Cisco IOS Basic System Management Command Reference

C O N T E N T S

A through M Commands

exception memory ignore overflow,

absolute

To specify an absolute time

Usage Guidelines

buffer-length

To specify the maximum

A lower buffer-length value should be used with caution. If all the Network Management (NM) and WAN interface card (WIC) slots in the router are filled with async cards, and each of the

buffers

To make adjustments to initial public buffer pool settings and to the limits

Table 1: Buffer Sizes for RADIUS Authentication

buffers huge size

To dyn amically

buffers tune automatic

To enable automatic tuning of buf

calendar set

To manually set the hardware clock (calendar), use one of the

Related Commands

clear platform hardware capacity rewrite-engine counter

To clear the packet drop and performance counters of the central rewrite engine on supervisors and line cards, use the **clear platform hardware capacity rewrite-engine counter** command

clock calendar-valid

clock read-calendar

To

clock save interval

Saving the time at

clock set
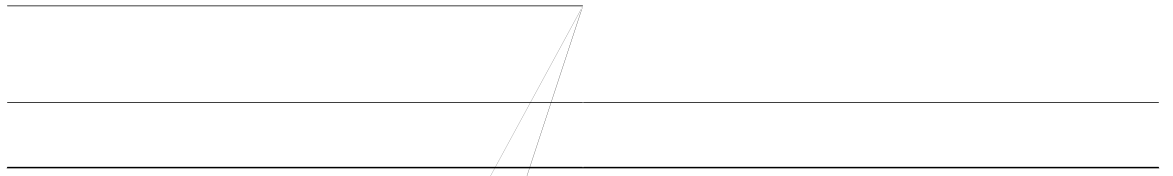
To

Related Commands

clock summer-time

	(Optional) End day of the week (Sunday, M

clock timezone

To set the

exception core-file

T

Command History

exception crashinfo buffersize

To change the size of the buffer used for crashinfo files, use the **exception crashinfo buffersize**command

Examples

exception crashinfo dump

To specify the type of output

Usage Guidelines A benefit for using the **exception crashinfo dump** command is that it allows users to customize the crashinfo file to contain information that is relevant to their

exception crashinfo maximum files

To enable a Cisco device to automatically delete old crashinfo files to help create space for writing the new crashinfo files when a system crashes, use the **exception crashinfo maximum files** command in global configuration mode. To disable automatic deletion of crashinfo files, use the **no** form of this command.

exception crashinfo maximum files *file-numbers*

no exception crashinfo maximum files *file-numbers*

Syntax Description

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Command	Description
	Changes the size of the crashinfo buffer.

exception data-corruption

To manage data error

exception delay-dump

To pause or delay the dump of data error exceptions to the host, use the **exception delay-dump**command in global configuration mode. To disable the delay in the dump o

