



Product Overview

This chapter provides an overview of the Cisco 12000 Manager (C12kM) application and its key features.

C12kM application is an element management system for managing Cisco 12000 series routers. C12kM works in conjunction with the Cisco Element Management Framework (Cisco EMF) to provide element management that enables service providers to plan, provision, and monitor network services on Cisco 12000 series routers. The Cisco 12000 series includes the following platforms, all sharing a similar architecture: Cisco 12416, Cisco 12410, Cisco 12406, Cisco 12404, Cisco 12016, Cisco 12012 and Cisco 12008.

Key Features of the C12kM Software

C12kM features include the following:

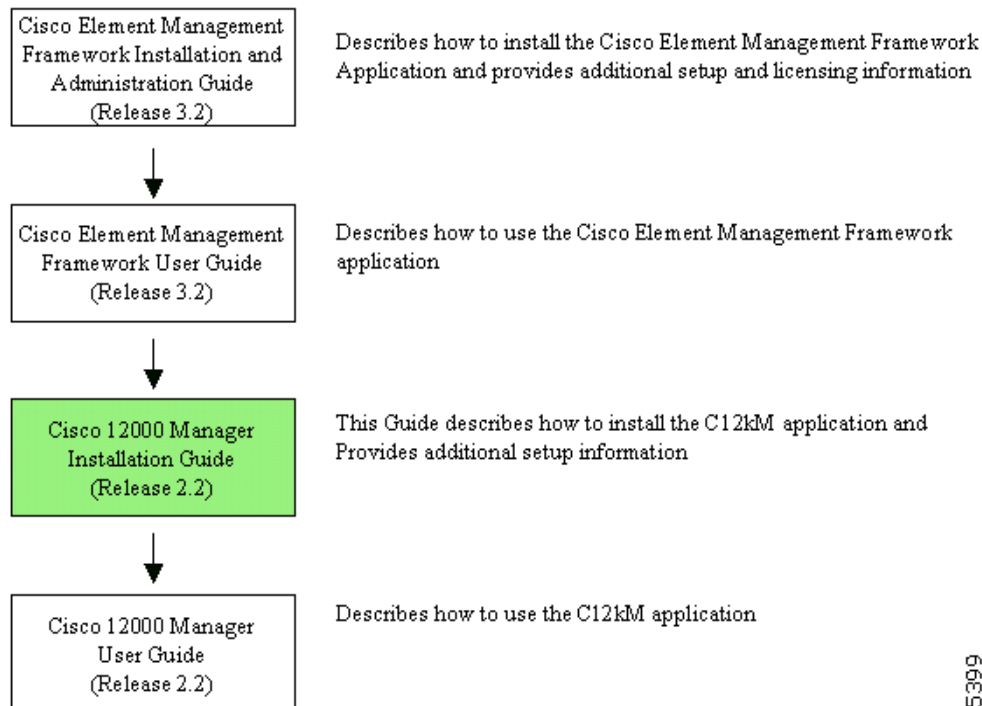
- Maps and icons for representation of the Cisco 12000 series internet router objects (for example, the chassis, line cards and interfaces)
- C12kM windows and wizards—Eliminate the need for operators to have detailed Cisco IOS software and SNMP-based knowledge for individual interface or system parameter commands
- C12kM deployment—Eases deployment of large networks by enabling template-based element configuration
 - Pre-deployment of chassis, GRP, line cards and its interfaces
 - AutoDiscovery—Automatically discovers existing Cisco 12000 series routers on specified network
- Comprehensive fault management system—Manages chassis, line card, and interface objects
- Configuration Backup/Restore—Backs up the running configuration of a device and its modules so that if a hardware failure occurs, you can restore configuration
- Configuration Editor—Uploads the running configuration from a device for editing and downloads the running configuration to a device
- Configuration operations—Performs configuration in bulk to numerous Cisco 12000 series routers
- C12kM Management—Fault, Configuration, Accounting, Performance, and Security (FCAPS) management of Cisco 12000 series routers using C12kM windows
- Profiles—Enables you to apply the same set of parameters to a large number of objects at one time
- Layer 3 QoS support—Includes Committed Access Rate (CAR), Weighted Random Early Detection (WRED), WRED ToFab, and Modified Deficit Round Robin (MDRR)

- Line cards and interfaces— Supports various line cards and interfaces, such as Synchronous Optical Network (SONET), packet-over-SONET (POS), Asynchronous Transfer Mode (ATM), Digital Signal 3 (DS3), Spatial Reuse Protocol (SRP), Gigabit and Fast Ethernet and NGRP Line cards
- Cisco IOS releases—Easily downloads new software releases from C12kM onto devices
- PVCs and associated QoS profiles—Uploads existing PVCs and associated QoS profiles from any device into C12kM
- Subchassis discovery—Determines the physical chassis contents, such as line cards and interfaces
- RPR support
- Rediscover Line Cards after Online Insertion or Removal (OIR)
- VLAN sub-interfaces—Supports the upload and configuration of VLAN sub-interfaces on the 12000 series Router objects.

C12kM Documentation Set

This Guide is one part of the C12kM documentation set. [Figure 1-1](#) displays all of the Guides in the C12kM documentation set and details the contents of each.

Figure 1-1 C12kM Documentation Set



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The Guides identified in [Figure 1-1](#) are available from Cisco Systems. Refer the [Obtaining Documentation](#) section in [About This Guide](#) chapter for more information.