



Cisco IOS Web Browser Commands

This chapter provides detailed descriptions of the commands used to issue Cisco IOS commands from the Cisco Web browser accessible from your router's home page.

For configuration tasks and examples, refer to the chapter entitled "Using the Cisco Web Browser" in the *Configuration Fundamentals Configuration Guide*.

clear ip wccp

To clear the counter for packets redirected by the Web Cache Control Protocol, use the **clear ip wccp EXEC** command.

clear ip wccp

Syntax Description This command has no arguments or keywords.

Command Modes EXEC

Command History	Release	Modification
	11.2 P, 11.1 CA	This command was introduced.

Usage Guidelines This command first appeared in Cisco IOS Release and Cisco IOS Release .

The “Packets Redirected” count is displayed by the **show ip wccp** and **show ip wccp web-caches** commands.

Examples The following is sample output from the **show ip wccp web-caches** command before and after the **clear ip wccp** command is used:

```
Router# show ip wccp web-caches
```

```
WCCP Web-Cache information:
```

```
  IP Address:          192.168.88.11
  Protocol Version:    1.0
  State:               Usable
  Initial Hash Info:   AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
                      AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
  Assigned Hash Info:  FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
                      FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
  Hash Allotment:      256 (100.00%)
  Packets Redirected:  21345
  Connect Time:        00:13:46
```

```
Router# clear ip wccp
```

```
Router# show ip wccp web-caches
```

```
WCCP Web-Cache information:
```

```
  IP Address:          192.168.88.11
  Protocol Version:    1.0
  State:               Usable
  Initial Hash Info:   AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
                      AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
  Assigned Hash Info:  FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
                      FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
  Hash Allotment:      256 (100.00%)
  Packets Redirected:  0
  Connect Time:        00:13:46
```

Related Commands

Command	Description
show ip wccp	Displays global statistics related to the Web Cache Control Protocol.
show ip wccp web-caches	Displays information about the router's known Cisco Cache Engines.

international

If you are Telnetting to a Cisco IOS platform and you want to display 8-bit and multibyte international characters (for example, Japanese) and print the ESC character as a single character instead of as the caret and bracket symbols (^[]), use the **international** line configuration command. Use the **no** form of this command to display characters in 7-bit format.

international

no international

Syntax Description This command has no arguments or keywords.

Defaults Disabled

Command Modes Line configuration

Command History

Release	Modification
11.3	This command was introduced.

Usage Guidelines

If you are configuring a Cisco IOS platform using the Cisco Web browser interface, this feature is enabled automatically when you enable the Cisco Web browser using the **ip http server** command.

Examples

The following example enables a Cisco IOS platform to display 8-bit and multibyte characters and print the ESC character as a single character instead of as the caret and bracket symbols (^[]) when you are Telnetting to the platform:

```
international
```

Related Commands

Command	Description
terminal international	Prints the ESC character as a single character instead of as the caret and bracket symbols (^[]) for a current Telnet session in instances when you are Telnetting to a Cisco IOS platform and you want to display 8-bit and multibyte international characters (for example, Japanese).

ip wccp enable

To enable the router to support the Web Cache Control Protocol, use the **ip wccp enable** global configuration command. The **no** form of this command disables support for the Web Cache Control Protocol.

ip wccp enable

no ip wccp enable

Syntax Description

This command has no arguments or keywords.

Defaults

The Web Cache Control Protocol is disabled on the router.

Command Modes

Global configuration

Command History

Release	Modification
11.2 P, 11.1 CA	This command was introduced.

Usage Guidelines

This command and the **ip web-cache redirect** interface command are the only commands required to start redirecting requests to the Cisco Cache Engine using the Web Cache Control Protocol. To see if the Web Cache Control Protocol is enabled on the router, use the **show ip wccp** command.

When this command is enabled but the **ip web-cache redirect** command is disabled, the router is aware of caches but does not use them.

Use the **ip wccp redirect-list** command to limit the redirection of packets to those matching an access list.