Þ~|\æãÇ´~^à⇔&DÀ **kr hvr**
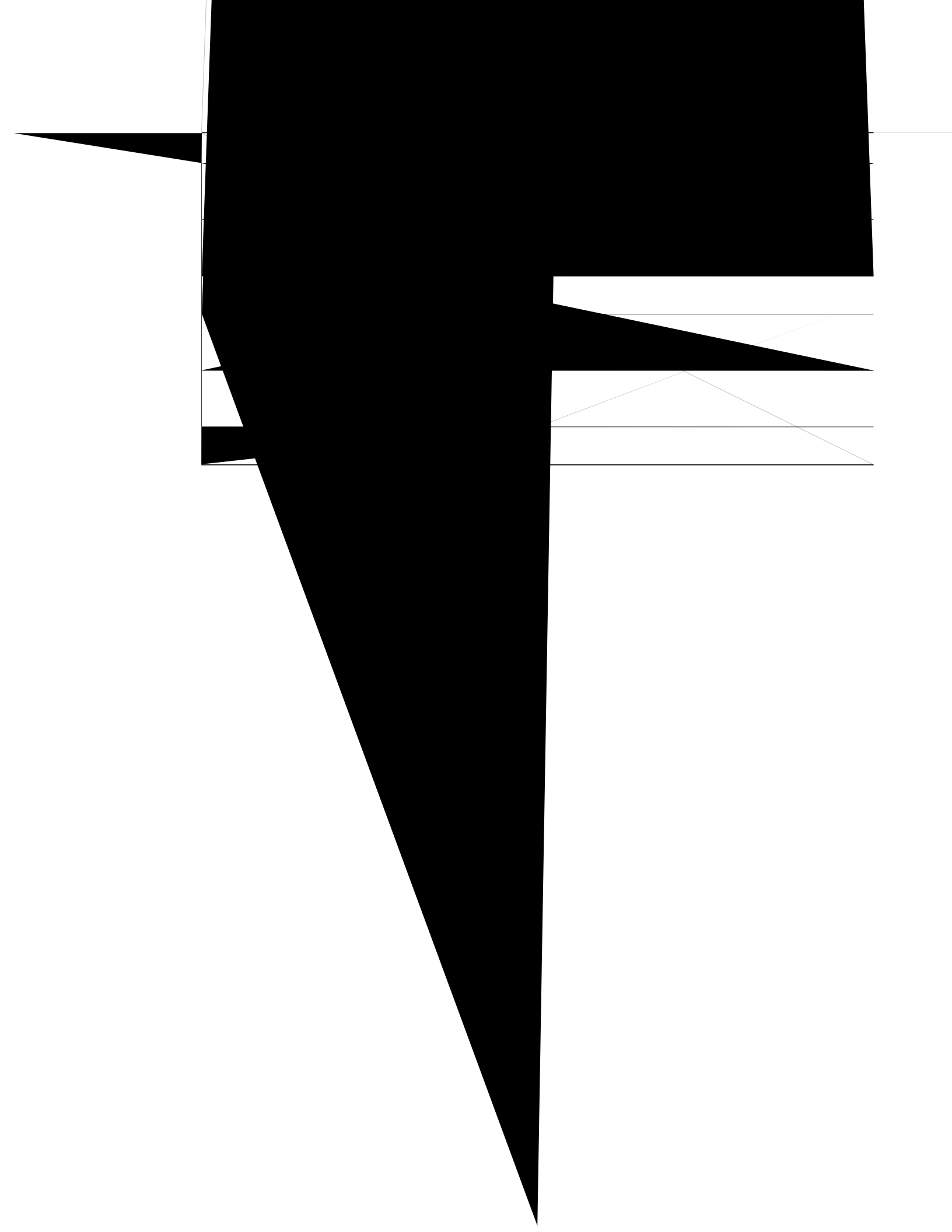
exception linecard

If

exception memory

To set free memory and memory block size

Global configuration (config)

exception memory ignore overflow

To configure the

is required more often than the configured

exception protocol

To configure the protocol used for core dumps, use the **exception protocol** command in global configuration mode. To configure the router to use the default protocol, use the **no**form of this command.

exception protocol {**ftp| rcp| tftp**}

no exception protocol

ftp	Uses FTP for core dumps.
rcp	Uses rcp for core dumps.
tftp	Uses TFTP for core dumps. This is the default.

Command Default

TFTP

Command Modes

Global

Þ~|\æãÇ´~^à⇔&DÀ **gzegrvkqp rtqvqeqn hvr**

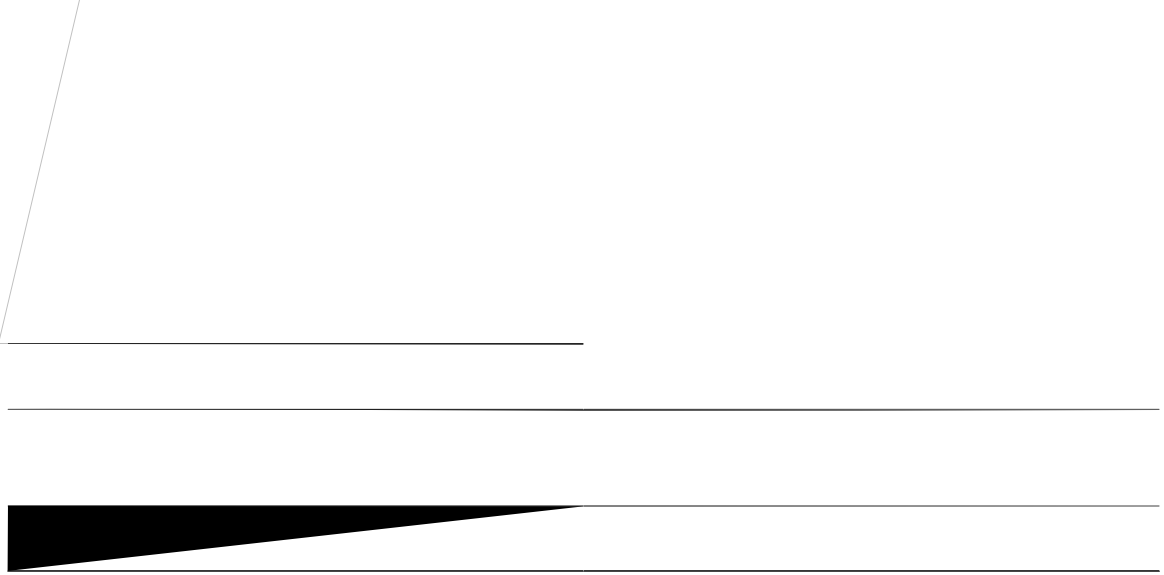Þ~|\æãÇ´~^à⇔&DÀ **gzegrvkqp**

exception region-size

To specify

exception spurious-interrupt

To configure the router to create a core dump and reload after a specified number of spurious interrupts, use the exception

