shelf. The second group of lines show monitored attributes for all shelves combined.

```
Router# show syscon monitor

Health Monitor setup status on the shel(f,ves):
Shelf#  Shelf IP Address        Monitoring Type Threshold Value Status
    1   172.27.32.173           IO-Mem            11             Active

Health Monitor setup status on the system controller:
Monitoring Type Threshold Value Status
 Trunk            12             Active
 Modem            50             Active
```

Table 112 describes the fields shown in this display.

Table 114 show syscon monitor Field Descriptions

Field	Description
Shelf#	Shelf ID of the managed shelf.
Shelf IP Address	IP address of the managed shelf.
Monitoring Type	Attribute being monitored, as set by the **syscon monitor** command.

Table 114 show syscon monitor Field Descriptions (continued)

Field	Description
Threshold Value	Threshold value for the attribute. If the attribute exceeds this value, the shelf will send a trap to the system controller for individually monitored attributes, or the system controller will generate a trap for combined attributes.
Status	Current status of threshold monitoring on the managed shelf.

Related Commands

Command	Description
show syscon mibpoll	Displays information about managed shelves contained in the Health Monitor MIB.
syscon monitor	Specifies attributes for the Health Monitor on the system controller to monitor.
syscon monitor traps	Enables Health Monitor MIB traps on the system controller.

show syscon perfdata

To display information about performance data collection, use the **show syscon perfdata** EXEC command.

show syscon perfdata

Syntax Description

This command has no arguments or keywords.

Command Modes

EXEC

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

The output from this command also appears in the **show syscon discover full** command output.

Examples

The following is sample output from the **show syscon perfdata** command:

```
SysCont# show syscon perfdata

Performance Data Collection:

          Poll        Last     Total     Get    GetBulk  Bulk Xfer
Shelf#    Group       File    Requests Requests Requests Requests   Errors
    2  chassis      886010845     151        0        0      151       0
       popmgmt      886011146    5180      148     5032        0       0
```

Table 113 describes the fields shown in this display.

Table 115 show syscon perfdata Field Descriptions

Field	Description
Shelf#	Shelf ID.
Poll Group	Poll group.
Last File	UNIX time stamp for last performance data collection file.
Total Requests	Total number of sets of requested information.
Get Requests	Number of get requests sent by the system controller.
GetBulk Requests	Number of getbulk requests sent by the system controller.
Bulk Xfer Requests	Number of bulk transfer requests sent by the system controller.
Errors	Number of errors in transferring information.

Related Commands

Command	Description
enable (poll-group)	Starts data collection for a performance data set.
oid	Specifies MIB variables for the system controller to collect.
poll-interval	Changes the interval for data collection by system controller.
samples	Specifies the maximum number of performance data sets to store on the disk for a poll group.
shelf-type	Specifies which shelf types the system controller collects data from.
syscon poll-group	Specifies a performance data set for the system controller to collect.
transfer-mode	Specifies the transfer method for collecting performance data from shelves.

show syscon sdp (managed shelf)

To display information about the Shelf Discovery Protocol, use the **show syscon sdp** EXEC command.

show syscon sdp

Syntax Description

This command has no arguments or keywords.

Command Modes

EXEC

Command History

Release	Modification
11.3 AA	This command was introduced.

Examples

The following is sample output from the **show syscon sdp** command:

```
Shelf# show syscon sdp

Current time 10:46:32 PST Jan 28 1998, system controller 172.23.66.100
Last hello packet received at 10:45:38 PST Jan 28 1998
11773 Total SDP packets
    0 packets with bad MD5 hash
    5884 Hello packets received
    5889 Hello packets sent
    0 Command packets received
    0 Command packets sent
```

Table 112 describes the fields shown in the sample display.

Table 116 show syscon sdp Field Descriptions

Field	Description
Current time	Current time and date.
system controller	IP address of the system controller.
Last hello packet received	Time and date the last Hello packet from the system controller was received by the shelf.
Total SDP packets	Total number of SDP packets sent or received by the shelf.
packets with bad MD5 hash	Number of packets with a bad MD5 hash.
Hello packets received	Number of Hello packets received by the shelf from the system controller.
Hello packets sent	Number of Hello packets sent from the shelf to the system controller.
Command packets received	Number of packets containing commands received by the shelf.
Command packets sent	Number of commands sent by the shelf.