Examples

The following example configures a router to support the Web Cache Control Protocol and redirects web-related packets from Ethernet interface 0 to the Cisco Cache Engine:

```
Router# configure terminal
Router(config)# ip wccp enable
Router(config)# interface Ethernet 0
Router(config-if)# ip web-cache redirect
Router(config-if)# end
Router#
%SYS-5-CONFIG_I: Configured from console by console.
```

ip wccp enable**Related Commands**

Command	Description
ip wccp redirect-list	Specifies which packets are redirected to a Cisco Cache Engine.
ip web-cache redirect	Instructs an interface to check for appropriate outgoing packets and redirect them to a Cisco Cache Engine.
show ip wccp	Displays global statistics related to the Web Cache Control Protocol.
show ip wccp web-caches	Displays information about the router's known Cisco Cache Engines.

ip wccp redirect-list

To specify which packets are redirected to a Cisco Cache Engine, use the **ip wccp redirect-list** global configuration command. The **no** form of this command enables redirection of all packets.

ip wccp redirect-list {*number* | *name*}

Syntax Description	<i>number</i>	Standard or extended IP access list number from 1 to 199.
	<i>name</i>	Standard or extended IP access list name. This argument is only available in Release 11.2 P.

Defaults All HTTP packets are redirected to the Cisco Cache Engine.

Command Modes Global configuration

Command History	Release	Modification
	11.2 P, 11.1 CA	This command was introduced.

Usage Guidelines Use this command to specify which packets should be redirected to the Cisco Cache Engine. When WCCP is enabled but this command is not configured, all web-related packets are redirected to the Cisco Cache Engine. When you enter this command, only packets that match the access list are redirected.

Some Web sites use the source IP address of packets for authentication. The Cisco Cache Engine uses its own IP address when sending requests to Web sites. Thus, the requests from the Cisco Cache Engine may not be authenticated. Use this command to bypass the Cisco Cache Engine in these cases.

Use the **ip wccp enable** and **ip web-cache redirect** commands to configure WCCP.

Examples The following example configures a router to redirect web-related packets without a destination of 192.168.196.51 to the Cisco Cache Engine:

```
Router# configure terminal
Router(config)# access-list 100 deny ip any host 192.168.196.51
Router(config)# access-list 100 permit ip any any
Router(config)# ip wccp enable
Router(config)# ip wccp redirect-list 100
Router(config)# interface Ethernet 0
Router(config-if)# ip web-cache redirect
Router(config-if)# end
Router#
%SYS-5-CONFIG_I: Configured from console by console.
```

Related Commands

Command	Description
clear ip wccp	Clears the counter for packets redirected by the Web Cache Control Protocol.
ip wccp enable	Enables the router to support the Web Cache Control Protocol.
ip web-cache redirect	Instructs an interface to check for appropriate outgoing packets and redirect them to a Cisco Cache Engine.
show ip wccp	Displays global statistics related to the Web Cache Control Protocol.

ip web-cache redirect

To instruct an interface to check for appropriate outgoing packets and redirect them to a Cisco Cache Engine, use the **ip web-cache redirect** interface configuration command. The **no** form of this command disables the redirection of messages to the Cisco Cache Engine.

ip web-cache redirect

no ip web-cache redirect

Syntax Description

This command has no arguments or keywords.

Defaults

The interface does not redirect messages to the Cisco Cache Engine.

Command Modes

Interface configuration

Command History

Release	Modification
11.2 P, 11.1 CA	This command was introduced.

Usage Guidelines

This command and the **ip wccp enable** interface command are the only commands required to start redirecting requests to the Cisco Cache Engine using the Web Cache Control Protocol.

Examples

The following example configures a router to support the Web Cache Control Protocol and redirects web-related packets from Ethernet interface 0 to the Cisco Cache Engine:

```
Router# configure terminal
Router(config)# ip wccp enable
Router(config)# interface Ethernet 0
Router(config-if)# ip web-cache redirect
Router(config-if)# end
Router#
%SYS-5-CONFIG_I: Configured from console by console.
```

Related Commands

Command	Description
clear ip wccp	Clears the counter for packets redirected by the Web Cache Control Protocol.
ip wccp enable	Enables the router to support the Web Cache Control Protocol.
ip wccp redirect-list	Specifies which packets are redirected to a Cisco Cache Engine.
show ip interface	Lists a summary of an interface's IP information and status.
show ip wccp	Displays global statistics related to the Web Cache Control Protocol.
show ip wccp web-caches	Displays information about the router's known Cisco Cache Engines.

show ip interface

To display the usability status of interfaces configured for IP, use the **show ip interface** EXEC command.

show ip interface [*type number*]

Syntax Description	<i>type</i>	(Optional) Interface type.
	<i>number</i>	(Optional) Interface number.

Command Modes EXEC

Command History	Release	Modification
	10.0	This command was introduced.

Usage Guidelines

The Cisco IOS software automatically enters a directly connected route in the routing table if the interface is usable. A usable interface is one through which the software can send and receive packets. If the software determines that an interface is not usable, it removes the directly connected routing entry from the routing table. Removing the entry allows the software to use dynamic routing protocols to determine backup routes to the network (if any).

