Release Notes for Cisco MWR 2941 Mobile Wireless Edge Router Release 3.5.1, Cisco IOS Release 15.1(3)MRA

December 14, 2012

These release notes are for the Cisco MWR Mobile Wireless Edge Router Release 3.5.1 for Cisco IOS Release 15.1(3)MRA. These release notes are updated as needed to describe new features, memory requirements, hardware support, software platform deferrals, and changes to the microcode.

For a list of the software caveats that apply to Cisco IOS Release 15.1(3)MRA, see the "Caveats in Cisco IOS Release 15.1(3)MRA" section on page 11.

To review all Cisco MWR 2941 release notes, including *Release Notes for Cisco MWR 2941 Mobile Wireless Edge Router for Cisco IOS Release 15.1(3)MRA,* go to:

http://www.cisco.com/en/US/products/ps9395/prod_release_notes_list.html

To review release notes for the Cisco IOS Software Release 15.1S, go to:

http://www.cisco.com/en/US/products/ps10890/prod_release_notes_list.html

Contents

This document contains the following sections:

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Introduction

The Cisco MWR 2941 Mobile Wireless Router is a cell-site access platform specifically designed to aggregate and transport mixed-generation radio access network (RAN) traffic. The router is used at the cell site edge as a part of a 2G, 3G, or 4G radio access network (RAN). The Cisco MWR 2941 includes the following models:

- Cisco MWR 2941-DC
- Cisco MWR 2941-DC-A

The Cisco MWR 2941 router helps enable a variety of RAN solutions by extending IP connectivity to devices using Global System for Mobile Communications (GSM), General Packet Radio Service (GPRS), Node Bs using HSPA or LTE, base transceiver stations (BTSs) using Enhanced Data Rates for GSM Evolution (EDGE), Code Division Multiple Access (CDMA), CDMA-2000, EVDO, or WiMAX, and other cell-site equipment. It transparently and efficiently transports cell-site voice, data, and signaling traffic over IP using traditional T1 and E1 circuits, as well as alternative backhaul networks such as Carrier Ethernet and DSL, Ethernet in the First Mile (EFM), and WiMAX. It also supports standards-based Internet Engineering Task Force (IETF) Internet protocols over the RAN transport network, including those standardized at the Third-Generation Partnership Project (3GPP) for IP RAN transport. Custom designed for the cell site, the Cisco MWR 2941 features a small form factor, extended operating temperature, and cell-site DC input voltages.

System Requirements

Memory Requirements

Table 1 lists the required memory for using this software.

Table 1 Cisco IOS Release 15.1(3)MRA Memory Requirements

Platform	Feature Set	Software Image	Recommended Flash Memory	Recommended DRAM Memory	Runs From
Cisco MWR 2941	RAN Optimization	mwr2941-adviprank9-mz.151-3.MRA.bin	128 MB	512 MB	RAM
Cisco MWR 2941	RAN Optimization	mwr2941-advipran-mz.151-3.MRA.bin	128 MB	512 MB	RAM

Determining the Software Version

To determine the image and version of Cisco IOS software running on your Cisco MWR 2941 router, log in to the router and enter the **show version** EXEC command:

```
Router> show version
Cisco IOS Software, 2900 Software (MWR2900-ADVIPRANK9-M), Version 15.1(3)MRA, RELEASE
SOFTWARE (fc3)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2012 by Cisco Systems, Inc.
Compiled Thu 27-Dec-12 05:10 by prod_rel_team

ROM: System Bootstrap, Version 12.4(20100105:220700) [walrobin-cowgirl2-rommon 101],
DEVELOPMENT SOFTWARE

sh-2941k uptime is 1 day, 3 hours, 40 minutes
System returned to ROM by reload at 12:05:06 IST Fri Dec 14 2012
System restarted at 12:07:03 IST Dec 14 2012
System image file is "flash:mwr2941-adviprank9-mz.151-3.MRA.fc3"
```

Upgrading to a New Software Release

For general information about upgrading to a new software release, refer to the *Software Installation and Upgrade Procedures* at:

http://www.cisco.com/en/US/products/hw/routers/ps259/products_tech_note09186a00801fc986.shtml

New and Changed Information

The following sections list the new hardware and software features supported by the Cisco MWR 2941 router.

