



# Release Notes for Cisco IOS Release 15.2(3)EA

**Last Updated: March 1, 2017**

**First Published: December 23, 2014**

Cisco IOS Release 15.2(3)EA runs on these platforms:

- Cisco 2500 Series Connected Grid Switches (CGS 2520)
- Cisco Embedded Service 2020 Series Switches (ESS 2020)
- Cisco Connected Grid Ethernet Switch Module (CGR 2010 ESM)
- Cisco Industrial Ethernet 2000 Series Switches (IE 2000)
- Cisco Industrial Ethernet 2000U Series Switches (IE 2000U)
- Cisco Industrial Ethernet 3000 Series Switches (IE 3000)
- Cisco Industrial Ethernet 3010 Series Switches (IE 3010)

These release notes include important information about Cisco IOS Release 15.2(3)EA and any limitations, restrictions, and caveats that apply to the release. Verify that these release notes are correct for your switch:

- If you are installing a new switch, see the Cisco IOS release label on the rear panel of your switch.
- If your switch is on, use the **show version** command. See [Finding the Software Version and Feature Set, page 5](#).
- If you are upgrading to a new release, see the software upgrade filename for the software version. See [Deciding Which Files to Use, page 5](#).

For a complete list of documentation for the platforms associated with this release, see [Related Documentation, page 14](#).

You can download the switch software from this site (registered Cisco.com users with a login password):

<http://software.cisco.com/download/navigator.html>

## Organization

This document includes the following sections:

<a href="#">Conventions, page 2</a>	Conventions used in this document.
<a href="#">New Features in Cisco IOS Release 15.2(3)EA, page 3</a>	New features in Release 15.2(3)EA.
<a href="#">System Requirements, page 4</a>	System requirements for Release 15.2(3)EA.
<a href="#">Upgrading the Switch Software, page 4</a>	Procedures for downloading software.
<a href="#">Important Notes, page 8</a>	Important information about this release.
<a href="#">Limitations and Restrictions, page 8</a>	Known limitations in this release.
<a href="#">Caveats, page 9</a>	Open caveats in Release 15.2(3)EA.
<a href="#">Related Documentation, page 14</a>	Links to the documentation for the hardware platforms associated with this release.
<a href="#">Obtaining Documentation and Submitting a Service Request, page 15</a>	Link to information about Cisco documentation.

## Conventions

This document uses the following conventions.

Conventions	Indication
<b>bold font</b>	Commands and keywords and user-entered text appear in <b>bold font</b> .
<i>italic font</i>	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic font</i> .
[ ]	Elements in square brackets are optional.
{x   y   z }	Required alternative keywords are grouped in braces and separated by vertical bars.
[ x   y   z ]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
courier font	Terminal sessions and information the system displays appear in <code>courier font</code> .
< >	Nonprinting characters such as passwords are in angle brackets.
[ ]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

**Note:** Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.

**Caution:** Means *reader be careful*. In this situation, you might perform an action that could result in equipment damage or loss of data.

**Warning: IMPORTANT SAFETY INSTRUCTIONS**

**Means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings**

that accompanied this device.

### SAVE THESE INSTRUCTIONS

**Regulatory:** Provided for additional information and to comply with regulatory and customer requirements.

## New Features in Cisco IOS Release 15.2(3)EA

Table 1 on page 3 lists the new features added in Cisco IOS Release 15.2(3)EA.