Related Commands

Command	Description
syscon address	Specifies the system controller for a managed shelf.
syscon source-interface	Specifies the interface to use for the source address in SDP packets.

show syscon sdp (system controller)

To display information about the Shelf Discovery Protocol, use the **show syscon sdp** EXEC command.

show syscon sdp

Syntax Description

This command has no arguments or keywords.

Command Modes

EXEC

Command History

Release	Modification
11.3 AA	This command was introduced.

Examples

The following is sample output from the **show syscon sdp** command:

```
Syscon# show syscon sdp

3006 Total SDP packets
    6 Bad packets with bad MD5 hash
    1503 Hello packets received
    1497 Hello packets sent
    0 Command packets received
    0 Command packets sent
```

Table 113 describes the fields shown in the example.

Table 117 show syscon sdp Field Descriptions

Field	Description
Total SDP packets	Total number of SDP packets sent or received by the system controller.
Bad packets with bad MD5 hash	Number of packets with a bad MD5 hash.
Hello packets received	Number of Hello packets received by the system controller from managed shelves.
Hello packets sent	Number of Hello packets sent from the system controller to managed shelves.
Command packets received	Number of packets containing commands received by the system controller.
Command packets sent	Number of commands sent by the system controller.

Related Commands

Command	Description
show syscon discover	Displays information about discovered shelves.
syscon community	Sets the SNMP community string the system controller uses to communicate with its managed shelves.
syscon password	Sets the password used by the system controller to communicate with its managed shelves.

show syslog-server

To display certain syslog messages in the syslog history table, use the **show syslog-server** EXEC command.

show syslog-server [**last** *number* | **since** [**date** *date*] *hh*:*mm*:*ss*] [**source** *ip-address*]

Syntax Description

last	(Optional) Displays the newest syslog messages.
number	(Optional) Number of syslog messages to display. You can display up to the last 500 messages.
since	(Optional) Displays messages after the specified time.
date *date*	(Optional) Displays messages starting on this date. The format is either *month day year* or *day month year*. If you do not specify a date, only messages from the current date are displayed.
hh:*mm*:*ss*	(Optional) Displays messages starting at this time.
source *ip-address*	(Optional) Displays syslog messages from the specified host.

Command Modes

EXEC

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

Use this command to display syslog messages the system controller has stored in its logging history subfiles. If you do not specify any filter options, all of the messages in all of the subfiles are displayed. When you specify multiple filters for messages, only messages that meet all of the criteria are displayed.

Examples

The following example displays the last three messages the system controller received:

```
Router# show syslog-server last 3

Jan  7 21:44:09 [172.23.3.200] %CI-3-BLOWER: ps2 fan failure
Jan  7 21:50:09 [172.23.3.200] %CI-3-PSFAIL: Power supply 2 failure
Jan  7 21:50:10 [172.23.3.200] %CI-3-BLOWER: ps2 fan failure
```

The following example displays the last message from the host at 172.23.3.200:

```
Router# show syslog-server source 172.23.3.200 last 1

Jan  7 21:50:10 [172.23.3.200] %CI-3-BLOWER: ps2 fan failure
```

The following example describes the messages generated since 9:50 p.m. on January 7, 1998:

```
Router# show syslog-server since date 7 jan 1998 21:50:00

Jan  7 21:50:09 [172.23.3.200] %CI-3-PSFAIL: Power supply 2 failure
Jan  7 21:50:10 [172.23.3.200] %CI-3-BLOWER: ps2 fan failure
```

Table 116 explains the fields shown in these examples, using the first line from the first example for illustrative purposes.

Table 118 show syslog-server Field Descriptions

Field	Description
Jan 7	Date of the syslog message.
21:44:09	Time the syslog message was generated.
[172.23.3.200]	IP address of the host generating the syslog message.
%CI-3-BLOWER	Error message.
ps2 fan failure	Message Text.