Support for Existing Cisco MWR 2941 Software Features

Cisco IOS Release 15.1(3)MRA supports the software features supported in Cisco IOS Release 15.1S.

For more information about Release 15.1S and previous releases, see:

http://www.cisco.com/en/US/products/ps9395/prod_release_notes_list.html.

New Hardware Features in Cisco IOS Release 15.1(3)MRA

There are no new hardware features in Cisco IOS Release 15.1(3)MRA.

New Software Features in Cisco IOS Release 15.1(3)MRA

Cisco MWR Release 3.5.1, Cisco IOS Release 15.1(3)MRA introduces the following new software features:

- IEEE 802.3ad LACP EtherChannel Support—Enables you to group multiple physical interfaces into a single logical link that provides fault tolerance and redundancy and higher bandwidth. Also known as a type of port channel.

  This feature introduces or modifies the following commands:

  - **channel-group—**Configures the LAN port in a port channel and specifies the LACP as the unconditional mode of the interface.
  - **lacp fast-switchover—**Enables LACP 1:1 link redundancy on this port channel.
  - **lacp max-bundle—**Configures the maximum number of member ports that can be in the link-up state and bundled in the EtherChannel for the port channel interface.
  - **lacp min-bundle—**Configures the minimum number of member ports that must be in the link-up state and bundled in the EtherChannel for the port channel interface to transition to the link-up state.
  - **lacp port-priority—**Sets the priority for a physical interface.
  - **lacp system-priority**—Indicates the priority for the system. Higher numbers have lower priority.
  - **show etherchannel load-balance—**Displays the load balance and frame distribution scheme across the ports in a port-channel.
  - **show lacp counters—**Displays information about the LACP traffic statistics.
  - **show lacp internal** [**detail**]**—**Displays LACP internal information.
  - **show lacp neighbor—**Displays information about the LACP neighbor.
  - **show lacp sys-id—**Displays the LACP system-id information. It is a combination of the port priority and the MAC address of the device.
- ANSI T1.403 Line and Payload Remote Loopback Support—The Cisco MWR 2941 supports the ANSI T1.403 Facility Data Link (FDL) remote loopback (line and payload) initiated at the far end. The FDL carries performance data and control signals across the network interface (NI), the customer installation (CI), and the network.

  ANSI T1.403 Line and Payload Loopback support on the Cisco MWR 2941 does not require any configuration tasks on the Cisco MWR 2941 because the FDL remote loopback command initiation is from satellite devices. The Cisco MWR 2941 responds to the instructions from the satellite box and functions as the remote framer in the loopback.

For more detail about these features, including how to configure them on the Cisco MWR 2941, see the *Cisco MWR 2941 Release 3.5.1 Software Configuration Guide* and *Cisco MWR 2941 Release 3.5.1 Command Reference*.

Limitations and Restrictions

Caution The Cisco MWR 2941 router does not support online insertion and removal (OIR) of WAN interface cards. Any attempt to perform OIR on a card in a powered-on router might cause damage to the card.

Cisco IOS Release 15.1(3)MRA for the Cisco MWR 2941 router has the following limitations and restrictions:

- The **lacp rate** command with the **fast** keyword specified is not supported on a port-channel interface.
- Synchronous Ethernet is not supported on the SFP-GE-T module.
- Release 15.1(3)MRA does not support ATM over MPLS N-to-1 Cell Mode or 1-to-1 Cell Mode.
- SPAN and RSPAN are not supported.
- VLAN Query Protocol (VQP) and VLAN Management Policy Server (VMPS) are not supported
- CFM Extension for Microwave 1+1 Hot Standby (HSBY) is only supported on Gigabit Ethernet interfaces 0/0–0/5.
- CEF Limitations—Cisco Express Forwarding (CEF) has the following limitations.
  - Load balancing on GRE interfaces is not supported
  - Load balancing on IOS switch interfaces is not supported
  - Packets may choose different egress interfaces when interface is up/down
  - Up to 16 interfaces are supported for load balancing
  - SNMP traps for CEF load balancing are not supported
- Ingress vlan classification and marking is not supported on dot1q tunnel interfaces.
- Release 15.1(3)MRA does not support the 802.1ad standard for VLAN scalability. However, the release supports QinQ, a Cisco-proprietary system for double-tagging.to provide VLAN scalability in the provider networks.
- Release 15.1(3)MRA does not support the **switchport vlan mapping default drop** command.
- Release 15.1(3)MRA does not support translation between CFM draft 1 and IEEE standardized 802.1ag CFM.
- Ethernet LCK is not supported.
- OAM Manager.is not supported.
- CFM Draft 1.0 is not supported.
- CFM for Customer VLANs (C-VLANs) is not supported.
- Ethernet Locked Signal is not supported.
- Rapid PVST+ is not supported.
- VLAN translation is not supported on HWIC interfaces.
- Rate limiting and policing are not supported on HWIC or onboard Gigabit Ethernet interfaces.
- GSM Abis optimization not supported—Release 15.1(3)MRA does not support GSM Abis optimization feature that was supported in Release 12.4(20)MR1.

