



# Release Notes for Cisco Configuration Engine 3.5

**Revised: March 12, 2010, OL-21544-02**

This document describes the new features, system requirements, and caveats for Cisco Configuration Engine 3.5. Use this document in conjunction with the documents listed in the “Related Documentation” section on page 4.



We sometimes update the documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates.

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# Introduction

The Cisco Configuration Engine 3.5 is a network management application that acts as a configuration service for automating the deployment and management of network devices and services. The Cisco Configuration Engine runs on host systems running either Linux or Solaris.

The Cisco Configuration Engine is a network management software application that provides a highly scalable, secure, and reliable solution for remote deployment. By taking advantage of intelligent agents inside Cisco IOS Software, the Cisco Configuration Engine enables the “call-home” architecture, where a new device can automatically connect with the Cisco Configuration Engine and ask for the correct configuration.

## What's New in this Release

Cisco Configuration Engine 3.5 supports the following features:

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## VMware Support

You can install and run the Cisco Configuration Engine in VMware environment. The Cisco Configuration Engine supports the VMware environment starting from the Cisco Configuration Engine 3.5. The host operation system for VMware could be either Windows or Linux. The guest operating system for Cisco Configuration Engine is RHEL4 or RHEL5.

## Support for RHEL5

The Cisco Configuration Engine supports RHEL5 starting from the Cisco Configuration Engine 3.5.

## Dynamic Gateway Port Assignment

The dynamic gateway port assignment enhancement enables to perform the true Zero Touch Deployment (ZTD).

**Note**

In the Cisco Configuration Engine, the event gateway ports 11011 and 11012 are reserved for port automatic allocation starting from the Cisco Configuration Engine release 3.5. If a user wants to zero touch deploy the devices or already have deployed the devices currently using these two ports, then the user should enable this feature and enter the correct **cns event** command during Cisco Configuration Engine setup. For more information, see "Scalability among Event Gateway Ports" chapter in the *Cisco Configuration Engine Installation and Configuration guide*.

## External Authentication

The Cisco Configuration Engine supports external user authentication. From the 3.5 release, the Cisco Configuration Engine supports Lightweight Directory Access Protocol (LDAP)-based external authentication integrating with MS Active Directory.

## ZTD Over Serial Line

The Cisco Configuration Engine supports ZTD over a serial line.

## UDI Support

The Cisco Configuration Engine provides full Unique Device Identifier (UDI) support.

## Text only Device Configuration

The Cisco Configuration Engine listing of device configuration currently has a line number in front. This prevents the customer from cut and paste a portion of a configuration.

## Multizone System Setup

The Cisco Configuration Engine can segregate the HTTP/HTTPS and TCP traffic based on the source IP address or the network interface. This traffic segregation enables the Cisco Configuration Engine to support multi-zone deployment architecture.

**Note**

The installation of the Cisco Configuration Engine software does not offer the multizone system setup by default. If you require a multizone system setup, you must enable the multizone feature during the system setup. To setup multiple IP addresses on the Cisco Configuration Engine server, you must manually customize the network parameters of the server to have multiple IP addresses. For more information, see Chapter 6 “Setting Up a Multizone System” in *Cisco Configuration Engine Installation and Configuration Guide*.

## FTP and SFTP Support

The Cisco Configuration Engine supports FTP and SFTP for transferring device configuration and templates to and from another external application.

## Accessibility

The Cisco Configuration Engine complies with the Cisco accessibility requirement.

## Health Checking Utility

A wrapper resource health checking utility is provided in release 3.5 to monitor the health of Event Gateways and Tibco Rendezvous Daemon. If any of the processes stops, the health checking utility restarts the process and logs a message in `/var/log/CNSCE/resource_monitor/resource_monitor.log` file. This utility (resource\_monitor\_daemon) starts during the Configuration Engine setup and stops when the Configuration Engine server stops.

## Related Documentation

[Table 1](#) describes the documentation available for Cisco Configuration Engine.