Related Commands

Command	Description
logging syslog-server	Creates subfiles for syslog-server logging.

syscon address

To specify the system controller for a managed shelf, use the **syscon address** global configuration command. Use the **no** form of this command to stop the management of the shelf by the system controller.

syscon address *ip-address password*

no syscon address

Syntax Description

ip-address	IP address of the system controller.
password	Password string.

Defaults

No system controller is specified.

Command Modes

Global configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

This command is required in order for the shelf to be managed by the system controller. The password must match the password configured on the system controller through the **syscon password** command.

Examples

The following example configures a shelf to be managed by a system controller at 10.2.3.4 using the password green:

```
syscon address 10.2.3.4 green
```

Related Commands

Command	Description
show syscon sdp (managed shelf)	Displays information about the Shelf Discovery Protocol.
syscon source-interface	Specifies the interface to use for the source address in SDP packets.

syscon community

To set the Simple Network Management Protocol (SNMP) community string the system controller uses to communicate with its managed shelves, use the **syscon community** global configuration command. The **no** form of this command sets the community string to public.

syscon community *string*

no syscon community

Syntax Description

string	SNMP community string.

Defaults

The community string is private.

Command Modes

Global configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

This command is required in order to configure the system controller. The system controller automatically configures its managed shelves to accept this SNMP community string.

Examples

The following example configures the system controller to use the community string purple when communicating with managed shelves using SNMP. The managed shelves will automatically be configured to accept the community string of purple from the system controller.

```
syscon community purple
```

Related Commands

Command	Description
show syscon discover	Displays information about discovered shelves.
show syscon sdp (system controller)	Displays information about the Shelf Discovery Protocol.
syscon password	Sets the password used by the system controller to communicate with its managed shelves.

syscon monitor

To specify attributes for the Health Monitor on the system controller to monitor, use the **syscon monitor** global configuration command. The **no** form of this command disables monitoring for the specified attribute.

syscon monitor {**io-mem** *percent* | **modem** *percent* | **trunk** *percent*}

no syscon monitor [**io-mem** | **modem** | **trunk**]

Syntax Description

io-mem	Monitors shelf I/O memory utilization.
modem	Monitors total modem utilization for all shelves combined.
trunk	Monitors total DS0 utilization for all shelves combined.
percent	Percent utilization value for triggering traps.

Defaults

The system controller does not monitor any attributes.

Command Modes

Global configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

When you configure the **syscon monitor** command on the system controller, the system controller automatically configures each managed shelf to generate traps. The system controller will use SNMP to configure the following:

- Expressions in the CISCO-EXPRESSION-MIB to calculate the attributes
- RMON alarms to poll the attributes at specific intervals
- RMON events to send traps to the system controller when an attribute exceeds its specified threshold

For attributes that are total percentages for all shelves combined, the system controller uses the information in the Health Monitor MIB to calculate the current total percentage. For example, the system controller calculates the total modem usage percentage from the individual usage values in the Health Monitor MIB.

Enter this command once for each attribute you wish to monitor.

Examples

The following example configures the managed shelves to monitor I/O memory and shelf utilization. If I/O memory utilization exceeds 80 percent or modem utilization exceeds 70 percent, the shelf sends a trap to the system controller.

```
syscon password blue
syscon community public
syscon monitor io-mem 80
syscon monitor modem 70
snmp-server manager
```

Related Commands

Command	Description
syscon monitor	Specifies attributes for the Health Monitor on the system controller to monitor.
show syscon monitor	Displays information about monitored shelf attributes.
syscon monitor traps	Enables Health Monitor MIB traps on the system controller.

syscon monitor traps

To enable Health Monitor MIB traps on the system controller, use the **syscon monitor traps** global configuration command. The **no** form of this command disables Health Monitor MIB traps.

syscon monitor traps

no syscon monitor traps

Syntax Description

This command has no arguments or keywords.

Defaults

The system controller does not send traps.

Command Modes

Global configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

This command enables the system controller to send Health Monitor MIB traps to network management stations. When the system controller receives a threshold trap from one of its managed shelves or generates a Health Monitor trap itself, it will forward the trap on to the management stations.

The traps are sent to the SNMP managers as specified by the **snmp-server hosts** command. You must configure this command in order to send traps from the system controller. In addition, enable trap generation using the **snmp-server enable traps** command.

