

Network Connectivity Monitor Documentation Roadmap

Each Cisco Network Connectivity Center (CNCC) Network Connectivity Monitor (NCM) product suite is distributed with a collection of documents. NCM product suites include:

- Network Connectivity Monitor IP Management Suite
- Network Connectivity Monitor Service Assurance Management Suite
- InCharge Application Management Suite
- InCharge Security Infrastructure Management Suite
- InCharge Software Development Kit

This roadmap summarizes the documentation included with each product suite. The first section of the roadmap describes documents that are applicable to all products. The remaining sections describe documents specific to each product suite. Please take a moment to review this roadmap and familiarize yourself with the documents that accompany your product(s).

For your convenience, documents are installed to ***BASEDIR/smarts/doc***. The term ***BASEDIR*** represents the location where software is installed. For UNIX, the default location is `/opt/InCharge<n>/<productsuite>`. For Windows, the default location is `C:\InCharge<n>\<productsuite>`. The `<n>` represents the software platform version number. The `<productsuite>` represents the product suite that the product is part of. For example, Table 1 identifies the default locations for documents on UNIX operating systems:

PRODUCT SUITE	DOCUMENTATION DIRECTORY
IP Management Suite	/opt/InCharge6/IP/smarts/doc
Service Assurance Management Suite	/opt/InCharge6/SAM/smarts/doc
Application Management Suite	/opt/InCharge6/APP/smarts/doc
Security Infrastructure Management Suite	/opt/InCharge6/SIM/smarts/doc
Software Development Kit	/opt/InCharge6/SDK/smarts/doc

Table 1: **Locations of Documentation**

Most of the documentation is provided in the form of Acrobat PDF files. Adobe's Acrobat Reader, version 3.0 or later, is required to view and print the PDF files. The Acrobat Reader is available on the NCM CD-ROM in the */vendor* directory. For UNIX, it is a .tar file (for example, *acroread-solaris-506.tar.gz*) and, for Windows, it is an executable (for example, *AcroReader51_ENU.exe*).

Some of the documentation (for example, the *ICIM Reference*) is delivered in HTML format. To view the HTML, you require a frames-compatible, Java-enabled browser. On Windows, to use the HTML search included with the Cisco HTML, you require the Windows version of the Sun Microsystems JRE version 1.4 or later.

Note: For information about previous versions of products, please refer to the documentation that accompanied the product.

Documentation Included With All Products

Several Cisco documents are applicable to all products and thus are included on every product suite CD-ROM. These documents are helpful to anyone installing, administering, or monitoring software:

- *Read Me First for Network Connectivity Monitor April 2004*
- *Network Connectivity Monitor Documentation Roadmap*
- *Release Notes for Network Connectivity Monitor 1.1*
- *Network Connectivity Monitor System Administration Guide*
- *InCharge Common Information Model™ (ICIM) Wall Chart*
- *ICIM Reference (HTML)*
- *InCharge Software Development Kit MODEL Reference Guide*
- *InCharge ASL Reference Guide*
- *Cisco Network Connectivity Center Perl Reference Guide*

Network Connectivity Monitor Read Me First

The Read Me First document highlights important issues that you should be aware of before you install your software.

Network Connectivity Monitor Release Notes

The release notes offer an overview of the new products and features of this software release. As a courtesy to our existing customers, the release notes highlight enhancements and changes to the software or its supported platforms. The notes also describe any known software issues and their resolutions. Issues are organized by NCM product suite for quick lookup.

Network Connectivity Monitor System Administration Guide

This guide pertains to NCM system administrators. The information it contains is relevant across all NCM products. System administrators should refer to this guide to find out how to license NCM products, control applications' start-up, understand the software directory structure, locate and modify user editable files, secure access to NCM applications, and manage log files. This guide also contains descriptions of environment variables used by NCM.

InCharge Common Information Model (ICIM) Wall Chart

The wall chart illustrates the ICIM class hierarchy. The chart's color coding differentiates between the Core class and the Reference classes, which include System, Network, Application, Routing Protocol, Business and J2EE classes. In addition, it shows the relationships between the classes. Anyone reviewing this chart will gain valuable insight into the set of managed objects.

ICIM Reference

The ICIM reference information is distributed in HTML format and describes the ICIM schemata. It provides a detailed description of the classes for the reference model schemata and the application implementations. It also describes general concepts related to information modeling and ICIM classes. Software developers and other users will find this information useful.

InCharge Software Development Kit MODEL Reference Guide

This guide describes the MODEL language syntax and how to develop programs using the MODEL language. Software developers and those users working with the SDK will find this information useful.

InCharge ASL Reference Guide

This guide describes the Adapter Scripting Language (ASL) syntax, ASL utility functions and how to develop programs using the ASL language. Software developers and other users working with ASL will find this information useful.

Cisco Network Connectivity Center Perl Reference Guide

This guide describes how to develop Perl scripts that interact with CNCC Managers. It includes information about the Perl Application Programming Interface (API) facilities (object and session) and the low-level primitives supported by the API. Software developers and other CNCC users working with Perl will find this information useful.

Network Connectivity Monitor IP Management Documentation

In addition to the first set of documents described in this roadmap, the following documents are distributed with the CNCC NCM IP Management Suite:

- *Network Connectivity Monitor IP Management Suite Installation Guide*
- *Network Connectivity Monitor IP Deployment Guide*
- *Network Connectivity Monitor IP Discovery Guide*
- *Network Connectivity Monitor IP Availability Manager User's Guide*
- *InCharge IP Performance Manager User's Guide*
- *InCharge IP Adapters User's Guide*

Network Connectivity Monitor IP Management Suite Installation Guide

This guide explains how to install and uninstall IP Management products. In addition, it identifies supported platforms for the IP products and summarizes the preinstallation hardware, software, and patch requirements of each. Requirements include those of third-party applications (for example, Hewlett Packard OpenView and IBM NetView) that can interface with this suite's products.