- Reduced HWIC support—Release 15.1(3)MRA does not support the HWIC-1GE-SFP, HWIC-4SHDSL, HWIC-1ADSL, and HWIC-1ADSL-I HWICs that were supported in Release 12.4(20)MR1.
- GRE offload not supported— 15.1(3)MRA does not support the GRE offload feature that was supported in Release 12.4(20)MR1.
- UMTS Iub Optimization not supported—Release 15.1(3)MRA does not support UMTS Iub optimization.
- L2TP not supported—The MWR 2941 currently does not support L2TP.
- Multicast used for PTP redundancy only—This release provides support for multicast in order to establish PTP redundancy; the Cisco MWR 2941 does not support multicast for other uses.
- Out-of-band master mode not supported—This release does not support out-of-band master mode for Timing over Packet/adaptive clock recovery. If your network design requires out-of-band master clocking, you can use the CEoPs SPA on the 7600 router for this purpose.
- ACR out-of-band payload limitation—The MWR 2941 only supports the payload-size values 486 (625 packets per second) or 243 (1250 packets per second) for out-of-band clock recovery.
- T1 SAToP is not supported on the HWIC-4T1/E1.
- Limited OAM support—ATM OAM (Operation, Administration, and Maintenance) is not supported on the short haul side of the Cisco MWR 2941.
- The Cisco MWR 2941 does not support the **mpls traffic-eng tunnels** command at the global or interface level.
- QoS Limitations—The Cisco MWR 2941 provides limited QoS support. For more information, see the *Cisco MWR 2941-DC Mobile Wireless Edge Router Software Configuration Guide, Release 12.2(33)MRB*.
- The Cisco MWR 2941 does not support the following options on offloaded dMLPPP bundles:
  - **ppp multilink idle-link**
  - **ppp multilink queue depth**
  - **ppp multilink fragment maximum**
  - **ppp multilink slippage**
  - **ppp timeout multilink lost-fragment**

Note If you have a bundle that requires the use of these options, contact Cisco support for assistance.

For more information about configuring dMLPPP, see the *Cisco MWR 2941-DC Mobile Wireless Edge Router Software Configuration Guide, Release 15.1(3)MRA*.

- MPLS pseudowire ping not supported—This release does not support the **ping mpls pseudowire** command. We recommend that you use the **ping mpls ipv4** command for operation and maintenance of MPLS connections.

- CAS limitations—The Cisco MWR 2941 implementation of CAS has the following limitations:
  - CAS is not supported on T1 and E1 HWICs.
  - When configuring a CESoPSN pseudowire to use CAS, you must configure the controller to use CAS signalling prior to creating a cem group, tdm group, or channel group. Otherwise the Cisco MWR 2941 rejects the **mode cas** command.
  - CAS is only supported on pseudowire connections between two Cisco MWR 2941 routers; the 7600 router does not currently support CAS.
- PTP only supported on Gigabit Ethernet interfaces—The Cisco MWR 2941 only supports PTP traffic on onboard Gigabit Ethernet interfaces.
- PPPoA not supported—This release does not provide support for PPPoA.
- ADSL not supported—This release does not support ADSL.
- BFD interface support limitations—Release 15.1(3)MRA only supports BFD on switched virtual interfaces (SVIs).
- Multicast interface limitations—Multicast is only supported on VLANs and Ethernet interfaces. Multicast routing is not supported on other interface types.
- Release 15.1(3)MRA supports up to 64 VLANs if the HWIC-D-9ESW card is in use; otherwise it supports a maximum of 255 VLANs as in previous releases.
- The Cisco MWR 2941 does not support access control lists (ACLs) for layer 3 forwarding through the network processor.
- The **show interfaces** command displays inaccurate information when used with the **counters** keyword. The counters for multicast packets display as 0 even if multicast traffic is passing on the router. To display correct multicast counters, use the **show interfaces** command without the **counters** keyword.
- The multicast packet counters in the **show interfaces** *type number* **counters** command output are set to 0 even if multicast traffic is enabled. To see accurate counters for multicast traffic, use the **show interfaces** command without the **counters** keyword.
- Virtual path-to-virtual path local switching is not supported.
- Local switching is only supported between onboard T1 and E1 ports; local switching between HWIC T1 and E1 ports is not supported.
- Ethernet loopback is only supported on onboard Gigabit Ethernet interfaces; it is not supported on HWIC Ethernet interfaces.

