



# Overview

---

The Cisco Access Router Manager routers are the basis for a multifunctioning platform that combines dial access, routing and LAN-to-LAN services, and multiservice integration of voice, video and data in the same device.

The Cisco Access Router Manager supports the following Cisco 2600 series modular access routers:

- Cisco 2610, 2611, 2612, and 2613
- Cisco 2620 and 2621
- Cisco 2650 and 2651

The Cisco Access Router Manager supports the following Cisco 3600 series modular access routers:

- Cisco 3620
- Cisco 3640
- Cisco 3661 and 3662

Cisco Access Router Manager 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 Access Router Manager routers.



**Note**

---

*For more information on the Cisco Access Router Manager, refer to the Cisco Access Router Manager User Guide, Release 1.0.*

---

# Cisco EMF Software Features

Cisco EMF provides a flexible framework which supports a variety of EMs, making it possible to manage multiple device types within a given network on a single system. Common network management functionality provides for complete management of the logical and physical components of the network. Using a solid base, Cisco EMF provides vital core functionality which allows for optimal network management when combined with EMs. Features include the following:

- **Map Viewer**—Displays the contents of the managed device(s) and serves as the primary entry point for the EM, allowing for enhanced object monitoring status for all network elements within the managed network
- **Deployment templates**—Provides object deployment prompts, increasing ease and consistency
- **Auto Discovery**—Allows for the automatic discovery of devices entering the network based on IP and/or SNMP data
- **Event Browser**—Notifies the system of events (e.g., alarms) which occur on the managed network and, in turn, notifies the network manager according to adjustable settings
- **Object Group Manager**—Enables you to organize managed objects which relate to one another into groups
- **Performance manager**—Presents performance statistics for monitored objects in a variety of formats according to the criteria selected
- **User Access Control**—Administration tool allowing system administrators to manage application privileges per user and user passwords
- **Query Editor**—Provides custom filtering capabilities which include or exclude certain information from writing to the database and enables object group management
- **Notification Profiles**—Warns the user of system events according to defined environmental occurrences through an audible or visual indicators (e.g., beep, display pop-up window), scripts (which, for example, sends an e-mail message), or event generation
- **Thresholding Regimes**—Defines a set of polling attributes and the polling period for monitoring, which, when met, run the applicable notification profiles
- **Event Groups**—Organizes events by managed object(s) according to query settings
- **Database Management**—Maximizes the Resource Manager Essentials (RME) tool to manage database backup and restoration

**Note**

---

*For further information on Cisco EMF and the tools it provides, see the Cisco Element Management Framework User Guide Release 3.2.*

---

Cisco EMF must be installed prior to installing EM software.

**Note**

---

*For information pertaining to the installation of Cisco EMF, see the Cisco Element Management Framework Installation and Administration Guide Release 3.2.*

---

# EM Software Features

Installed with Cisco EMF, the EM allows for precise management of the device(s) it supports through custom GUI windows and modeling behavior. Invoked from the Cisco EMF Map Viewer application, the EM provides Fault, Configuration, Accounting, Performance, and Security (FCAPS) windows on chassis, module, interface, and connection levels as applicable. These windows provide the features which compliment the Cisco EMF capabilities to provide for complete, efficient network management.

Specifically, the Cisco Access Router Manager supports related routers as well as various modules including ATM, ethernet, SONET, and IP modules. Element management capabilities for these items are provided in windows and wizards, eliminating the need for operators to have detailed Cisco IOS software and SNMP-based knowledge for individual interface or system parameter commands.

The following features highlight the capabilities of the EM:

- Framework—Based on Cisco EMF 3.2, which includes FCAPS management tools
- IOS Versions—See the corresponding release note document for specific versions supported
- Deployment and Discovery—Allows for manual or automatic deployment and discovery
  - Deployment—Supports manual deployment for generic objects, and pre-deployment of chassis objects using templates which provide faster deployment with fewer errors
  - Auto Discovery—Discovers chassis and all submodules automatically within a given IP range, providing real-time information regarding the contents of the network
- Synchronization—Synchronizes the physical inventory model with managed NEs, providing accurate, real-time information on what is deployed in the network
- Fault management—Provides status information, as well as fault detection, troubleshooting, and repair tools
- Configuration—Provides base configuration for managed objects within the device
- Accounting—Provides real-time inventory information
- Performance—Supplies real-time performance-related statistics for modules, interfaces, and connection, as well as capabilities to log historical performance data for analysis
- Security—Provides capabilities to manage system security at the EM or device level
- Alarm Notification—Provides support of multiple traps, producing alarm notification per the criteria established