**Table 1 New Feature Summary for Cisco IOS Release 15.2(3)EA**

Feature	Platform	Description	Related Documentation
IP Lite License Support	IE 2000	Includes Enterprise Layer3 support (OSPF, RIP, and EIGRP) and Embedded Event Manager (EEM) for IE2000.	<a href="#">Software Activation Licensing Upgrade Instructions for the Cisco IE2000 Switch Series</a>
Device Manager Online Help Enhancements	IE 2000, IE 3000, IE 3010, CGS 2520	Adds support for IE 3010 and CGS 2520 in addition to existing IE 2000 and IE 3000. Includes feature enhancements such as Read only User Privilege and IP routing interfaces.	Device Manager Online Help
IP Device Tracking Enhancement (CSCur09175)	IE 2000, IE 3000	IP Device Tracking (IPDT) is now disabled by default.  IPDT monitors ARP packets and DHCP requests to detect the presence of connected devices. The following CLI is added to suppress messages from hosts about duplicate IP addresses:  <b>ip device tracking probe auto-source fallback &lt;ipaddress&gt; &lt;mask&gt; override</b>	<ul style="list-style-type: none"> <li>■ <a href="http://www.cisco.com/c/en/us/td/docs/switches/lan/cisco_ie2000/software/release/15_0_2_eb/configuration/guide/scg-ie2000/swipsrc.html">http://www.cisco.com/c/en/us/td/docs/switches/lan/cisco_ie2000/software/release/15_0_2_eb/configuration/guide/scg-ie2000/swipsrc.html</a></li> </ul>
CIP Enhancements	IE 2000, IE 3000	Includes Common Industrial Protocol (CIP) support for EtherChannel and static IPv4 routing configuration.	<ul style="list-style-type: none"> <li>■ CIP specifications: <a href="http://www.odva.org">http://www.odva.org</a></li> <li>■ To enable CIP: <ul style="list-style-type: none"> <li>– <a href="#">Cisco IE 2000 Switch Command Reference</a></li> <li>– <a href="#">Cisco IE 3000 Switch Command Reference</a></li> </ul> </li> <li>■ Information about EtherChannels and static IPv4 routing: <ul style="list-style-type: none"> <li>– <a href="#">IE 2000 Software Configuration Guide</a></li> <li>– <a href="#">IE 3000 Software Configuration Guide</a></li> </ul> </li> </ul>
100 Mbps SFP full-duplex enhancement	IE 2000, CGS 2520, ESM, IE 3000, IE 3010,	For 100 Mbps SFP ports, the default duplex auto-negotiate setting is changed to full-duplex.	<ul style="list-style-type: none"> <li>■ Device Manager Online Help</li> </ul>

## System Requirements

**Table 1 New Feature Summary for Cisco IOS Release 15.2(3)EA (continued)**

Feature	Platform	Description	Related Documentation
Temperature and Power Monitoring for SFP DOMs	CGS 2520	You can configure the monitoring interval of temperature and power for SFP DOM modules on the CGS 2520.	<a href="#">Temperature and Power Monitoring for SFP DOMs</a>
SFP DOMs: BX40 and BX80 (Group A, long distance)	IE 2000, IE 3000, IE 3010	The new SFPs are: <ul style="list-style-type: none"> <li>■ GLC-BX40-D-I with DOM support</li> <li>■ GLC-BX40-DA-I with DOM support</li> <li>■ GLC-BX40-U-I with DOM support</li> <li>■ GLC-BX80-D-I with DOM support</li> <li>■ GLC-BX80-U-I with DOM support</li> </ul>	<ul style="list-style-type: none"> <li>■ <a href="#">Cisco IE 2000 Switch Hardware Installation Guide</a></li> <li>■ <a href="#">Cisco IE 3000 Series Switch Hardware Installation Guide</a></li> <li>■ <a href="#">Cisco IE 3010 Switch Hardware Installation Guide</a></li> </ul>
TrustSec 4.0	IE 2000U	TrustSec 4.0 is an intelligent access control solution that enables secure network access, shows who and what is connecting to the network, and mitigates risk by providing centralized controls over the resources that users and devices can access.	<ul style="list-style-type: none"> <li>■ <a href="http://www.cisco.com/c/en/us/solutions/enterprise-networks/trustsec/index.html">http://www.cisco.com/c/en/us/solutions/enterprise-networks/trustsec/index.html</a></li> </ul>

## System Requirements

This section describes the following system requirements for Cisco IOS Release 15.2(3)EA:

- [Express Setup Requirements, page 4](#)

## Express Setup Requirements

### Hardware

- 1 gigahertz (GHz) or faster 32-bit (x86) or 64-bit (x64) processor
- 1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)
- 16 GB available hard disk space (32-bit) or 20 GB (64-bit)

### Software

- PC with Windows 7, or Mac OS 10.6.x
- Web browser (Internet Explorer 9.0, 10.0, and 11.0, or Firefox 32) with JavaScript enabled
- Straight-through or crossover Category 5 or 6 cable

Express Setup verifies the browser version when starting a session, and it does not require a plug-in.