If the interface can provide two-way communication, the line protocol is marked “up.” If the interface hardware is usable, the interface is marked “up.”

If you specify an optional interface type, you will see only information on that specific interface.

If you specify no optional arguments, you will see information on all the interfaces.

When an asynchronous interface is encapsulated with PPP or SLIP, IP fast switching is enabled. A **show ip interface** command on an asynchronous interface encapsulated with PPP or SLIP displays a message indicating that IP fast switching is enabled.

Examples

The following is sample output from the **show ip interface** command:

```
Router# show ip interface

Ethernet0 is up, line protocol is up
  Internet address is 192.195.78.24, subnet mask is 255.255.255.240
  Broadcast address is 255.255.255.255
  Address determined by non-volatile memory
  MTU is 1500 bytes
  Helper address is not set
  Secondary address 131.192.115.2, subnet mask 255.255.255.0
  Directed broadcast forwarding is enabled
  Multicast groups joined: 224.0.0.1 224.0.0.2
  Outgoing access list is not set
  Inbound access list is not set
  Proxy ARP is enabled
  Security level is default
  Split horizon is enabled
  ICMP redirects are always sent
  ICMP unreachable are always sent
  ICMP mask replies are never sent
  IP fast switching is enabled
  IP fast switching on the same interface is disabled
  IP SSE switching is disabled
  Router Discovery is disabled
  IP output packet accounting is disabled
  IP access violation accounting is disabled
  TCP/IP header compression is disabled
  Probe proxy name replies are disabled
  Web Cache Redirect is enabled
```

Table 12 describes the fields shown in this display.

Table 12 *show ip interface Field Descriptions*

Field	Description
Ethernet0 is up	If the interface hardware is usable, the interface is marked “up.” For an interface to be usable, both the interface hardware and line protocol must be up.
line protocol is up	If the interface can provide two-way communication, the line protocol is marked “up.” For an interface to be usable, both the interface hardware and line protocol must be up.
Broadcast address	Shows the broadcast address.
Address determined by...	Indicates how the IP address of the interface was determined.
MTU	Shows the MTU value set on the interface.
Helper address	Shows a helper address, if one has been set.
Secondary address	Shows a secondary address, if one has been set.
Directed broadcast forwarding	Indicates whether directed broadcast forwarding is enabled.
Multicast groups joined	Indicates the multicast groups this interface is a member of.
Outgoing access list	Indicates whether the interface has an outgoing access list set.
Inbound access list	Indicates whether the interface has an incoming access list set.

Table 12 *show ip interface Field Descriptions (continued)*

Field	Description
Proxy ARP	Indicates whether Proxy ARP is enabled for the interface.
Security level	Specifies the IPSO security level set for this interface.
ICMP redirects	Specifies whether redirects will be sent on this interface.
ICMP unreachable	Specifies whether unreachable messages will be sent on this interface.
ICMP mask replies	Specifies whether mask replies will be sent on this interface.
IP fast switching	Specifies whether fast switching has been enabled for this interface. It is generally enabled on serial interfaces, such as this one.
IP SSE switching	Specifies whether IP SSE switching is enabled.
Router Discovery	Specifies whether the discovery process has been enabled for this interface. It is generally disabled on serial interfaces.
IP output packet accounting	Specifies whether IP accounting is enabled for this interface and what the threshold (maximum number of entries) is.
TCP/IP header compression	Indicates whether compression is enabled or disabled.
Probe proxy name	Indicates whether HP Probe proxy name replies are generated.
Web Cache Redirect	Indicates whether HTTP packets are redirected to a Cisco Cache Engine.

show ip wccp

To display global statistics related to the Web Cache Control Protocol, use the **show ip wccp** EXEC command.

show ip wccp

Syntax Description This command has no arguments or keywords.

Command Modes EXEC

Command History	Release	Modification
	11.2 P, 11.1 CA	This command was introduced.

Usage Guidelines Use the **clear ip wccp** command to reset the counter for the “Packets Redirected” information.

Examples The following example is sample output from the **show ip wccp** command:

```
Router# show ip wccp

Global WCCP information:
  Number of web-caches:          2
  Total Packets Redirected:      101
  Redirect access-list:         no_linux
  Total Packets Denied Redirect: 88
  Total Packets Unassigned:     0
```

Table 13 describes fields shown in this display.