The following example shows how to enable continuous event

monitor event-trace cpu-report (global)

To monitor the collection of CPU report traces, use the **monitor event-trace cpu-report**command in global configuration mode.

monitor event-trace cpu-report {**disable**| **dump-file** *location*| **enable**| **size**| **stacktrace**

The following example shows how to disable the event tracing information:

```
Þ~|\æãÀ oqpkvqt gxgpv/vtceg erw/tgrqtv fkucdng
```

The following example shows how to first clear the event tracing and then trace the call stacks at the tracepoints 4:

```
Þ~|\æãÀ oqpkvqt gxgpv/vtceg erw/tgrqtv
```

547m100WF0 10 Tfl 0 1 2064 629092 Tm49 547m100WF0 10 Tf000W9 545810

Related Commands
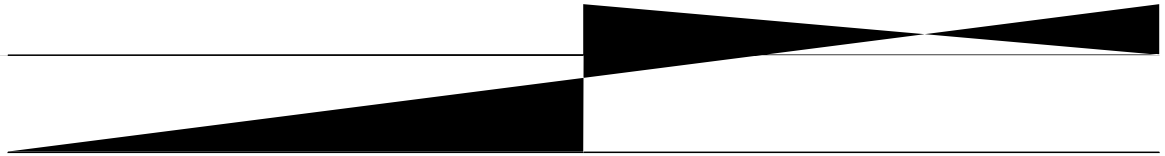
ntp update-calendar

ntp access-group

Command History

If you do not specify the

ntp allow mode private

■ _____

Effective

Y
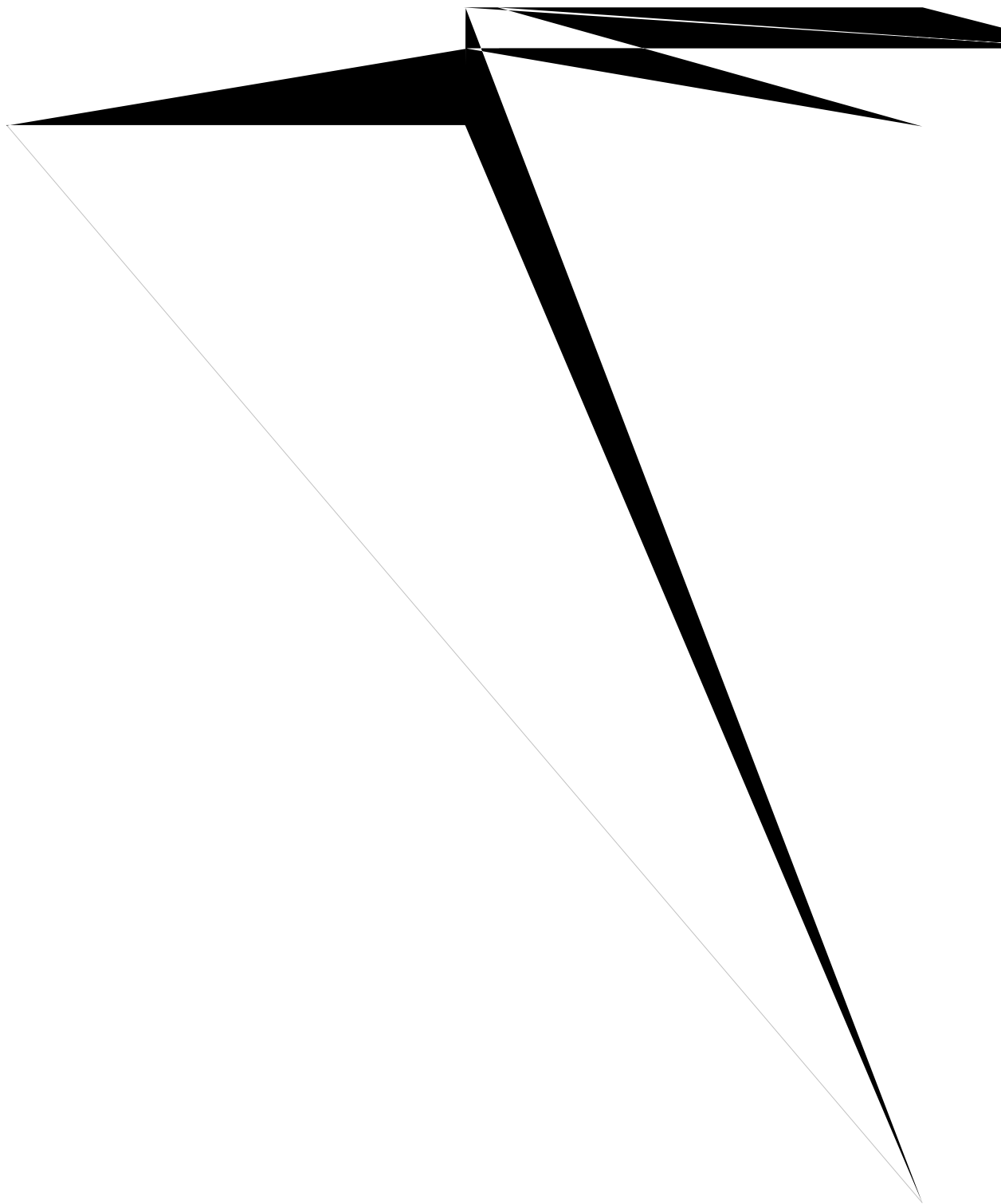
ntp authentication-key

To define an authentication key for Network Time Protocol (NTP), use the **ntp authentication-key** command in global configuration mode. To remove the authentication key for NTP, use the **no** for

ntp broadcast client

T

The NTP service can be activated by entering any **ntp** command. When you use the **ntp br**

ntp clear drift

To reset the drift value stored in the persistent data file, use the **ntp clear drift**command in privileged EXEC mode.

ntp clear drift

This command has no arguments or keywords.

The drift value stored in

ntp clock-period

Usage Guidelines

Do not

ntp logging

To

ntp master

To configure the Cisco IOS software as a Network Time Protocol (NTP) master clock to which peers synchronize themselves when an external NTP

Related Commands

ntp max-associations

To

<u>Usage Guidelines</u>   The

ntp maxdistance

To configure a maximum distance threshold value to govern the number of packets required for synchronization of peers in Network Time Protocol version 4 (NTPv4), use the **ntp maxdistance** command in global configuration mode. To set the maximum distance threshold to the default value, use the **no** form of this command.

ntp maxdistance *threshold*   )   *e*