## Upgrading the Switch Software

These are the procedures for downloading software. Before downloading software, read these sections for important information:

- [Finding the Software Version and Feature Set, page 5](#)
- [Deciding Which Files to Use, page 5](#)

## Upgrading the Switch Software

- [Archiving Software Images, page 6](#)
- [Upgrading a Switch by Using the CLI, page 6](#)
- [Installation Notes, page 7](#)

## Finding the Software Version and Feature Set

The Cisco IOS image is stored as a bin file in a directory that is named with the Cisco IOS release. A subdirectory contains the files needed for web management. The image is stored on the compact flash memory card.

You can use the **show version** privileged EXEC command to see the software version that is running on your switch. The second line of the display shows the version.

You can also use the **dir filesystem:** privileged EXEC command to see the directory names of other software images stored in flash memory. For example, use the **dir flash:** command to display the images in the flash memory.

## Deciding Which Files to Use

The upgrade procedures in these release notes describe how to perform the upgrade by using a combined tar file. This file contains the Cisco IOS image file and the files needed for the embedded device manager. You must use the combined tar file to upgrade the switch through Express Setup. To upgrade the switch through the command-line interface (CLI), use the tar file and the **archive download-sw** privileged EXEC command.

[Table 2](#) lists the filenames for this software release.

**Note:** If you download the IP services image and plan to use Layer 3 functionality, you must use the Switch Database Management (SDM) routing template. To determine the currently active template, enter the **show sdm prefer** privileged EXEC command. If necessary, enter the **sdm prefer** global configuration command to change the SDM template to a specific template. For example, if the switch uses Layer 3 routing, change the SDM template from the default to the routing template. You must reload the switch for the new template to take effect.

**Table 2 Cisco IOS Software Image Files**

File Name	Description
c2020-universalk9-tar.152-3.EA.tar	ESS 2020 universal image file
ie2000-universalk9-tar.152-3.EA.tar	IE 2000 universal image file
ie3010-ipservicesk9-tar.152-3.EA.tar	IE 3010 IP services image file
ie3010-lanbasek9-tar.152-3.EA.tar	IE 3010 LAN base image file
ies-ipservices-tar.152-3.EA.tar	IE 3000 IP services image file
ies-lanbase-tar.152-3.EA.tar	IE 3000 LAN base image file
ie2000u-ipserviceslmk9-tar.152-3.EA.tar	IE 2000U IP services image file
ie2000u-lanbaselmk9-tar.152-3.EA.tar	IE 2000U LAN base image file
cgs2520-ipserviceslmk9-tar.152-3.EA.tar	CGS 2520 IP services image file
cgs2520-lanbaselmk9-tar.152-3.EA.tar	CGS 2520 LAN base image file
grwicdes-ipserviceslmk9-tar.152-3.EA.tar	ESM IP services image file
grwicdes-lanbaselmk9-tar.152-3.EA.tar	ESM LAN base image file

## Archiving Software Images

Before upgrading your switch software, make sure that you archive copies of both your current Cisco IOS release and the Cisco IOS release to which you are upgrading. Keep these archived images until you have upgraded all devices in the network to the new Cisco IOS image and verified that the new Cisco IOS image works properly in your network.

Cisco routinely removes old Cisco IOS versions from Cisco.com. See *Product Bulletin 2863* for information: [http://www.cisco.com/en/US/prod/collateral/iosswrel/ps8802/ps6969/ps1835/prod\\_bulletin0900aecd80281c0e.html](http://www.cisco.com/en/US/prod/collateral/iosswrel/ps8802/ps6969/ps1835/prod_bulletin0900aecd80281c0e.html)

You can copy the bin software image file on the flash memory to the appropriate TFTP directory on a host by using the **copy flash: tftp:** privileged EXEC command.