**Table 1      Cisco Configuration Engine Documentation**

Document Title	Available Formats
<i>Cisco Configuration Engine Installation &amp; Configuration Guide, 3.5</i>	This guide is available in the following formats: <ul style="list-style-type: none"><li>• On the product CD-ROM</li><li>• On Cisco.com</li></ul>
<i>Cisco Configuration Engine Administration Guide 3.5</i>	This guide is available in the following formats: <ul style="list-style-type: none"><li>• On the product CD-ROM</li><li>• On Cisco.com</li></ul>
<i>Cisco Configuration Engine Software Development Kit API Reference and Programmer Guide</i>	This guide is available in the following formats: <ul style="list-style-type: none"><li>• On the SDK CD-ROM</li><li>• On Cisco.com</li></ul> <p>See “<a href="#">SDK Document Available Online and on the SDK CD-ROM</a>” section on page 5.</p>
<i>Troubleshooting Guide for Cisco Configuration Engine 3.5</i>	<ul style="list-style-type: none"><li>• On Cisco.com</li></ul>
<i>Release Notes for Cisco Configuration Engine 3.5</i>	<ul style="list-style-type: none"><li>• On Cisco.com</li></ul>
<i>Readme First for Cisco Configuration Engine 3.5</i>	Printed document included with the product.

## SDK Document Available Online and on the SDK CD-ROM

The *Cisco Configuration Engine Software Development Kit API Reference and Programmer Guide* is available online, as well as on the Software Development Kit (SDK)CD-ROM. Although the readme first document states that the *Cisco Configuration Engine Software Development Kit API Reference and Programmer Guide* is available on the SDK CD-ROM only, please note that this document is also available online at Cisco.com.

## Cisco IOS Dependencies

[Table 2](#) lists Cisco IOS versions with corresponding versions of Configuration Engine, including feature limitations associated with each version.

**Table 2 Cisco Configuration Engine 3.5 and Cisco IOS Dependencies**

Cisco IOS	CNS Configuration Engine	Limitations
12.3	1.3.2 or later	—
12.2(11)T	1.2 or later	—
12.2(2)T	1.2 or later with no authentication	Applications will be unable to use exec commands or point-to-point messaging.

## Router Configuration

The Cisco Configuration Engine 3.5 software needs to be installed and prepared first before configuring a device. The device can obtain its initial configuration from the Cisco Configuration Engine 3.5.

For information about Cisco Flow-Through Provisioning, see:

[http://www.cisco.com/en/US/docs/ios/12\\_2t/12\\_2t8/feature/guide/ftsnap26.html](http://www.cisco.com/en/US/docs/ios/12_2t/12_2t8/feature/guide/ftsnap26.html).

## Limitations and Restrictions

- If you download a configuration that changes username, password, enable password, or IP address for a non-agent-enabled device, you need to modify the corresponding Intelligent Modular Gateway (IMGW) hop information for the device to update it with the new username, password, enable password, and IP address.
- TFTP:
  - No new files can be created and files cannot be deleted. However, existing files can be overwritten ONLY if they are publicly writable. The permissions of the files placed into the FTP directory can be controlled by the SFTP user managing files in the FTP directory.
  - The TFTP service does not require an account or password on the server system. Because of the lack of authentication information, TFTPD allows only publicly readable files (o+r) to be accessed. Files may be written only if they already exist and are publicly writable.
- Device Name values may only contain : period (.), underscore (\_), hyphen (-), and alphanumeric characters.
- Group Name values may only contain: underscore (\_) and alphanumeric characters.

- The configuration entry in /etc/hosts on the server where CE is installed must comply with the following format:  

```
<server IP> <hostname> <FQDN>
172.27.117.199 imgw-test16 imgw-test16.cisco.com
```
- CNS Agent should use the same config event and image ID when using CE to manage devices.
- If you download a configuration that changes the CNS password, you need to use CE to resync the device.
- Attribute name must begin with alpha characters only when adding a new attribute through the Directory Manager.