Use the **syscon monitor** command to specify which threshold traps to configure on the shelves. If you do not specify enabled traps through the **syscon monitor** command, the system controller will not receive any traps from its managed shelves.

Examples

The following example configures the router to send traps to the host myhost.cisco.com using the community string public. The system controller will generate modem utilization traps if the total modem utilization exceeds 70 percent.

```
syscon password blue
syscon community public
syscon monitor modem 70
syscon monitor traps
snmp-server host myhost.cisco.com public
snmp-server enable traps
snmp-server manager
```

Related Commands

Command	Description
show syscon monitor	Displays information about monitored shelf attributes.
snmp-server enable traps	Enables a router to send SNMP traps.
snmp-server host	Specifies the recipient of an SNMP notification operation.
syscon monitor	Specifies attributes for the Health Monitor on the system controller to monitor.

syscon password

To set the password used by the system controller to communicate with its managed shelves, use the **syscon password** global configuration command. This command also configures the device as a system controller. The **no** form of this command deletes the password and disables the system controller.

syscon password *string*

no syscon password

Syntax Description

string	Password string.

Defaults

No password is set.

Command Modes

Global configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

This command is required to use any of the system controller features. The password must match the password specified on the shelves through the **syscon address** command. The managed shelves use this password to authenticate messages from the system controller.

Examples

The following example configures the system controller to use the password yellow to communicate with its managed shelves:

```
syscon password yellow
```

Related Commands

Command	Description
show syscon discover	Displays information about discovered shelves.
show syscon sdp (system controller)	Displays information about the Shelf Discovery Protocol.
syscon community	Sets the SNMP community string the system controller uses to communicate with its managed shelves.

syscon poll-group

To specify a performance data set for the system controller to collect, use the **syscon poll-group** global configuration command. The **no** form of this command stops data collection and removes the poll group from the configuration.

syscon poll-group *name*

no syscon poll-group *name*

Syntax Description

name	Name of this performance data set.

Defaults

The system controller collects no performance data.

Command Modes

Global configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

Use this command on the system controller to configure performance data collection. The system controller periodically collects the specified MIB variables from managed shelves and stores the data on a disk local to the system controller. A new file will be created each time the system controller collects data from a shelf.

This command puts the router into poll-group configuration mode. You can enter any of the following commands:

- **enable (poll-group)**
- **oid**
- **poll-interval**
- **samples**
- **shelf-type**
- **transfer-mode**

You must specify the desired Object IDs and the transfer mode. If you do not specify the **shelf-type** command, the system controller collects data from all discovered shelves. The default data collection interval is 10 minutes. The default maximum number of samples is 10. To begin the data collection process, configure the **enable** command.

Examples

The following example configures the poll group cmlineinfo:

```
SysCont# configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
SysCont(config)# syscon poll-group cmlineinfo
SysCont(config-poll-gr)# oid cmLineInfo.1.*
SysCont(config-poll-gr)# oid cmLineInfo.2.*
SysCont(config-poll-gr)# oid cmLineInfo.3.*
SysCont(config-poll-gr)# oid cmLineInfo.4.*
SysCont(config-poll-gr)# transfer-mode bulk
SysCont(config-poll-gr)# enable
SysCont(config-poll-gr)# exit
SysCont(config)# exit
SysCont#
Jan 23 17:47:05: %SYS-5-CONFIG_I: Configured from console by console
```

Related Commands

Command	Description
enable (poll-group)	Starts data collection for a performance data set.
oid	Specifies MIB variables for the system controller to collect.
poll-interval	Changes the interval for data collection by system controller.
samples	Specifies the maximum number of performance data sets to store on the disk for a poll group.
shelf-type	Specifies which shelf types the system controller collects data from.
show syscon perfdata	Displays information about performance data collection.
transfer-mode	Specifies the transfer method for collecting performance data from shelves.

syscon shelf-id

To specify a shelf ID for a managed shelf, use the **syscon shelf-id** global configuration command. The **no** form of this command removes the shelf ID.

syscon shelf-id *number*

no syscon shelf-id

Syntax Description

number	Shelf ID. The value ranges from 0 to 9999.