**Note:** Although you can copy any file on the flash memory to the TFTP server, it is time consuming to copy all of the HTML files in the tar file. We recommend that you download the tar file from Cisco.com and archive it on an internal host in your network.

You can also configure the switch as a TFTP server to copy files from one switch to another without using an external TFTP server by using the **tftp-server** global configuration command.

## Upgrading a Switch by Using the CLI

This procedure is for copying the combined tar file to the switch. You copy the file to the switch from a TFTP server and extract the files. You can download an image file and replace or keep the current image.

**Note:** Make sure that the compact flash card is in the switch before downloading the software.

To download software, follow these steps:

1. Use [Table 2 on page 5](#) to identify the file that you want to download.
2. Download the software image file. If you have a SMARTNet support contract, go to this URL, and log in to download the appropriate files:

<http://software.cisco.com/download/navigator.html>

For example, to download the image for an IE 2000 switch, select Products > Switches > Industrial Ethernet Switches > Cisco Industrial Ethernet 2000 Series Switches, then select your switch model. Select IOS Software for Software Type, then select the image you want to download.

3. Copy the image to the appropriate TFTP directory on the workstation, and make sure that the TFTP server is properly configured.

For more information, see the “Assigning the Switch IP Address and Default Gateway” chapter in the applicable document listed in [Table 3](#).

4. Log into the switch through the console port or a Telnet session.
5. (Optional) Ensure that you have IP connectivity to the TFTP server by entering this privileged EXEC command:

```
Switch# ping tftp-server-address
```

For more information about assigning an IP address and default gateway to the switch, see [Table 3](#).

6. Download the image file from the TFTP server to the switch.

If you are installing the same version of software that currently exists on the switch, overwrite the current image by entering this privileged EXEC command:

```
Switch# archive download-sw /overwrite /reload tftp:[[//location]/directory]/image-name.tar
```

- The **/overwrite** option overwrites the software image in flash memory with the downloaded one.

## Upgrading the Switch Software

- The **/reload** option reloads the system after downloading the image unless the configuration has been changed and not saved.
- For **///location**, specify the IP address of the TFTP server.
- For **/directory/image-name.tar**, specify the directory (optional) and the image to download. Directory and image names are case sensitive.

This example shows how to download an image from a TFTP server at 198.30.20.19 and to overwrite the image on the switch:

```
Switch# archive download-sw /overwrite tftp://198.30.20.19/image-name.tar
```

You can also download the image file from the TFTP server to the switch and keep the current image by replacing the **/overwrite** option with the **/leave-old-sw** option.

## Installation Notes

You can assign IP information to your switch using the methods shown in [Table 3](#).

**Table 3 Methods for Assigning IP Information**

Method	Platform	Document
Express setup program	IE 2000	Device Manager Online Help
	IE 2000U	<a href="#">Cisco IE 2000U Switch Getting Started Guide</a>
	IE 3000	<a href="#">Cisco IE 3000 Switch Getting Started Guide</a>
	IE 3010	Device Manager Online Help
	CGS 2520	<a href="#">Cisco CGS 2520 Getting Started Guide</a>
	ESM	<a href="#">Connected Grid Ethernet Switch Module Interface Card Getting Started Guide</a>
CLI-based setup program	IE 2000	<a href="#">Cisco IE 2000 Switch Hardware Installation Guide</a>
	IE 2000U	<a href="#">Cisco IE 2000U Switch Hardware Installation Guide</a>
	IE 3000	<a href="#">Cisco IE 3000 Series Switch Hardware Installation Guide</a>
	IE 3010	<a href="#">Cisco IE 3010 Switch Hardware Installation Guide</a>
	CGS 2520	<a href="#">Cisco CGS 2520 Hardware Installation Guide</a>
	ESM	<a href="#">CGS 2520 Switch Software Configuration Guide</a>
DHCP-based autoconfiguration	IE 2000	<a href="#">Cisco IE 2000 Series Switch Software Configuration Guide</a>
	IE 2000U	<a href="#">System Management Software Configuration Guide for Cisco IE 2000U and Connected Grid Switches</a>
	IE 3000	<a href="#">Cisco IE 3000 Series Switch Software Configuration Guide</a>
	IE 3010	<a href="#">Cisco IE 3010 Series Switch Software Configuration Guide</a>
	CGS 2520	<a href="#">CGS 2520 Switch Software Configuration Guide</a>
	ESM	<a href="#">Cisco Connected Grid Ethernet Switch Module Interface Card Software Configuration Guide</a>