Supported Hardware—Cisco MWR 2941-DC Router

The Cisco MWR 2941 supports the following interface cards:

- HWIC-4T1/E1
- HWIC-D-9ESW

Note Release 15.1(3)MRA does not support the HWIC-1GE-SFP, HWIC-4SHDSL, HWIC-1ADSL, and HWIC-1ADSL-I HWICs that were supported in Release 12.4(20)MR1.

The Cisco MWR 2941 router supports the following SFP modules:

- CWDM-SFP-1470
- CWDM-SFP-1490
- CWDM-SFP-1510
- CWDM-SFP-1530
- CWDM-SFP-1550
- CWDM-SFP-1570
- CWDM-SFP-1590
- CWDM-SFP-1610
- DWDM-SFP-4612
- DWDM-SFP-4692
- DWDM-SFP-4772
- DWDM-SFP-4851
- DWDM-SFP-5012
- DWDM-SFP-5092
- DWDM-SFP-5172
- DWDM-SFP-5252
- DWDM-SFP-5413
- DWDM-SFP-5494
- DWDM-SFP-5575
- DWDM-SFP-5655
- DWDM-SFP-5817
- DWDM-SFP-5898
- DWDM-SFP-5979
- DWDM-SFP-6061
- GLC-BX-D
- GLC-BX-U
- GLC-EX-SMD
- GLC-LH-SMD
- GLC-LX-SM-RGD

- GLC-SX-MM-RGD
- GLC-ZX-SM-RGD
- SFP-GE-L
- SFP-GE-S
- SFP-GE-T
- SFP-GE-Z

Other hardware interfaces are not supported.

Caution The Cisco MWR 2941 router does not support online insertion and removal (OIR) of WAN interface cards. Any attempt to perform OIR on a card in a powered-on router might cause damage to the card.

For instructions on how to install HWICs and SFPs, see the documentation included with the product. For information about how to configure HWICs and SFPs, see the *Cisco MWR 2941 Mobile Wireless Edge Router Software Configuration Guide, Cisco IOS Release 15.1(3)MR*.

Supported MIBs

The Cisco MWR 2941 router supports the following MIBs:

- CISCO-ACCESS-ENVMON-MIB
- CISCO-CDP-MIB
- CISCO-CONFIG-COPY-MIB
- CISCO-CONFIG-MAN-MIB
- CISCO-ENHANCED-MEMPOOL-MIB
- CISCO-ENTITY-EXT-MIB
- CISCO-ENTITY-FRU-CONTROL-MIB
- CISCO-ENTITY-SENSOR-MIB
- CISCO-ENTITY-VENDORTYPE-OID-MIB
- CISCO-ENVMON-MIB
- CISCO-FLASH-MIB
- CISCO-IETF-BFD-MIB
- CISCO-IETF-PW-MIB
- CISCO-IETF-PW-TC-MIB
- CISCO-IF-EXTENSION-MIB
- CISCO-IMAGE-MIB
- CISCO-MEMORY-POOL-MIB
- CISCO-PROCESS-MIB
- CISCO-PRODUCTS-MIB
- CISCO-RESILIENT-ETHERNET-PROTOCOL-MIB
- CISCO-RTTMON-MIB
- CISCO-SMI
- CISCO-SYSLOG-MIB
- CISCO-TC
- CISCO-VTP-MIB
- ENTITY-MIB
- HCNUM-TC
- IANAifType-MIB
- IF-MIB
- IMA-MIB
- INET-ADDRESS-MIB
- IP-FORWARD-MIB
- IP-MIB
- MPLS-VPN-MIB
- OLD-CISCO-CHASSIS-MIB
- OLD-CISCO-INTERFACES-MIB
- OLD-CISCO-SYS-MIB
- OLD-CISCO-TS-MIB
- PerfHist-TC-MIB
- RFC1213-MIB
- RMON2-MIB
- RMON-MIB
- SNMP-FRAMEWORK-MIB
- SNMP-TARGET-MIB
- SNMPv2-CONF
- SNMPv2-MIB
- SNMPv2-SMI
- SNMPv2-TC