Defaults

No shelf ID is specified.

Command Modes

Global configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

Use this command to specify a shelf ID for a managed shelf. Some platforms, such as the Cisco AS5800, use other commands to assign a shelf ID. In these situations, do not specify a shelf ID with the **syscon shelf-id** command. Use the platform-specific command instead.

Examples

The following example configures a shelf ID of 5 for the managed shelf:

```
syscon shelf-id 5
```

Related Commands

Command	Description
show syscon sdp (managed shelf)	Displays information about the Shelf Discovery Protocol.
syscon address	Specifies the system controller for a managed shelf.

syscon source-interface

To specify the interface to use for the source address in SDP packets, use the **syscon source-interface** global configuration command. Use the **no** form of this command to return to the default source interface for a packet, the interface that sent the packet from the shelf.

syscon source-interface *interface*

no syscon source-interface

Syntax Description

interface	Type and number of the interface to use for the source IP address.

Defaults

SDP packets use the IP address of the output interface.

Command Modes

Global configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

Use this command to ensure that all SDP packets sent by the managed shelf have the same source IP address.

Examples

The following example configures a shelf to use the IP address of the Ethernet99/1/0 interface:

```
syscon source-address Ethernet99/1/0
```

Related Commands

Command	Description
show syscon sdp (managed shelf)	Displays information about the Shelf Discovery Protocol.
syscon shelf-id	Specifies a shelf ID for a managed shelf.

transfer-mode

To specify the transfer method for collecting performance data from shelves, use the **transfer-mode** poll-group configuration command.

transfer-mode {**bulk** | **poll**}

Syntax Description

bulk	Bulk transfer (FTP).
poll	SNMP polling.

Defaults

The system controller does not collect data.

Command Modes

Poll-group configuration

Command History

Release	Modification
11.3 AA	This command was introduced.

Usage Guidelines

Use this command to specify which method the system controller uses to collect data from managed shelves. You must specify a transfer mode in order to collect performance data.

If you are collecting a large amount of data, use the bulk transfer method to avoid sending large numbers of SNMP packets. The bulk transfer method has less of an impact on the managed shelves and creates less network traffic than the poll transfer method.

The two methods generate different data formats. You may want to use the same transfer method for all your poll groups so that all the data is in the same format. Refer to the "Examples" section for examples of the two formats.

Bulk file formats have the following characteristics:

- Tables are always written in lexical order.
- MIB objects with a SYNTAX of OCTET STRING are stored as octet strings, not as ASCII characters.

Refer to the CISCO-BULK-FILE-MIB for more information on the format of the bulk files.

Examples

The following example configures the system controller to use the SNMP polling to collect the data:

```
syscon poll-group busyPerpoll
 oid lsystem.56.0
 oid lsystem.57.0
 oid lsystem.58.0
 oid interfaces.2.*
 transfer-mode poll
 enable
```

