



IP Multicast Load Splitting—Equal Cost Multipath (ECMP) Using S, G and Next Hop

The IP Multicast Load Splitting—Equal Cost Multipath (ECMP) Using S, G and Next Hop feature introduces more flexible support for ECMP multicast load splitting by adding support for load splitting based on source and group address and on source, group, and next-hop address. This feature enables multicast traffic from devices that send many streams to groups or that broadcast many channels, such as IPTV servers or MPEG video servers, to be more effectively load split across equal-cost paths. Prior to the introduction of this feature, the Cisco IOS software only supported ECMP multicast load splitting based on source address, which restricted multicast traffic sent by a single source to multiple groups from being load split across equal-cost paths.

Configuration Information

Configuration information is included in the “Load Splitting IP Multicast Traffic over ECMP” module of the *Cisco IOS IP Multicast Configuration Guide*, Release 12.4T, at the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124tcg/timcst_c/mctlsplt.htm

The following sections provide information about this feature:

- ECMP Multicast Load Splitting Based on Source and Group Address Using the Basic S-G-Hash Algorithm
- ECMP Multicast Load Splitting Based on Source, Group, and Next-Hop Address Using the Next-Hop-Based Hash Algorithm

For a complete list of features included in the “Load Splitting IP Multicast Traffic over ECMP” module, see the Feature Information Table located toward the end of the module.

Command Reference Information

Command reference information is included in the *Cisco IOS IP Multicast Command Reference*, Release 12SR, at the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/software/ios122sr/cr/srimc_r/index.htm

New or Modified Commands

The following commands are new or modified for this feature:

- **ip multicast multipath**
- **show ip rpf**

CCVP, the Cisco logo, and Welcome to the Human Network are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networkers, Networking Academy, Network Registrar, PIX, ProConnect, ScriptShare, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0711R)

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.

© 2007 Cisco Systems, Inc. All rights reserved.