Note Release 15.1(3)MRA provides limited support for the CISCO-CLASS-BASED-QOS-MIB for tail drop monitoring; the router supports the cbQosQueueingDiscardPkt64 object within the cbQosQueueingStatsTable table for tail drop accounting. Other objects in this table and other tables within the CISCO-CLASS-BASED-QOS-MIB are not supported.

Caveats

This section documents the open and resolved caveats for the Cisco MWR 2941 router running Cisco IOS Release 15.1(3)MRA.

Caveats describe unexpected behavior in Cisco IOS software releases. Severity 1 caveats are the most serious caveats, severity 2 caveats are less serious, and severity 3 caveats are the least serious of these three severity levels. Only select severity 3 caveats are listed.

For information on caveats in Cisco IOS Software Releases 15.1S, go to:

http://www.cisco.com/en/US/products/ps10890/prod_release_notes_list.html.

Note If you have an account with Cisco.com, you can use the Bug Toolkit to find caveats of any severity for any release. To reach the Bug Toolkit, log in to Cisco.com and click the **Support** tab and select **Support** from the drop-down menu. Under Frequently Used Resources, click **Bug Toolkit**. You must then log in. Another option is to go directly to: http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl.

The following sections document the opened and resolved caveats by Cisco IOS release:

- Caveats in Cisco IOS Release 15.1(3)MRA, page 11
- Troubleshooting, page 14

Caveats in Cisco IOS Release 15.1(3)MRA

The following section describe the caveats open in Cisco IOS Release 15.1(3)MRA.

Open Caveats

- CSCua64908

  Symptom: Traceback messages are seen after reloading a router on which multilink interfaces are configured or after an IP header compression (IPHC) configuration is changed.

  Conditions: Occurs in the following topology:

  7600—MWR

  The symptom occurs under the following conditions:

  - Multilink interfaces with IPHC configurations are configured.
  - The IPHC configurations are changed.

  Workaround: None.

- CSCua96150

  Symptom: SNMP trap-directed notifications occur after every execution of a counter command.

  Conditions: This condition occurs after every execution of a counter command when the storm control action trap is enabled and traffic is exceeding the configured limit.

  Workaround: None.

- CSCub05412

  Symptom: The Cisco MWR 2941 does not support storm control for multicast PDUs.

  Conditions: Multicast storm control applied as 0% is not controlling the multicast PDUs of CDP and STP. The expected behavior is that when applied as 0% no convergence occurs on STP and no CDP learning occurs.

  Workaround: None.

Closed Caveats

- CSCub94088 (Duplicate of CSCud02423)

  Symptom: Counters increase for all class-maps even though traffic is being sent to only one class-map.

  Conditions: The symptom occurs under the following conditions:

  - 10 class-maps with matches on different VLANs are configured.
  - The service policy is applied on the on the ingress direction of the Cisco MWR 2941.
  - Traffic is sent from IXIA1 that matches one VLAN class.

  When the conditions above occur, the **show policy-map interface** command displays all the class-map counters increasing.

  Workaround: Reload the router.

- CSCuc87911

  Symptom:

  Flags are incorrect when the priority is configured the modes from active to passive change.

  Conditions: This condition occurs in the following topology:

  IXIA1 > MWR1 > MWR2 > IXIA2

  When:

  - A port-channel interface is configured on the MWR1 and MWR2.
  - The bundle is up.
  - The priority is configured and the modes change from active to passive on the members, which results in the incorrect flags. The flags are not correct until the router is reloaded.