The following is a sample data collection file from the configuration:

```
sysUpTime.0
lsystem.56.0
lsystem.57.0
lsystem.58.0
interfaces.2

sysUpTime.0 1164196 lsystem.56.0 0 lsystem.57.0 0 lsystem.58.0 1 ifEntry.1.1 1
ifEntry.1.2 2 ifEntry.1.3 3 ifEntry.1.4 4 ifEntry.1.5 5 ifEntry.1.6 6 ifEntry.1.7 7
ifEntry.1.8 8 ifEntry.1.9 9 ifEntry.1.10 10 ifEntry.2.1 FastEthernet0/0 ifEntry.2.2
Ethernet2/0 ifEntry.2.3 Ethernet2/1 ifEntry.2.4 Ethernet2/2 ifEntry.2.5 Ethernet2/3
ifEntry.2.6 Loopback1 ifEntry.2.7 Tunnel8 ifEntry.2.8 Tunnel10 ifEntry.2.9 Dialer1
ifEntry.2.10 Lex30 ifEntry.3.1 6 ifEntry.3.2 6 ifEntry.3.3 6 ifEntry.3.4 6 ifEntry.3.5 6
ifEntry.3.6 24 ifEntry.3.7 1 ifEntry.3.8 1 ifEntry.3.9 22 ifEntry.3.10 6 ifEntry.4.1 1500
ifEntry.4.2 1500 ifEntry.4.3 1500 ifEntry.4.4 1500 ifEntry.4.5 1500 ifEntry.4.6 1514
ifEntry.4.7 1514 ifEntry.4.8 1514 ifEntry.4.9 1500 ifEntry.4.10 1500 ifEntry.5.1
100000000 ifEntry.5.2 10000000 ifEntry.5.3 10000000 ifEntry.5.4 10000000 ifEntry.5.5
10000000 ifEntry.5.6 4294967295 ifEntry.5.7 9000 ifEntry.5.8 9000 ifEntry.5.9 56000
ifEntry.5.10 10000000 ifEntry.6.1 ifEntry.6.1 ifEntry.6.2 ifE!
 ntry.6.2 ifEntry.6.3 ifEntry.6.3 ifEntry.6.4 ifEntry.6.4 ifEntry.6.5 ifEntry.6.5
ifEntry.6.6  ifEntry.6.7  ifEntry.6.8  ifEntry.6.9  ifEntry.6.10  ifEntry.7.1 2
ifEntry.7.2 1 ifEntry.7.3 2 ifEntry.7.4 2 ifEntry.7.5 2 ifEntry.7.6 1 ifEntry.7.7 1
ifEntry.7.8 1 ifEntry.7.9 1 ifEntry.7.10 1 ifEntry.8.1 2 ifEntry.8.2 1 ifEntry.8.3 2
ifEntry.8.4 2 ifEntry.8.5 2 ifEntry.8.6 1 ifEntry.8.7 2 ifEntry.8.8 2 ifEntry.8.9 5
ifEntry.8.10 2 ifEntry.9.1 817 ifEntry.9.2 817 ifEntry.9.3 817 ifEntry.9.4 817
ifEntry.9.5 817 ifEntry.9.6 0 ifEntry.9.7 0 ifEntry.9.8 0 ifEntry.9.9 0 ifEntry.9.10 758
ifEntry.10.1 0 ifEntry.10.2 575553 ifEntry.10.3 0 ifEntry.10.4 0 ifEntry.10.5 0
ifEntry.10.6 0 ifEntry.10.7 0 ifEntry.10.8 0 ifEntry.10.9 0 ifEntry.10.10 0 ifEntry.11.1
0 ifEntry.11.2 5729 ifEntry.11.3 0 ifEntry.11.4 0 ifEntry.11.5 0 ifEntry.11.6 0
ifEntry.11.7 0 ifEntry.11.8 0 ifEntry.11.9 0 ifEntry.11.10 0 ifEntry.12.1 0 ifEntry.12.2
555 ifEntry.12.3 0 ifEntry.12.4 0 ifEntry.12.5 0 ifEntry.12.6 0 ifEn!
 try.12.7 0 ifEntry.12.8 0 ifEntry.12.9 0 ifEntry.12.10 0 ifEntry.13.1

0 ifEntry.13.2 0 ifEntry.13.3 0 ifEntry.13.4 0 ifEntry.13.5 0 ifEntry.13.6 0 ifEntry.13.7
0 ifEntry.13.8 0 ifEntry.13.9 0 ifEntry.13.10 0 ifEntry.14.1 0 ifEntry.14.2 0
ifEntry.14.3 0 ifEntry.14.4 0 ifEntry.14.5 0 ifEntry.14.6 0 ifEntry.14.7 0 ifEntry.14.8 0
ifEntry.14.9 0 ifEntry.14.10 0 ifEntry.15.1 0 ifEntry.15.2 118 ifEntry.15.3 0
ifEntry.15.4 0 ifEntry.15.5 0 ifEntry.15.6 0 ifEntry.15.7 0 ifEntry.15.8 0 ifEntry.15.9 0
ifEntry.15.10 0 ifEntry.16.1 0 ifEntry.16.2 861338 ifEntry.16.3 0 ifEntry.16.4 0
ifEntry.16.5 0 ifEntry.16.6 0 ifEntry.16.7 0 ifEntry.16.8 0 ifEntry.16.9 0 ifEntry.16.10
0 ifEntry.17.1 0 ifEntry.17.2 7903 ifEntry.17.3 0 ifEntry.17.4 0 ifEntry.17.5 0
ifEntry.17.6 0 ifEntry.17.7 0 ifEntry.17.8 0 ifEntry.17.9 0 ifEntry.17.10 0 ifEntry.18.1
0 ifEntry.18.2 229 ifEntry.18.3 0 ifEntry.18.4 0 ifEntry.18.5 0 ifEntry.18.6 0
ifEntry.18.7 0 ifEntry.18.8 0 ifEntry.18.9 0 ifEntry.18.10 0 ifEntry.19.1 0 ifEntry.19.2
0 ifEntry.19.3 0 ifEntry.19.4 0 ifEntry.19.5 0 ifEntry.1!
 9.6 0 ifEntry.19.7 0 ifEntry.19.8 0 ifEntry.19.9 0 ifEntry.19.10 0 ifEntry.20.1 0
ifEntry.20.2 0 ifEntry.20.3 0 ifEntry.20.4 0 ifEntry.20.5 0 ifEntry.20.6 0 ifEntry.20.7 0
ifEntry.20.8 0 ifEntry.20.9 0 ifEntry.20.10 0 ifEntry.21.1 0 ifEntry.21.2 0 ifEntry.21.3
0 ifEntry.21.4 0 ifEntry.21.5 0 ifEntry.21.6 0 ifEntry.21.7 0 ifEntry.21.8 0 ifEntry.21.9
0 ifEntry.21.10 0 ifEntry.22.1 ccitt.0 ifEntry.22.2 ccitt.0 ifEntry.22.3 ccitt.0
ifEntry.22.4 ccitt.0 ifEntry.22.5 ccitt.0 ifEntry.22.6 ccitt.0 ifEntry.22.7 ccitt.0
ifEntry.22.8 ccitt.0 ifEntry.22.9 ccitt.0 ifEntry.22.10 ccitt.0
```

