



Cisco MITG RHEL OS Application Note

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Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

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About this Guide

This document pertains to the features and functionality that run on and/or that are related to Cisco Mobile Internet Technology Group (MITG) Red Hat Enterprise Linux (RHEL) 5.9 operating system (OS) which is a custom 64-bit operating system designed to run on the Cisco UCS 240 hardware platform.

Conventions Used

The following tables describe the conventions used throughout this documentation.

Icon	Notice Type	Description
	Information Note	Provides information about important features or instructions.
	Caution	Alerts you of potential damage to a program, device, or system.
	Warning	Alerts you of potential personal injury or fatality. May also alert you of potential electrical hazards.

Typeface Conventions	Description
Text represented as a <code>screen display</code>	This typeface represents displays that appear on your terminal screen, for example: <code>Login:</code>
Text represented as <code>commands</code>	This typeface represents commands that you enter, for example: <code>show ip access-list</code> This document always gives the full form of a command in lowercase letters. Commands are not case sensitive.
Text represented as a <code>command variable</code>	This typeface represents a variable that is part of a command, for example: <code>show card slot_number</code> <code>slot_number</code> is a variable representing the desired chassis slot number.
Text represented as menu or sub-menu names	This typeface represents menus and sub-menus that you access within a software application, for example: Click the File menu, then click New

Contacting Customer Support

Use the information in this section to contact customer support.

Refer to the support area of <http://www.cisco.com> for up-to-date product documentation or to submit a service request. A valid username and password are required to access this site. Please contact your Cisco sales or service representative for additional information.

Additional Information

Refer to the following guides for supplemental information about the system:

- *Cisco ASR 5000 Installation Guide*
- *Cisco ASR 5000 System Administration Guide*
- *Cisco ASR 5x00 Command Line Interface Reference*
- *Cisco ASR 5x00 Thresholding Configuration Guide*
- *Cisco ASR 5x00 SNMP MIB Reference*
- *StarOS IP Security (IPSec) Reference*
- *Web Element Manager Installation and Administration Guide*
- *Cisco ASR 5x00 AAA Interface Administration and Reference*
- *Cisco ASR 5x00 GTPP Interface Administration and Reference*
- *Cisco ASR 5x00 Release Change Reference*
- *Cisco ASR 5x00 Statistics and Counters Reference*
- *Cisco ASR 5x00 Gateway GPRS Support Node Administration Guide*
- *Cisco ASR 5x00 HRPD Serving Gateway Administration Guide*
- *Cisco ASR 5000 IP Services Gateway Administration Guide*
- *Cisco ASR 5x00 Mobility Management Entity Administration Guide*
- *Cisco ASR 5x00 Packet Data Network Gateway Administration Guide*
- *Cisco ASR 5x00 Packet Data Serving Node Administration Guide*
- *Cisco ASR 5x00 System Architecture Evolution Gateway Administration Guide*
- *Cisco ASR 5x00 Serving GPRS Support Node Administration Guide*
- *Cisco ASR 5x00 Serving Gateway Administration Guide*
- *Cisco ASR 5000 Session Control Manager Administration Guide*
- *Cisco ASR 5000 Packet Data Gateway/Tunnel Termination Gateway Administration Guide*
- Release notes that accompany updates and upgrades to the StarOS for your service and platform

Chapter 1

Cisco MITG RHEL OS Application Note

This application note provides information related to the installation of the Cisco Mobile Internet Technology Group (MITG) Red Hat Enterprise Linux (RHEL) v5.9 operating system (OS).

This document provides information on the following topics:

- [Overview](#)
- [Software Compatibility](#)
- [Hardware Platform and Hard Disk Drive Partition Requirements](#)
- [Cisco MITG RHEL v5.9 Operating System Installation](#)
- [Installing the Cisco External Application](#)

Overview

The Cisco MITG RHEL v5.9 OS is a custom 64-bit operating system designed to run only on the Cisco UCS 240 hardware platform. The Cisco MITG RHEL v5.9 OS supports the following Cisco external software applications:

- Web Element Manager (WEM)
- InTracer
- Local-External Storage Server (L-ESS)

Software Compatibility

The Cisco MITG RHEL v5.9 OS is compatible with the following external Cisco software application releases:

- WEM release 15.0.2304 or later (till 15.x)
- InTracer release 15.0.271 or later (till 16.x)
- L-ESS release 14.1.108 or later

Hardware Platform and Hard Disk Drive Partition Requirements

This section provides information related to the hardware platform and hard disk drive partitions required for the Cisco MITG RHEL v5.9 OS and Cisco external applications.

