



## WCCP—Configurable Router ID

The WCCP—Configurable Router ID feature enables the configuration of a Web Cache Communication Protocol (WCCP) source interface. The IP address of this configured source interface is then used as the preferred WCCP router ID and WCCP GRE source address. When a WCCP router ID is manually configured, router IDs are no longer automatically generated when the current router ID is no longer valid and the router ID does not change when another IP address is added to the system.

- [Finding Feature Information, on page 1](#)
- [Restrictions for WCCP—Configurable Router ID, on page 1](#)
- [Information About WCCP—Configurable Router ID, on page 2](#)
- [How to Configure WCCP—Configurable Router ID, on page 2](#)
- [Configuration Examples for WCCP—Configurable Router ID, on page 3](#)
- [Additional References for WCCP—Configurable Router ID, on page 3](#)
- [Feature Information for WCCP—Configurable Router ID, on page 4](#)

### Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see [Bug Search Tool](#) and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table at the end of this module.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to [www.cisco.com/go/cfn](http://www.cisco.com/go/cfn). An account on Cisco.com is not required.

### Restrictions for WCCP—Configurable Router ID

The following restriction apply to this feature:

- Do not configure the Web Cache Control Protocol (WCCP) router ID as the tunnel source, if multipoint generic routing encapsulation (GRE) tunnels are configured on a router, because this configuration may cause the traffic over this tunnel to fail.

# Information About WCCP—Configurable Router ID

## WCCP—Configurable Router ID Overview

WCCP uses a router ID in its control messages that a WCCP client can use to uniquely identify a particular WCCP server. The router ID is an IP address and is used as the source address of any WCCP-generated Generic Routing Encapsulation (GRE) frames. Prior to the WCCP—Configurable Router ID feature, WCCP selected a router ID using an automatic mechanism; the highest reachable IP address on the system (or the highest loopback IP address, if there is one) was used as the WCCP router ID. The highest IP address on the system is not always the best choice as the router ID or as the source address of GRE frames. A change in addressing information on the system may cause the WCCP router ID to change unexpectedly. During this changeover period, WCCP clients briefly advertise the existence of two routers (the old router ID and the new router ID) and GRE frames are sourced from a different address.

The WCCP—Configurable Router ID feature enables you to define a WCCP source interface from which the router ID will be obtained. The IP address of this configured source interface is then used as the preferred WCCP router ID and WCCP GRE source address. When a WCCP router ID is manually configured, the router ID does not change when another IP address is added to the system. The router ID changes only when a new router ID is manually configured using the `ip wccp source-interface` or the `ipv6 wccp source-interface` command, or when the address on the manually configured interface is no longer valid.

## How to Configure WCCP—Configurable Router ID

### Configuring a Preferred WCCP Router ID

#### SUMMARY STEPS

1. `enable`
2. `configure terminal`
3. `ip wccp [vrf vrf-name] source-interface source-interface`
4. `exit`

#### DETAILED STEPS

	Command or Action	Purpose
Step 1	<p><code>enable</code></p> <p><b>Example:</b></p> <pre>Device&gt; enable</pre>	<p>Enables privileged EXEC mode.</p> <ul style="list-style-type: none"> <li>• Enter your password if prompted.</li> </ul>
Step 2	<p><code>configure terminal</code></p> <p><b>Example:</b></p> <pre>Device# configure terminal</pre>	<p>Enters global configuration mode.</p>

	Command or Action	Purpose
Step 3	<b>ip wccp [vrf vrf-name] source-interface source-interface</b> <b>Example:</b> <pre>Device(config)# ip wccp source-interface GigabitEthernet 0/0/0</pre>	Configures a preferred WCCP router ID.
Step 4	<b>exit</b> <b>Example:</b> <pre>Device(config)# exit</pre>	Exits global configuration mode and returns to privileged EXEC mode.

## Configuration Examples for WCCP—Configurable Router ID

### Example: Configuring a Preferred WCCP Router ID

The following example displays the configuration for a preferred WCCP router ID:

```
! Configure a preferred WCCP router ID
ip wccp source-interface GigabitEthernet 0/0/0
```

## Additional References for WCCP—Configurable Router ID

### Related Documents

Related Topic	Document Title
Cisco IOS commands	<a href="#">Cisco IOS Master Commands List, All Releases</a>
WCCP commands	<a href="#">Cisco IOS IP Application Services Command Reference</a>
Currently assigned IP multicast addresses	<i>Internet Multicast Addresses</i> <a href="http://www.iana.org/assignments/multicast-addresses">http://www.iana.org/assignments/multicast-addresses</a>
Configuration fundamentals configuration tasks	<i>Cisco IOS Configuration Fundamentals Configuration Guide</i>
Configuration fundamentals commands	<i>Cisco IOS Configuration Fundamentals Command Reference</i>
Cisco IOS bridging and IBM networking configuration tasks	<i>Cisco IOS Bridging and IBM Networking Configuration Guide</i>
Cisco IOS bridging and IBM networking commands	<i>Cisco IOS Bridging and IBM Networking Command Reference</i>

Related Topic	Document Title
Cisco IOS IP multicast configuration tasks	<i>Cisco IOS IP Multicast Configuration Guide</i>
Cisco IOS IP Multicast commands	<i>Cisco IOS IP Multicast Command Reference</i>

### Standards

Standard	Title
IEEE Spanning-Tree Bridging	802.1D MAC Bridges <a href="http://www.ieee802.org/1/pages/802.1D-2003.html">http://www.ieee802.org/1/pages/802.1D-2003.html</a>

### MIBs

MIB	MIBs Link
—	No new or modified MIBs are supported, and support for existing MIBs has not been modified.

### RFCs

RFC	Title
RFC 1812	<i>Requirements for IP Version 4 Routers</i> <a href="http://www.ietf.org/rfc/rfc1812.txt">http://www.ietf.org/rfc/rfc1812.txt</a>
RFC 2131	<i>Dynamic Host Configuration Protocol</i> <a href="http://www.ietf.org/rfc/rfc2131.txt">http://www.ietf.org/rfc/rfc2131.txt</a>

### Technical Assistance

Description	Link
The Cisco Support and Documentation website provides online resources to download documentation, software, and tools. Use these resources to install and configure the software and to troubleshoot and resolve technical issues with Cisco products and technologies. Access to most tools on the Cisco Support and Documentation website requires a Cisco.com user ID and password.	<a href="http://www.cisco.com/cisco/web/support/index.html">http://www.cisco.com/cisco/web/support/index.html</a>

## Feature Information for WCCP—Configurable Router ID

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to [www.cisco.com/go/cfn](http://www.cisco.com/go/cfn). An account on Cisco.com is not required.

**Table 1: Feature Information for WCCP—Configurable Router ID**

<b>Feature Name</b>	<b>Releases</b>	<b>Feature Information</b>
WCCP—Configurable Router ID	15.1(1)SG 15.2(3)T	<p>The WCCP—Configurable Router ID feature enables the configuration of a Web Cache Communication Protocol (WCCP) source interface. The IP address of this configured source interface is then used as the preferred WCCP router ID and WCCP GRE source address. When a WCCP router ID is manually configured, router IDs are no longer automatically generated when the current router ID is no longer valid and the router ID does not change when another IP address is added to the system.</p> <p>The following command was added: <b>ip wccp source-interface</b>.</p>