The following example configures the system controller to use the bulk transfer method to collect the same data:

```
syscon poll-group busyPerpoll
 oid lsystem.56.0
 oid lsystem.57.0
 oid lsystem.58.0
 oid interfaces.2.*
 transfer-mode bulk
 enable
```

The following is a sample data collection file from the configuration:

```
object 2.1.1.3.0 1188306
object 4.1.9.2.1.56.0 2
object 4.1.9.2.1.57.0 0
object 4.1.9.2.1.58.0 0
prefix 1.3.6.1.2.1.2.2.1
table 22 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
row 1 1 4661737445746865726E6574302F30 6 1500 100000000 00602F861100 2 2 817 0 0 0 0 0 0
0 0 0 0 0 0 0.0
row 2 2 45746865726E6574322F30 6 1500 10000000 00602F861138 1 1 817 589642 5873 559 0 0
118 882201 8083 233 0 0 0 0.0
row 3 3 45746865726E6574322F31 6 1500 10000000 00602F861139 2 2 817 0 0 0 0 0 0 0 0 0 0
0 0.0
row 4 4 45746865726E6574322F32 6 1500 10000000 00602F86113A 2 2 817 0 0 0 0 0 0 0 0 0 0
0 0.0
row 5 5 45746865726E6574322F33 6 1500 10000000 00602F86113B 2 2 817 0 0 0 0 0 0 0 0 0 0
0 0.0
row 6 6 4C6F6F706261636B31 24 1514 -1  1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0.0
row 7 7 54756E6E656C38 1 1514 9000  1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0.0
row 8 8 54756E6E656C3130 1 1514 9000  1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0.0
row 9 9 4469616C657231 22 1500 56000  1 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0.0
row 10 10 4C65783330 6 1500 10000000  1 2 758 0 0 0 0 0 0 0 0 0 0 0 0 0.0
```

Related Commands

Command	Description
enable (poll-group configuration)	Starts data collection for a performance data set.
oid	Specifies MIB variables for the system controller to collect.
poll-interval	Changes the interval for data collection by system controller.
samples	Specifies the maximum number of performance data sets to store on the disk for a poll group.
shelf-type	Specifies which shelf types the system controller collects data from.
show syscon perfdata	Displays information about performance data collection.