## Important Notes

**Table 3 Methods for Assigning IP Information (continued)**

Method	Platform	Document
Manually assigning an IP address	IE 2000	<a href="#">Cisco IE 2000 Series Switch Software Configuration Guide</a>
	IE 2000U	<a href="#">System Management Software Configuration Guide for Cisco IE 2000U and Connected Grid Switches</a>
	IE 3000	<a href="#">Cisco IE 3000 Series Switch Software Configuration Guide</a>
	IE 3010	<a href="#">Cisco IE 3010 Series Switch Software Configuration Guide</a>
	CGS 2520	<a href="#">CGS 2520 Switch Software Configuration Guide</a>
	ESM	<a href="#">Cisco Connected Grid Ethernet Switch Module Interface Card Software Configuration Guide</a>

## Important Notes

**Device Manager and NAT Statistics**

A NAT instance with translations that you create using the CLI is not reflected in the Device Manager > Monitor > Statistics > NAT statistics page. Only those instances that you create from the Device Manager GUI and that have translations are shown in the NAT instance statistics. (CSCum87971)

NAT “permit unmatched” allows ARP packets as long as the translation matches either IP source OR IP destination. (CSCup27591)

## Limitations and Restrictions

Cisco recommends that you review this section before you begin working with the switch. These are known limitations that will not be fixed, and there is not always a workaround for these issues. Some features might not work as documented, and some features might be affected by recent changes to the switch hardware or software.

- CSCup58174

**Symptom** CIP V4Router object does not display some metrics that **show run | i route** displays.

Example of behavior:

-----

```
IE2000_2016(config)#ip route 10.0.0.11 255.255.255.255 50.0.0.50 name ?
WORD Name of the next hop
```

```
IE2000_2016(config)#ip route 10.0.0.11 255.255.255.255 50.0.0.50 name fa1/1
IE2000_2016(config)#end
IE2000_2016#show run | i route
```

```
ip route profile
ip route 0.0.0.0 0.0.0.0 FastEthernet1/9 172.27.168.129
ip route 10.0.0.1 255.255.255.255 20.0.0.2
ip route 10.0.0.2 255.255.255.255 Loopback10
ip route 10.0.0.2 255.255.255.255 Loopback10 20.0.0.2
ip route 10.0.0.3 255.255.255.255 Vlan1
ip route 10.0.0.3 255.255.255.255 Vlan10
ip route 10.0.0.3 255.255.255.255 Vlan10 40.0.0.4
ip route 10.0.0.11 255.255.255.255 10.0.0.11
ip route 10.0.0.11 255.255.255.255 50.0.0.50 name fa1/1
```



## Caveats

```
ip route 10.0.0.7 255.255.255.255 50.0.0.7 permanent multicast
ip route 10.0.0.8 255.255.255.255 44.44.44.44 permanent multicast
ip route 10.0.0.6 255.255.255.255 dhcp
```

```
IE2000_2016#show cip object v4router 0
1: 0.0.0.0 0.0.0.0 0.0.255.255
2: 10.0.0.1 255.255.255.255 20.0.0.2
3: 10.0.0.2 255.255.255.255 0.0.255.255
4: 10.0.0.3 255.255.255.255 0.0.255.255
5: 10.0.0.11 255.255.255.255 50.0.0.50
6: 10.0.0.7 255.255.255.255 50.0.0.7
7: 10.0.0.8 255.255.255.255 44.44.44.44
8: 0.0.0.0 0.0.0.0
```

**Conditions** Not applicable.

**Workaround** There is no workaround for this issue.

### ■ CSCup75235

**Symptom** SFP types SFP-GE-L and GLC-EX-SMD sometimes generate Rx power high warning without significant traffic.

**Conditions** Insert SFPs ( SFP-GE-L and GLC-EX-SMD) into CGS 2520. You can sometimes observe that the Rx power high warning syslog message is generated at every monitoring interval.