If you had issued the **ntp maxdistance**

Command History

ntp multicast client

To configure the system to receive Network Time

Command	Description
	Configures the specified interface to receive NTP broadcast packets.

ntp orphan

To enable a group of Network Time Protocol (NTP) devices to select one among them to be the simulated Coordinated Universal Time (UTC) source if all real-time clock sources become inaccessible,

Command	Description
ntp peer	Configures the software clock to synchronize with a peer or to be synchronized by a peer.
	Allows the software clock to be synchronized by an

If you had issued the **ntp peer** command and you now want to remove not only this restriction, but also all NTP functions from the device, use the **no ntp** command without any keywords or arguments.

If you use the **no ntp** command without keywords or arguments in global configuration mode, all NTP configurations are removed

ntp refclock

To configure an external clock source for use with Network Time Protocol (NTP) services, use the **ntp refclock**

Command History

To terminate the

ntp server

To configure a router to allow its software clock

When you enter the **no ntp server** command,

used as the destination for reply packets. If the

ntp trusted-key

To authenticate the identity of a system to which Network Time Protocol (NTP) will synchronize, use the **ntp trusted-key** command in global configuration

Release	Modification
15.2(3)T	This command was modified. The - *end-key-number* argument was added.

Usage Guidelines

ntp update-calendar

To periodically update the hardware clock

specified by the NTP source. The hardware clock

show buffers leak

To display the details of all the buffers that are older than one minute in the system,

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show buffers tune

To display the details of automatic tuning of buffers, use the **show buffers tune**command in user EXEC or privileged EXEC mode.

show buffers tune

Command Modes   User EXEC (>) Privileged EXEC (#)

Command History

Release	Modification
12.3(14)T	This command was introduced.
12.2(33)SRB	This command was integrated into Cisco IOS Release 12.2(33)SRB.