## Caveats

The caveats describe unexpected behavior in Cisco Configuration Engine 3.5. See the following sections for more information:

- [Open Caveats, page 6](#)
- [Resolved Caveats, page 7](#)

## Open Caveats

[Table 3](#) describes the open caveats for Cisco Configuration Engine 3.5.

**Table 3 Open Caveats for Cisco Configuration Engine 3.5**

ID	Problem	Workaround
CSCtg57154	HTTPD can not start in SSL only mode.	<p>Rerun the Cisco Configuration Engine setup as described below:</p> <pre>\$CISCO_CE_HOME/bin/setup... Enable cryptographic (crypto) operation between Event Gateway(s)/Config server and device(s) (y/n)? [n] <b>y</b> Enter absolute pathname of server key file: [/root/ssl/server.key] Enter absolute pathname of server certificate file: [/root/ssl/server.crt]  Enabling plaintext operation will increase security risk.  When user is asked about the following 2 questions, enter "y" to either of the question:  Enable plaintext operation between Config Server and devices/GUI administration (y/n)? [y] <b>y</b> Enable plaintext operation between Event Gateway and devices (y/n)? [y] <b>n</b></pre>

**Table 3 Open Caveats for Cisco Configuration Engine 3.5**

ID	Problem	Workaround
CSCtb93388	Device Id has to be unique within Cisco Configuration Engines namespace.	Create an unique device Id within the Cisco Configuration Engines namespace.
CSCsv89994	Device name and unique ID has to be the same for IMGW to work.	When creating IMGW device, ensure that the device name and the unique ID are the same, otherwise, the device will not work.

## Resolved Caveats

Table 4 describes the resolved caveats for Cisco Configuration Engine 3.5.

**Table 4 Resolved Caveats for Cisco Configuration Engine 3.5**

ID	Problem
CSCtc76165	Option for monthly data backup is not available.
CSCte12010	Image update does not happen when the trigger is ON.
CSCsv22600	bfcrypt executable was wrongly packaged.
CSCtc54606	HttpServer log file not found in Cisco Configuration Engine release 3.5 (Linux version).
CSCtc70840	Deleted device appears in the view device list.
CSCtb95999	Migration hangs when the server.key is not found.
CSCtd21080	Cisco Configuration Engine does not parse email cache files with multiline body.
CSCta29192	Cisco Configuration Engine 3.1 throws invalid URL error while adding images from "/" root directory by using FTP.
CSCsv78312	Data restore and migration need both CEs to be installed in the same directory.
CSCtc72021	ImportLocalTemplate fails to import text file.
CSCtc53308	Cisco Configuration Engine still prints error message referring to IE2100.
CSCsv33937	GUI allows non-selected device to perform Update Config/Image/ and so on.
CSCsv28886	HTTP 500 error is displayed on the Cisco Configuration Engine GUI when you click on the Job.
CSCtc80439	Discover Device task does not show Group Name choice for some devices.
CSCtd21054	ce_monitor process should not create error messages in cfgsrv.log.
CSCtd71530	Cisco Configuration Engine is not able to migrate data between two versions.
CSCsh88613	CNS Job status is not updated and shows the in progress status.
CSCtb99586	Job status not getting updated if one of the devices receives a failure notice.
CSCtc57467	Parameter validation feature fails to validate.
CSCtc38533	The function "Save" option from the Edit Parameter-Operator menu hangs.
CSCtc39010	JobId is altered for Custom Job.
CSCtb52819	TibGate generate core file.
CSCtd17401	Cisco Configuration Engine upgrade process is needed for Solaris and broken for Linux.
CSCtb97527	Cisco Configuration Engine cannot send Emails.