If **snmp-server enable trap transceiver** is configured, a trap is also generated.

**Workaround** There is no workaround for this issue. The SFPs could have gone bad or the optical cable is bad. Observe the SFPs, cable and traffic, and if you find issues replace the SFPs.

There is no functionality issue observed under this condition. This seems to be a false positive.

### ■ CSCus02105

**Symptom** **show cip object v4router 0** does not display correct routes in some scenarios.

**Conditions** If you configure a cip unsupported route, for example, `ip route 0.0.0.0 0.0.0.0 fa1/1 172.27.168.129`, the route will not be displayed properly in the **sh cip object v4router** command output. All following routes (including supported routes such as `ip route 0.0.0.0 0.0.0.0 fa1/1` or `ip route 0.0.0.0 0.0.0.0 v1an1`) also will not be displayed properly.

**Workaround** Reload the switch.

### ■ CSCuw22362

**Symptom** The **network-policy profile** command is not supported on the IE 3010 in this release and earlier 15.x and 12.x Cisco IOS releases.

**Conditions** Entering the **network-policy profile** command on an IE 3010 indicates that it is an Unrecognized command.

**Workaround** There is no workaround. The IE 3010 does not support the command in this release.

## Caveats

This section addresses the open caveats in this release and provides information on how to use the Bug Search Tool to find further details on those caveats. This section includes the following topics:

- [Open Caveats, page 10](#)
- [Accessing Bug Search Tool, page 14](#)

## Caveats

## Open Caveats

## ■ CSCuo87734

**Symptom** When a system is reloaded after its startup configuration has been erased, sometimes the vlan 1 interface goes to admin down state.

**Conditions** Boot a system with empty startup configuration.

**Workaround** Issue **no shut** on the vlan interface.

## ■ CSCup53568

**Symptom** The system allows you to configure more than 16 routes, but they are not visible in the ip route table.

**Conditions** With the IE 2000 running the enhanced lanbase image and ip routing enabled, configure more than 16 routes. They are not visible in the ip route table or in **show running-configuration**. There is no error/warning message when you exceed the 16 route limit. Functionally there is no impact.

**Workaround** There is a CLI error message when the maximum number of static routes is exceeded. To see this error message, set the following debugging CLI: **debug ip routing static db**. When too many routes are configured, you will see the following messages on the console:

```
>Mar 30 23:49:09.912: IP-ST-DB(default): Maximum allowed static route count reached :16
>Mar 30 23:49:09.912: IP-ST-DB(default): ip_addstatic_route(), failed
>Mar 30 23:49:09.912: 10.0.0.15/32 via 3.3.3.1 ,tag 0,fg 0x40020004,dis 1,name ,lfg 0x0,own M
```

## ■ CSCuq16134

**Symptom** CPU protection and dot1x are mutually exclusive. When enabled, these features work fine. When the IE 2000U or CGS 2520 have TrustSec configured to work with ISE, dot1x fails to authenticate.

**Conditions** CPU protection is enabled.

**Workaround** Disable CPU protection by running the following command: **no policer cpu uni all**.

## ■ CSCuq21005

**Symptom** In-line editing becomes unresponsive on the Device Manager Port Thresholds page.

**Conditions** Editing a field too quickly can cause in-line editing to become unresponsive.

**Workaround** Editing the box repeatedly works if the user waits one or two seconds for Device Manager to push the update to the device.

