



Minimal Disruptive Restart of VIP Cards

The Minimal Disruptive Restart (MDR) of VIP Cards feature optimizes the reload time of a VIP card on a Cisco 7500 series router after a software failure has occurred. The amount of time for a VIP card to reload with the MDR functionality varies depending on the port adapter in the VIP card. With this software enhancement, the reload time of a VIP card with the Single Line Card Reload (SLCR) technology is decreased from approximately 30 seconds to approximately 5 seconds. This improvement provides high availability and minimizes equipment downtime. As an additional part of this feature, users can initiate a VIP card reload with the MDR functionality on a single slot using the **microcode reload** command.

The MDR functionality has the following limitations:

- If a VIP card software failure occurs within 5 minutes of up time, the VIP card is not reloaded with the MDR functionality. Instead, a standard reset and microcode reload is performed. If a software failure occurs after 5 minutes of up time, the VIP card is reloaded with the MDR functionality.
- A VIP card can be reloaded with the MDR functionality five consecutive times. If a VIP card must be reloaded for a sixth consecutive time, it is not reloaded with the MDR functionality. Instead, a standard reset and microcode reload is performed.

These limitations are not applicable when performing a VIP card reload using the **microcode reload** command. There is no limit to the number of times a VIP card can be reloaded with this command.

Feature History for the Minimal Disruptive Reload of VIP Cards Feature

Release	Modification
12.3(8)T	This feature was introduced.

Finding Support Information for Platforms and Cisco IOS Software Images

Use Cisco Feature Navigator to find information about platform support and Cisco IOS software image support. Access Cisco Feature Navigator at <http://www.cisco.com/go/fn>. You must have an account on Cisco.com. If you do not have an account or have forgotten your username or password, click **Cancel** at the login dialog box and follow the instructions that appear.



Command Reference

The following modified command is pertinent to this feature. To see the command pages for this command and other commands used with this feature, go to the *Cisco IOS Master Commands List*, Release 12.4, at <http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124mindx/124index.htm>.

- **microcode reload (7500)**

CCDE, CCENT, Cisco Eos, Cisco Lumin, Cisco Nexus, Cisco StadiumVision, the Cisco logo, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn is a service mark; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo 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. (0805R)

© 2004 Cisco Systems, Inc. All rights reserved.