Cisco Wide Area Application Services Web Cache Communication Protocol Redirection: Cisco Router Platform Support

What You Will Learn

Cisco® Wide Area Application Services (WAAS) relies on network interception to receive packets from flows that should be optimized. **Web Cache Communication Protocol Version 2** (WCCPv2) gives IT organizations a mechanism to transparently intercept and redirect this network traffic to a nearby Cisco WAAS device for application acceleration and WAN optimization. This document identifies the WCCP functions supported by various common Cisco routers and switches and provides recommended best practices for their use.

WCCP Platform Support

The following platforms are recommended for use with Cisco WAAS and the WCCP TCP promiscuous services:

- Cisco 890, 1900, 1800, 2800, 3800, 2900, and 3900 Series Integrated Services Routers (ISR)
- Cisco 3700, 7200 (NPE-400, NPE-G1, and NPE-G2 only), and 7600 Series Routers and Cisco ASR 1000 Series Aggregation Services Routers
- Cisco Catalyst® 3560 and 3750 Series Switches
- Cisco Catalyst 4500 (Sup2) and 4948 Series Switches
- Cisco Catalyst 6500 and 7600 Series Switches
- Cisco Nexus® 7000 Series Switches

The following platforms support WCCP, but their implementation is not compatible with Cisco WAAS:

- Catalyst 6500 Series Supervisor Engine 1A
- Cisco PIX® and Cisco ASA firewalls
- Cisco Catalyst 3550 Series Switch

The various WCCP-supported Cisco routers and switches are listed in Table 1. Each device supports a set of features and capabilities. Where there is a choice of features, the recommended feature is shown in **Bold**. Each device is listed with a *minimum* recommended Cisco IOS® Software release.

Table 1. WCCP Platform Support (Recommendations Shown in **Bold**)

Function Platform	Assignment	Redirect	Forwarding Redirect List	Direction	Return	Cisco IOS Software (Minimum Recommended)
Cisco Catalyst 7600 Series	Hash or **mask**	Generic routing encapsulation (GRE) or **Layer 2**	Full extended access control list (ACL)	**In** or out	GRE, **Generic GRE**, or **IP forward**	• Release 12.2(18)SXF16 • Release 12.3(33)SXI
Software Cisco ISR Generation 1 (ISR G1) and 7200 Series	Hash or **mask**	GRE or **Layer 2**	Full extended ACL	**In** or out	**IP forward** or GRE	• Release 12.4(10) • Release 12.4(11)T3 • Release 12.4(15)T5 • Release 12.4(24)T

Function Platform	Assignment	Redirect	Forwarding Redirect List	Direction	Return	Cisco IOS Software (Minimum Recommended)
Software Cisco ISR Generation 2 (ISR G2) with Cisco Network Module (NME)	Hash or mask	GRE or Layer 2	Full extended ACL	In or out	IP forward or GRE	Release 15.0(1)M1
Software Cisco ISR G2 with Cisco Service Module Services-Ready Engine (SM-SRE)	Hash or mask	GRE or Layer 2	Full extended ACL	In or out	IP forward or GRE	Release 15.0(1)M2[1]
Cisco Nexus 7000 Series	Mask only	Layer 2 only	Full extended ACL	In or out	Layer 2 or IP forward only	Release 4.2.4
Cisco ASR 1000 Series	Mask only	GRE or Layer 2	Full extended ACL	In or out	GRE or IP forward	Release 2.2XE
Cisco Catalyst 6500 Series Supervisor Engine 720 and 32	Hash or mask	GRE or Layer 2	Full extended ACL	In or out	GRE, Generic GRE, or IP forward	• Release 12.2(18)SXF16 • Release 12.2(33)SXI
Cisco Catalyst 6500 Series Supervisor Engine 2	Hash or Mask	GRE or Layer 2	Full extended ACL	In or out	IP Forward or Layer 2	12.2(18)SXF16
Cisco Catalyst 4500 Series	Mask only	Layer 2 only	No Redirect List Support	In only	IP Forward or Layer 2	12.2(46)SG
Cisco Catalyst 3750 Series	Mask only	Layer 2 only	Extended ACL (no deny)	In only	IP Forward or Layer 2	12.2(46)SE

For More Information

For more information about Cisco WAAS Software, visit http://www.cisco.com/go/waas or contact your local account representative.

[1] M3 is schedule for release in July 2010 and will be the recommended release at that time.
[1] **Cisco IOS Software Release 15.0(1)M3** is scheduled for release in July 2010 and will be the recommended release at that time. See Table 2 for a list of caveats affecting WCCP and Cisco IOS Software Release 15.0(1)M2.