**Table 4 Resolved Caveats for Cisco Configuration Engine 3.5 (continued)**

<b>ID</b>	<b>Problem</b>
CSCta32043	Cisco Configuration Engine: Device is getting deleted with AdminDevType attribute assigned with va.
CSCsy80772	Cisco Configuration Engine 3.0: Displays misleading job status for image download and takes more than 30 minutes to complete the job.
CSCsu41024	Concurrent Modification Exception upon choosing discover device.
CSCsz24293	Delete device operation for 5000 devices resulted in exception.
CSCsv02116	Null pointer exception upon choosing discover device.
CSCsl38114	HTTP 500 error is displayed on the Cisco Configuration Engine GUI while executing a custom image job.
CSCtc81852	Cisco Configuration Engine uninstallation program is unable to remove the file .install.
CSCtc74896	Cisco Configuration Engine should terminate the db_archive jobs scheduled when it is uninstalled.
CSCtc39613	Unable to install or uninstall after aborting the Cisco Configuration Engine install.
CSCtc55332	ce_uninstall says another Cisco Configuration Engine uninstall job is in progress when there is not any.
CSCsy37153	Inconsistency in using previously configured bootstrap password.
CSCtb93389	VMware machine crash causes the LDAP to hang and the VMware cannot be restarted.
CSCsv59359	Bootstrap password is only used during device discovery.
CSCsu90630	CE3.0:Job status is not being visible using GUI upon DB migrated from 2.
CSCsl31404	Security Vulnerability - module mod_ssl needs to be upgraded on Solaris.
CSCtc54427	Could not resolve address error shown while restarting the httpd.
CSCsr67550	config update: banner cannot begin with “-” nor have ^C as delimiter.
CSCsv02547	Authentication errors are not getting logged.
CSCtc71592	Cisco Configuration Engine does not handle the Auth error from device during delete file operation.
CSCtc82266	Cisco Configuration Engine is not checking the file name to validate the delete operation.
CSCtc55290	Cisco Configuration Engine displays HTTP 500 error on device discovery.
CSCtc50937	Device is attached to wrong config file during device discovery.
CSCsv00423	Bulk upload feature is broken for cvs file type.
CSCta50103	Activation failed for Custom Job for \${!cnsceObj.activate("persist")}.
CSCtc01056	Bulkupload Edit - Edit a device with image id failed.
CSCtc80698	Autodiscovery discovers the same device twice (different id).
CSCsx05568	Image job does not restart when the device comes back online.
CSCsx49115	DAT bulkupload - Edit group displays NullPointer exception.
CSCsy33772	Directory: Import Schema LDAP goes down if attribute is " " or has "_".
CSCtd33606	Delete device by using bulk upload feature fails for 400 attribute.
CSCsy18292	You cannot have trailing white space in access-list command.
CSCtc83792	Create Image requires remote Image location accessible from the Cisco Configuration Engine.
CSCtd54844	WebSvc JavaDoc - How to create and version information.
CSCtc55580	Logs is not showing exec response.
CSCsw64495	Cisco Configuration Engine needs to normalize the UDI string.

**Table 4 Resolved Caveats for Cisco Configuration Engine 3.5 (continued)**

ID	Problem
CSCsz15092	Cisco Configuration Engine support for external authentication.
CSCsx98942	HTTPD script does not shutdown tomcat properly.
CSCsz69888	EventGateway does not come up on Linux.
CSCtb10545	Cisco Configuration Engine supports Multi-zone.
CSCsq83479	Deleted search pattern appears in the selected search parameter window 003.000(000.005).
CSCsu85086	Displays error while you Edit IMGW "Device Name" 003.000(000.005).
CSCsw65841	Displays error while adding two different devices with same config id's 003.000(000.005).
CSCsv28832	Add steps as to how to use IMGW device tool kit 003.000(000.005).
CSCsw98205	Status does not update with retrigger option 003.000(000.005).
CSCsw70082	Cisco Configuration Engine3.0:Data backup cron job does not get reset when you uninstall or install the Cisco Configuration Engine 003.000(000.005).
CSCsw69803	Cisco Configuration Engine3.0: System does not remove all Cisco Configuration Engine directories when you uninstall 003.000(000.005).
CSCsw87568	Clone group operation leads to unexpected session expiry 003.000(000.005).
CSCsv18757	The plus (+) operator is lost in a cloned template in Cisco Configuration Engine 003.000(000.005).

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, 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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This document is to be used in conjunction with the documents listed in the “[Related Documentation](#)” section.

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