Examples   The following is samplO   olloc

Related Commands

show buffers usage

To display the details of the buffer usage pattern in a specified buffer pool, use the **show buffers usage** command in user EXEC or privileged EXEC mode.

show buffers usage [**poolCC**

```
S|↑âæã ~à Ñ|ààæãb |bæä â] *á´←æ\b &æ^æãá\æä â] b]b\æ↑İ    G
S|↑âæã ~à Ñ|ààæãb |bæä â] ↔^´~↑↔^& *á´←æ\bİ                  €
U\á\↔b\↔´b à~ã \åæ Òæáäæã *~~→
S|↑âæã ~à Ñ|ààæãb |bæä â] *á´←æ\b &æ^æãá\æä â] b]b\æ↑İ  IFF
S|↑âæã ~à Ñ|ààæãb |bæä â] ↔^´~↑↔^& *á´←æ\bİ                  €
U\á\↔b\↔´b à~ã \åæ ÔU Òæáäæã *~~→
Oá→→æã *´       İ €[ɯ€ÎÔɯÎÔo ´~|^\İ            Ï
Þæb~|ã´æ Ûbæãİ          Ø^↔\ ´~|^\İ          FG
Oá→→æã *´
```

EˇFÏGÈFıJÎÈFĞEıÍ

à↔→\æãã~ã K   €ÈI€   FÈHÎ   GÈHIJ   ĞÈHĞ   HÈHF   IÈĞÏ   IJÈĞIJ   ÍÈĞH
FÏGÈFIJÎÈFĞÈĞĞ ´~^à↔&|ãæä

show ntp info

To display static information about Network Time Protocol (NTP) entities,

The following is sample output from the **show ntp packets mode client** command:

```
Œæ{↔´æÀ ujqy pvr rcemgvu oqfg enkgpv
```

```
S\* Ø^ *á´←æ\b ´→↔æ^\İ H€
S\* Š|\ *á´←æ\b ´→↔æ^\İ I€
```

The following is sample output from the **show ntp packets mode passive** command:

```
Œæ{↔´æÀ ujqy pvr rcemgvu oqfg rcuukxg
```

```
S\* Ø^ *á´←æ\b b]↑↑æ\ã↔´Ë*ább↔{æİ H€
S\* Š|\ *á´←æ\b b]↑↑æ\ã↔´Ë*ább↔{æİ I€
```

The following is sample output from the **show ntp packets mode server** command:

```
Œæ{↔´æÀ ujqy pvr rcemgvu oqfg ugtxgt
```

```
S\* Ø^ *á´←æ\b bæã{æãİ €
S\* Š|\ *á´←æ\b bæã{æãİ €
```

The following M   ng

show ntp status

To display the status of the Network Time Protocol (NTP), use the **show ntp status** command

Table 10: show ntp status Field Descriptions

show sntp

To show information about the Simple Network Time Protocol (SNTP), use the **show sntp** command in EXEC mode on a Cisco 1003, Cisco 1004, Cisco 1005, Cisco 1600, Cisco 1720, or Cisco 1750 router.

show sntp

Syntax Description   This command

Field	Description
Bcast	Indicates a broadcast server.

Related Commands

show time-range

To display information about configured time ranges, use the **show time-range** command

sntp broadcast client

To use the Simple Network Time Protocol (SNTP) to accept Network Time Protocol

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Ñã~áä´áb\ ´→↔æ^\ ↑~äæ ↔b æ^áâ→æäÈ

sntp logging

To enable Simple Network Time Protocol (SNTP) message logging, use

sntp server

T

SNTP time servers should operate only at the root (stratum 1) of the subnet, and then only in configurations where no other source of synchronization other than a reliable radio or modem time service is available. A stratum 2 server cannot be used as an SNTP time server. The use of SNTP rather than NTP in primary servers should be carefully considered.

The following example enables the router to request and accept NTP packets from the server at 172.21.118.9 and displays sample **show sntp** command output:

```
Þ~|\æãÇ´~^à⇔&DÀ upvr u W          ugtO           qwv                    ;
```

sntp source-interface

time-period

To set the time increment for automatically saving an archive file of the current running configuration in the Cisco configuration archive, use the **time-period** command in archive configuration mode. To disable this function, use the **no** form of this command.

time-period *minutes*

no time-period

If this command is configured, an archive file of the current running configuration is automatically saved after the given time specified by the *minutes* argument. Archive files continue to be automatically saved at this given time increment until this function is disabled. Use the **maximum** command to set the maximum number of

time-range

To enable time-range configuration mode and define time ranges for functions (such as extended access lists), use the time-range command in

After the **time-range** command, use the **periodic** time-range configuration command, the **absolute** time-range configuration command, or some combination of them to define when the feature is in effect. Multiple **periodic** commands