## ■ CSCuq43566

**Symptom** Unsupported vlan v4r cip object configuration causes issues.

**Conditions** If you configure a route with a vlan interface as the next hop, it affects the display of other routes in the v4r output.

**Workaround** Remove all vlan routes in order to view the routes configured after the vlan v4r configuration. CIP does not support vlan for static routes.

## ■ CSCuq49187

**Symptom** The following message is displayed during bootup:

```
IPv6 ACL is not supported.
```

**Conditions** This issue occurs when the sdm template is dual-ipv4-ipv6 routing/default.

## Caveats

**Workaround** There is no workaround for this issue.

- CSCuq63574

**Symptom** Per port per vlan policer feature is not present on the IE 2000.

**Conditions** The IPLite license is applied.

**Workaround** There is no workaround for this issue.

- CSCuq63577

**Symptom** Match Input interface option cannot be configured while configuring class map.

**Conditions** The IPLite license is applied.

**Workaround** There is no workaround for this issue.

- CSCuq64362

**Symptom** QoS VLAN-based and hierarchical queuing is not configurable on the IE 2000.

**Conditions** The IPLite license is applied.

**Workaround** There is no workaround for this issue.

- CSCuq72745

**Symptom** On the IE 3010, the GE port shows speed as 100Mbps when another GE port is connected.

**Conditions** While generating traffic with IXIA, 90% packet drop is seen.

Topology:

IXIA------(GE)IE3010--(GE)------(GE)-IE2K(GE)----- IXIA

Steps to reproduce:

1. Connect the UUTs on GE ports using 100 MB SFP & RJ 45.
2. Ensure that the port comes up using the SFP.
3. Change the media type to RJ45.
4. The port still displays the speed as 100 Mbps.
5. Pass end to end L2 line rate traffic using IXIA.
6. 90% packet loss is seen.

**Workaround** Issue a **shut** and **no shut** on the interface.

- CSCuq73660

**Symptom** The CLI to configure NAC L2 IP is not available.

**Conditions** The IPLite license is applied.

**Workaround** There is no workaround for this issue.

- CSCur00491

## Caveats

**Symptom** Not able to configure the input alarm 3 and 4 in CGS2520 and IE3010 devices from the CLI (Relay, Notices, and Syslog options)

**Conditions** Input alarms 3 and 4 appear to be enabled in **show alarm settings** output but the settings are not retained after reloading the device.

**Workaround** There is no workaround for this issue.

■ CSCur01466

**Symptom** Sometimes a memory leak can be seen originating from psecure\_vlan\_info\_find.

**Conditions** The leak is occasionally seen when a user tries to enable port-security with a duplicate MAC address and receives an error.

**Workaround** Reload the system.

■ CSCur21110

**Symptom** The VLAN Access List (VACL) feature cannot be configured on the IE 2000.

**Conditions** The IPLite license needs to be enabled.

**Workaround** There is no workaround for this issue.

■ CSCur24288

**Symptom** On the Cisco IE 2000 and IE 3000, the GetAttList time sync obj 0x43 Reply sequence is inconsistent with the request.

**Conditions** Get Attributes List was executed against the time sync object in the IE switches. The sequence was explicitly specified with attributes of variable size at the end in order to simplify parsing the reply. While the CIP specification does not explicitly require that the reply follow the sequence of the request, this is the typical (and therefore expected) behavior in released products so far observed.

The initial sequence attempted was

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 18, 19, 20, 27, 28, 12, 13

However the reply sequence received was

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 18, 19, 20, 27, 28

To verify this, a get attributes list with sequence was attempted

5, 4, 3, 2, 1, 6, 7, 8, 9, 10, 11, 18, 19, 20, 27, 28, 12, 13

However the reply sequence received was

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 18, 19, 20, 27, 28

**Workaround** There is no workaround for this issue.

■ CSCur45858

**Symptom** Cisco MAC notification MIB entries are not reported correctly.

**Conditions** cmnUtilizationUtilization.1001 = 4194258 << This entry is percentage. It is showing > 100.

The Value is shown higher on a device when the mac address entries reach the maximum value.