Cisco UCS Hardware Platform Requirements

The Cisco MITG RHEL v5.9 OS is designed to operate on the Cisco UCS hardware platform. For detailed hardware requirements specific to the external application you will be utilizing, refer to the chapter and section in the Cisco document listed in the table below.

Table 1. Locating Cisco UCS Hardware and Cisco MITG RHEL v5.9 OS Hard Disk Partition Requirements

External Application	Refer to...		
	Document Title	Chapter	Section
Cisco Web Element Manager	<i>Cisco Web Element Manager Installation and Administration Guide.</i>	Hardware Requirements: <i>Web Element Manager Overview.</i>	Hardware Requirements: <i>Web Element Manager System Requirements.</i>
		Partition Requirements: <i>WEM Port and Hardware Information</i>	Partition Requirements: <i>WEM Server Hardware Sizing and Provisioning Guidelines.</i>
Cisco InTracer	<i>Cisco InTracer Installation and Configuration Guide.</i>	Hardware Requirements Only: <i>Intelligent Packet Monitoring System Overview.</i>	Hardware Requirements: <i>InTracer Server Recommendations.</i> Partition Requirements: <i>InTracer Server Hardware Sizing and Provisioning Guidelines.</i>
Local-External Storage Server	<i>Cisco External Storage Server Installation and Administration Guide</i>	Hardware Requirements Only: <i>External Storage System Overview.</i>	Hardware Requirements Only <i>System Requirements</i>

Hard Disk Drive Partition Requirements

This section provides information related to the hard disk drive partitions that must be created during the Cisco MITG RHEL v5.9 OS installation.

The Cisco MITG v5.9 RHEL OS requires a minimum of three hard disk drive partitions:

- **"/boot":** For the OS booting kernel and related files.
- **"/":** For the RHEL OS.
- **“swap”:** For the OS swap memory.

In addition, the Cisco external application supported by the Cisco MITG RHEL v5.9 OS may require that additional hard disk partitions be created during the OS installation. To determine if the application you plan to install on the Cisco

UCS server has additional hard disk drive partition requirements, refer to the chapter and section in the application-specific Cisco document listed in the previous table.




Important: Make a note of all applicable hard disk partition requirements for your Cisco external application and have them available during the installation.


Cisco MITG RHEL 5.9 Operating System Installation


This section provides information related to the installation of the Cisco MITG RHEL v5.9 OS.

Please note the following items before proceeding with the RHEL installation:

 **Important:** The information in this section assumes that the user is performing a fresh installation on a Cisco UCS server which requires the disk to be formatted.

- Gather the hard disk drive partition information described in the *Hardware Platform and Hard Disk Drive Partition Requirements* section of this document, if applicable to your Cisco external application.
- With the exception of the previously mentioned hard disk drive partition requirements, all installation steps are the same as a standard RHEL installation.

 **Important:** The Cisco MITG RHEL v5.9 OS is a custom image that contains only those software packages required to support compatible Cisco MITG external software applications. Users must not install any other applications on servers running the Cisco MITG v5.9 OS. For detailed software compatibility information, refer to the *Software Compatibility* section in this document.

 **Important:** Kickstart installation automatically disables the firewall. Enabling the firewall will disable all access to the installed applications. Prior to release 12.2, the RHEL firewall must be disabled manually.

To install:

1. Download and unzip the Cisco_MITG_RHEL_5.9_<build_number>.zip file to a network location accessible to the UCS server.
2. Burn the unzipped .iso file to a DVD.
3. Connect the UCS server to the network.
4. Insert the disk containing the unzipped .iso image into the UCS server's DVD drive.
5. Reboot the UCS server to launch the Cisco MITG RHEL v5.9 OS installation program.
6. To start the kickstart installation, enter `linux ks=cdrom:/ks.cfg` at the command prompt.

This has the effect of:

- Skipping the installation key
 - Disabling the firewall
 - Starting the ftp server
 - Permitting the *selinux* policy by default
7. Follow the on-screen prompts to format the UCS server's hard disk, create the required hard disk partitions, and install the Cisco MITG RHEL v5.9 OS.
 8. When the installation is complete, reboot the UCS server.
- Continue with *Installing the Cisco External Application*.

Installing the Cisco External Application

Once the Cisco MITG RHEL v5.9 OS installation is complete, the Cisco external application or applications can be installed on the UCS server. Refer to the product-specific guide applicable to your Cisco external application for detailed installation instructions:



Important: InTracer and MUR are both disk-write and CPU-intensive applications. It is **NOT** recommended to install both of them on the same physical server.

- *Cisco Web Element Manager Installation and Administration Guide.*
- *Cisco InTracer Installation and Configuration Guide.*
- *Cisco External Storage Server Installation and Administration Guide*