  The Cisco MWR 2941 does not support dynamic modification of the port-channel mode. Perform a **shut** and **no shut** for the flags to be effected post change.

- CSCuc88332

  Symptom: Deleting a port-channel interface after removing the switchport configuration causes continuous tracebacks to occur.

  Conditions: This condition occurs in the following topology:

  IXIA1 > MWR1 > MWR2 > IXIA2

  When:

  - A port-channel interface is configured on the MWR1 and MWR2.
  - The bundle is up.

  - The switchport configuration is removed from the port-channel interface and as designed, an error message is received.
  - The port-channel interface is deleted, which causes continuous tracebacks.

  The Cisco MWR does not support dynamic modification of the port-channel mode. Perform a **shut** and **no shut** for the flags to be affected post change.

- CSCuc92958

  Symptom: A member of a port-channel takes more time to go to hot-standby mode after its priority has been increased.

  Conditions: This condition occurs in the following topology:

  IXIA1 > MWR1 > MWR2 > IXIA2

  When:

  - A port-channel interface is configured on the MWR1 and MWR2.
  - The bundle is up.
  - The priority of the members is changed, which results in the member of a port-channel taking more time to go to hot-standby mode.

  Priority assignment for hot-standby is not supported on the Cisco MWR 2941. The members of a bundle are assigned equal priority.

- CSCud37981

  Symptom: Tracebacks are seen after shutting the VLAN associated with a port-channel.

  Conditions: This condition occurs in the following topology:

  IXIA1 > MWR1 > MWR2 > IXIA2

  When:

  - A port-channel interface is configured on the MWR1 and MWR2.
  - The bundle is up.
  - The VLAN associated with the port-channel is shut and tracebacks are seen.

  Cisco does not recommend performing a **shut** on a switch VLAN with traffic. The **shut vlan** command should be replaced with **shutdown** on the interface VLAN to stop L3 traffic forwarding.

- CSCud06690

  Symptom: Changes do not take effect when modifying the HQoS policy-map with shaping configured to parent policy-map.

  This condition occurs with the following scenario:

  - When the shaping parameter is modified in the parent policy.
  - When the parameters are modified/applied in the child policy.

  Removing and re-applying the egress service policy from interface makes the changes take effect. For information on removing and reapplying a service policy, see the *Cisco MWR 2941 Mobile Wireless Edge Router Software Configuration Guide*.

Troubleshooting

The following sections describe troubleshooting commands you can use with the Cisco MWR 2941.

Collecting Data for Router Issues

To collect data for reporting router issues, issue the following command:

- **show tech-support**—Displays general information about the router if it reports a problem.

Collecting Data for ROMmon Issues

To collect data for ROMmon issues, issue the following command while in EXEC mode:

- **show rom-monitor**—Displays currently selected ROM monitor.

Note If you contact Cisco support for assistance, we recommend that you provide any crashinfo files stored in flash memory. For more information about crashinfo files, see http://www.cisco.com/en/US/products/hw/routers/ps167/products_tech_note09186a00800a6743.shtml.

Related Documentation

Related documents for implementing the Cisco MWR 2941 mobile wireless edge router are available on Cisco.com

To access the related documentation on Cisco.com, go to:

http://www.cisco.com/en/US/products/ps9395/tsd_products_support_series_home.html

Documents related to the Cisco MWR 2941-DC mobile wireless edge router include the following guides:

- Cisco MWR 2941 Mobile Wireless Edge Router documents
  - *Cisco MWR 2941 Mobile Wireless Edge Router Hardware Installation Guide*
  - *Cisco MWR 2941 Mobile Wireless Edge Router Software Configuration Guide, Cisco IOS Release 15.1(3)MR*
  - *Cisco MWR 2941 Router Command Reference, Cisco IOS Release 15.1(3)MR*
  - *Regulatory Compliance and Safety Information for the Cisco MWR 2941 Mobile Wireless Edge Routers*
- Release Notes—*Release Notes for Cisco MWR 2941 Mobile Wireless Edge Router for Cisco IOS Release 15.1(3)MRA*

- Cisco Interface Cards Installation Guides
  - *Quick Start Guide: Interface Cards*
  - Cisco Interface Cards Installation Guide

Services and Support

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New* in Cisco Product Documentation, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

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