On another device the value is shown by default as the one above.

Also the cmnUtilizationTable (5) is always shown as zero.

## Caveats

**Workaround** There is no workaround for this issue.

- CSCur62153

**Symptom** Logging out of Device Manager in the IE browser terminates all tab sessions. The user must log in again to any web application sessions that were terminated.

**Conditions** This issue occurs only with the IE browser.

**Workaround** Use the Firefox browser.

- CSCus18066

**Symptom** Profinet DCP (Dynamic Configuration Protocol) discovery and config download do not work consistently.

**Conditions** Siemens STEP7 DCP tool may not be able to discover the device MAC address.

**Workaround** Reboot the switch.

- CSCvd25567

**Symptom** Inserting GLC-FE-T-I SFP puts FE ports of IE2000 unit in err-disable state

**Conditions** The issue affects certain IE2000 SKU types on which the issue is always present. There are no pre-conditions.

Affected Cisco SKUs:

IE-2000-4TS-L (on uplinks)

IE-2000-4TS-B (on uplinks)

IE-2000-8TC-L (on uplinks)

IE-2000-8TC-B (on uplinks)

IE-2000-16TC-L (on both uplink and downlink)

IE-2000-16TC-B (on both uplink and downlink)

IE-2000-16TC-G-L (on downlink)

IE-2000-16TC-G-E (on downlink)

IE-2000-16TC-G-E-U (on downlink)

IE-2000-16TC-G-X (on downlink)

IE-2000-16TC-G-N (on downlink)

**Workaround** There is no workaround

## Resolved Caveats

None.

## Accessing Bug Search Tool

You can use the Bug Search Tool to find information about caveats for this release, including a description of the problems and available workarounds. The Bug Search Tool lists both open and resolved caveats.

To access Bug Search Tool, you need the following items:

- Internet connection
- Web browser
- Cisco.com user ID and password

To access the Bug Search Tool, enter the following URL:

<https://tools.cisco.com/bugsearch/search>

To access the Bug Search Tool to search on a specific caveat, enter the following URL:

<https://tools.cisco.com/bugsearch/search/<BUGID>>

## Related Documentation

**Table 4** Related Documentation

Device or Feature	Related Documents
Cisco 2500 Series Connected Grid Switches	<a href="http://www.cisco.com/go/cgs2520">http://www.cisco.com/go/cgs2520</a>
Cisco Embedded Service 2020 Series Switches (ESS 2020)	<a href="http://www.cisco.com/c/en/us/support/switches/embedded-service-2020-series-switches/tsd-products-support-series-home.html">http://www.cisco.com/c/en/us/support/switches/embedded-service-2020-series-switches/tsd-products-support-series-home.html</a>
Cisco Ethernet Switch Module (ESM) for CGR 2010	<a href="http://www.cisco.com/go/cgr2000">http://www.cisco.com/go/cgr2000</a>
Cisco Industrial Ethernet 2000 Series Switches	<a href="http://www.cisco.com/go/ie2000">http://www.cisco.com/go/ie2000</a>
Cisco Industrial Ethernet 2000U Series Switches	<a href="http://www.cisco.com/go/ie2000u">http://www.cisco.com/go/ie2000u</a>
Cisco Industrial Ethernet 3000 Series Switches	<a href="http://www.cisco.com/go/ie3000">http://www.cisco.com/go/ie3000</a>
Cisco Industrial Ethernet 3010 Series Switches	<a href="http://www.cisco.com/go/ie3010">http://www.cisco.com/go/ie3010</a>

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see [What's New in Cisco Product Documentation](#).

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the [What's New in Cisco Product Documentation RSS feed](#). The RSS feeds are a free service.

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

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

All printed copies and duplicate soft copies are considered un-Controlled copies and the original on-line version should be referred to for latest version.

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third-party trademarks mentioned 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. (1110R)

No combinations are authorized or intended under this document.

© 2014–2017 Cisco Systems, Inc. All rights reserved.

Related Documentation