



## **Cisco MITG RHEL OS v5.5 Application Note**

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# About this Guide

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This document pertains to the features and functionality that run on and/or that are related to the Cisco® ASR 5000 Chassis.

This preface includes the following sections:

- [Conventions Used](#)
- [Contacting Customer Support](#)

## 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.
	Electrostatic Discharge (ESD)	Warns you to take proper grounding precautions before handling ESD sensitive components or devices.

Typeface Conventions	Description
Text represented as a <i>screen display</i>	This typeface represents text that appears on your terminal screen, for example: <i>Login:</i>
Text represented as <b>commands</b>	This typeface represents commands that you enter at the CLI, for example: <b>show ip access-list</b> This document always gives the full form of a command in lowercase letters. Commands are <u>not</u> case sensitive.
Text represented as a <b>command variable</b>	This typeface represents a variable that is part of a command, for example: <b>show card slot_number</b> <i>slot_number</i> 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 <b>File</b> menu, then click <b>New</b> .

Command Syntax Conventions	Description
{ <b>keyword</b> or <i>variable</i> }	Required keywords and variables are surrounded by braces. They must be entered as part of the command syntax.
[ <b>keyword</b> or <i>variable</i> ]	Optional keywords or variables that may or may not be used are surrounded by brackets.

Command Syntax Conventions	Description
	<p>Some commands support alternative variables. These “options” are documented within braces or brackets by separating each variable with a vertical bar.</p> <p>These variables can be used in conjunction with required or optional keywords or variables. For example:</p> <pre>{ <b>nonce</b>   <b>timestamp</b> }</pre> <p>OR</p> <pre>[ <b>count</b> <i>number_of_packets</i>   <b>size</b> <i>number_of_bytes</i> ]</pre>

## Contacting Customer Support

Go to <http://www.cisco.com/cisco/web/support/> to submit a service request. A valid Cisco account (username and password) is required to access this site. Please contact your Cisco account representative for additional information.

# Chapter 1

## Cisco MITG RHEL OS v5.5 Application Note

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This application note provides information related to the installation of the Cisco Mobile Internet Technology Group (MITG) Red Hat Enterprise Linux (RHEL) v5.5 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 v5.5 Operating System Installation](#)
- [Installing the Cisco External Application](#)

## Overview

The Cisco MITG RHEL v5.5 OS is a custom 64-bit operating system designed to run on the Cisco UCS hardware platform. The Cisco MITG RHEL v5.5 OS supports the following Cisco external software applications:

- Web Element Manager (WEM)
- Mobility Unified Reporting System (MUR)
- Policy and Provisioning Tool (PPT)
- InTracer

## Software Compatibility

The Cisco MITG RHEL v5.5 OS is compatible with the following external Cisco software application releases:

- WEM release 12.0.2171 or greater
- MUR release 12.0.138 or greater
- PPT release 12.1.44 or greater
- InTracer release 12.0.140 or greater



**Important:** The Cisco MITG RHEL v5.5 OS is a custom image that contains only those software packages required to support the above compatible Cisco MITG external software applications. Users must not install any other applications on servers running the Cisco MITG RHEL v5.5 OS.

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# 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 v5.5 OS and Cisco external applications.

## Cisco UCS Hardware Platform Requirements

The Cisco MITG RHEL v5.5 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 v5.5 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>	<b>Hardware Requirements:</b> <i>Web Element Manager Overview.</i>	<b>Hardware Requirements:</b> <i>Web Element Manager System Requirements.</i>
		<b>Partition Requirements:</b> <i>WEM Port and Hardware Information</i>	<b>Partition Requirements:</b> <i>WEM Server Hardware Sizing and Provisioning Guidelines.</i>
Cisco Mobility Unified Reporting System	<i>Cisco Mobility Unified Reporting System Installation and Configuration Guide.</i>	<b>Hardware Requirements Only:</b> <i>Mobility Unified Reporting System Overview.</i>	<b>Hardware Requirements Only:</b> <i>Server Recommendations for Use in RHEL Environment.</i>
Cisco Policy Provisioning Tool	<i>Cisco Policy and Provisioning Tool Installation and Administration Guide.</i>	<b>Hardware Requirements Only:</b> <i>Policy Provisioning Tool Overview</i>	<b>Hardware Requirements Only:</b> <i>System Requirements.</i>
Cisco InTracer	<i>Cisco InTracer Installation and Configuration Guide.</i>	<b>Hardware Requirements Only:</b> <i>Intelligent Packet Monitoring System Overview.</i>	<b>Hardware Requirements:</b> <i>InTracer Server Recommendations.</i> <b>Partition Requirements:</b> <i>InTracer Server Hardware Sizing and Provisioning Guidelines.</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 v5.5 OS installation.

The Cisco MITG v5.5 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 v5.5 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 of the Cisco MITG RHEL v5.5 OS.


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# Cisco MITG RHEL 5.5 Operating System Installation

This section provides information related to the installation of the Cisco MITG RHEL v5.5 OS.

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


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

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- 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.

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 **Important:** The Cisco MITG RHEL v5.5 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 v5.5 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.

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To install the Cisco MITG RHEL v5.5 OS:

1. Download and unzip the Cisco\_MITG\_RHEL\_5.5\_<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 v5.5 OS installation program.
  6. Enter **linux ks=cdrom:/ks.cfg** at the command prompt.
  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 v5.5 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 v5.5 OS installation is complete, the Cisco external application can be installed on the UCS server. Refer to the product-specific guide applicable to your Cisco external application for detailed installation instructions:



**Important:** Ensure that X11 Forwarding is enabled on the terminal from where the installation is to be invoked and continue installation in “Console” mode as described the installation documentation for each application, described below:

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- *Cisco Web Element Manager Installation and Administration Guide.*
- *Cisco Mobility Unified Reporting System Installation and Administration Guide.*
- *Cisco Policy and Provisioning Tool Installation and Configuration Guide.*
- *Cisco InTracer Installation and Configuration Guide.*