Table 13 *show ip wccp Field Descriptions*

Field	Description
Number of web-caches	Number of Cisco Cache Engines using the router as their home router.
Total Packets Redirected	Total number of packets redirected by the router.
Redirect access-list	Name or number of the redirect access list. Only packets matching the access list are redirected.
Total Packets Denied Redirect	Total number of packets that were not redirected because they did not match the access list.
Total Packets Unassigned	Number of packets that were not redirected because they were not assigned to any web cache. Packets may not be assigned during initial discovery of Cisco Cache Engines or when a cache is dropped from a farm.

■ show ip wccp

Related Commands	Command	Description
	clear ip wccp	Clears the counter for packets redirected by the Web Cache Control Protocol.
	lip wccp enable	Enables the router to support the Web Cache Control Protocol.
	ip wccp redirect-list!	Specifies which packets are redirected to a Cisco Cache Engine.
	ip web-cache redirect	Specifies which packets are redirected to a Cisco Cache Engine.
	show ip interface	Lists a summary of an interface's IP information and status.
	show ip wccp web-caches	Displays information about the router's known Cisco Cache Engines.

show ip wccp web-caches

To display information about the router's known Cisco Cache Engines, use the **show ip wccp web-caches** EXEC command.

```
show ip wccp web-caches
```

Syntax Description This command has no arguments or keywords.

Command Modes EXEC

Command History	Release	Modification
	11.2 P, 11.1 CA	This command was introduced.

Usage Guidelines Use the **clear ip wccp** command to reset the counter for the “Packets Redirected” information.

Examples The following example is sample output from the **show ip wccp web-caches** command:

```
Router# show ip wccp web-caches

WCCP Web-Cache information:
  IP Address:          192.168.88.11
  Protocol Version:   1.0
  State:              Usable
  Initial Hash Info:  AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
                    AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
  Assigned Hash Info: FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
                    FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
  Hash Allotment:     256 (100.00%)
  Packets Redirected: 21345
  Connect Time:       00:13:46
```

Table 16 describes the fields shown in this display

Table 14 *show ip wccp web-caches Field Descriptions*

Field	Description
IP Address	IP address of the Cisco Cache Engine.
Protocol Version	Version of the Web Cache Control Protocol the Cisco Cache Engine is running.
State	State of the Cisco Cache Engine. Possible values are “Usable” and “NOT Usable.”
Initial Hash Info	Initial contents of the hash field. The hash field contains information about how the router intends to use the Cisco Cache Engine.

Table 14 *show ip wccp web-caches Field Descriptions (continued)*

Field	Description
Assigned Hash Info	Current hash information of the Cisco Cache Engine. The hash information field contains information about how the router intends to use the Cisco Cache Engine.
Hash Allotment	Percentage of all possible web servers for which the router redirects HTTP requests to this Web cache. In this example, there is only one Cisco Cache Engine, so all HTTP requests are redirected to it.
Packets Redirected	Number of packets redirected to this Cisco Cache Engine.
Connect Time	Indicates how long the Cisco Cache Engine has used this router as its home router.

Related Commands

Command	Description
clear ip wccp	Clears the counter for packets redirected by the Web Cache Control Protocol.
ip wccp enable	Enables the router to support the Web Cache Control Protocol.
ip web-cache redirect	Instructs an interface to check for appropriate outgoing packets and redirect them to a Cisco Cache Engine.
show ip interface	Lists a summary of an interface's IP information and status.
show ip wccp	Displays global statistics related to the Web Cache Control Protocol.

terminal international

If you are Telnetting to a Cisco IOS platform and you want to display 8-bit and multibyte international characters (for example, Japanese) and print the ESC character as a single character instead of as the caret and bracket symbols (^[]) for a current Telnet session, use the **terminal international** EXEC command. Use the **no** form of this command to display characters in 7-bit format for a current Telnet session.

terminal international

no terminal international

Syntax Description This command has no arguments or keywords.

Defaults Disabled

Command Modes EXEC

Command History	Release	Modification
	11.3	This command was introduced.

Usage Guidelines If you are configuring a Cisco IOS platform using the Cisco Web browser interface, this feature is enabled automatically when you enable the Cisco Web browser using the **ip http server** command.

Examples The following example enables a Cisco IOS platform to display 8-bit and multibyte characters and print the ESC character as a single character instead of as the caret and bracket symbols (^[]) when you are Telnetting to the platform for the current Telnet session:

```
terminal international
```

Related Commands	Command	Description
	international	Prints the ESC character as a single character instead of as the caret and bracket symbols (^[]) in instances when you are Telnetting to a Cisco IOS platform and you want to display 8-bit and multibyte international characters (for example, Japanese).