Network Connectivity Monitor IP Deployment Guide

This guide explains how to successfully deploy IP products, and includes important considerations when Service Assurance is also deployed. The deployment process is described as a phased approach that encompasses information gathering, designing, physically deploying, validating, and tuning your NCM deployment. Sales engineers, support personnel, integrators, network consultants, network and system administrators will all find this document useful.

Network Connectivity Monitor IP Discovery Guide

This guide describes the IP discovery process and the various methods to add topology to your IP domain. It explains how to interpret discovery results and resolve discovery errors. It also explains how to perform rediscovery, manage topology, configure discovery of network partitions, and customize discovery post-processing to meet your needs. This guide is relevant for network or administrators who will discover and maintain IP topology.

Network Connectivity Monitor IP Availability Manager User's Guide

This guide describes the elements discovered and managed by Availability Manager along with the connectivity-related failures diagnosed for each. It includes Availability Manager's default polling and threshold groups and the default settings associated with each group. It goes on to describe how NCM assigns elements membership into these groups. Finally, this document provides instructions for administrators who wish to modify groups, tailor settings, or create new groups. Operators will also find the element and failure information useful.

InCharge IP Performance Manager User's Guide

This guide describes the elements discovered and managed by Performance Manager along with the performance faults and exceptions diagnosed for each. It includes Performance Manager's default polling and threshold groups and the default settings associated with each group. It goes on to describe how NCM assigns elements membership into these groups. Additionally, this document provides instructions for administrators who wish to modify groups, tailor settings, or create new groups. An appendix of MIBs polled and SNMP traps processed completes this document. Operators will also find the element and fault information useful.

InCharge IP Adapters User's Guide

This guide describes how to configure, start, stop, and use the CNCC NCM Adapter for HP OpenView NNM and the CNCC NCM Adapter for IBM/Tivoli NetView. Troubleshooting tips about these adapters are also provided. Network or administrators will find this information useful.

Network Connectivity Monitor Service Assurance Management Documentation

In addition to the first set of documents described in this roadmap, the following documents are distributed with the CNCC NCM Service Assurance Suite:

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- *Network Connectivity Monitor Service Assurance Management Suite Installation Guide*
 - *An Introduction to Network Connectivity Monitor Service Assurance Manager*
 - *Network Connectivity Monitor Operator's Guide*
 - *Network Connectivity Monitor Service Assurance Manager Configuration Guide*
 - *InCharge Service Assurance Manager Business Dashboard Configuration Guide*
 - *Network Connectivity Monitor Service Assurance Manager Adapter Platform User's Guide*
 - *InCharge Service Assurance Manager Failover System User's Guide*
 - *InCharge Service Assurance Manager User's Guide for Business Impact Manager*
 - *InCharge Service Assurance Manager User's Guide for Report Manager*
 - *InCharge Service Assurance Manager SQL Data Interface Adapter User's Guide*
 - *Network Connectivity Monitor Service Assurance Manager Notification Adapters User's Guide*
 - *InCharge XML Adapter User's Guide*
 - *InCharge Service Assurance Manager User's Guide for Remedy Adapter*
 - *InCharge Service Assurance Manager User's Guide for Concord eHealth Adapter*
 - *InCharge Service Assurance Manager User's Guide for InfoVista*

Network Connectivity Monitor Service Assurance Management Suite Installation Guide

This guide explains how to install and uninstall Service Assurance Management products. In addition, it identifies supported platforms for the Service Assurance Management products and summarizes the preinstallation hardware, software, and patch requirements of each. Requirements include those of third-party applications (for example, Remedy ARS, TIBCO Rendezvous, or Concord eHealth) that can interface with this suite's products.

An Introduction to Network Connectivity Monitor Service Assurance Manager

This introductory document offers an architectural and functional overview of Service Assurance Manager and its modules. It describes two implementation scenarios, which illustrate how Service Assurance can easily meet the needs of either the enterprise service provider or the network service provider. Anyone interested in gaining a general understanding of the Service Assurance solution should read this document.

Network Connectivity Monitor Operator's Guide

The operator's guide begins with an overview of the notification log, topology browser, summary, and map consoles available through the Global Console. It then focuses on typical operator tasks. For example, this document describes how to start a session (including how to run the console as a Java applet), navigate and examine console contents, use tools, respond to notifications, and customize the appearance and views in a console. Operators and others responsible for acting upon failures will find this document useful.

Network Connectivity Monitor Service Assurance Manager Configuration Guide

This guide focuses on how to configure the Service Assurance Manager, including how to set up notification lists, users, user profiles, tools, and escalation policies. It also discusses Service Assurance deployment considerations. Service providers and system administrators responsible for configuring Service Assurance will find this guide useful.

InCharge Service Assurance Manager Business Dashboard Configuration Guide

This guide describes the CNCC Business Dashboard and how to configure it. Configuration includes how to set up Jakarta Tomcat, create and save Dashboard viewlets, and how to write HTML to load the viewlets to a Web page or third-party portal. Service providers, CNCC system administrators and anyone who needs to configure CNCC Business Dashboard functionality will find this guide useful.

Network Connectivity Monitor Service Assurance Manager Adapter Platform User's Guide

This guide offers an architectural overview of the Service Assurance Manager Adapter Platform, which imports and normalizes topological and event information from sources other than NCM by way of Service Assurance Manager Adapters. Detailed instructions are provided for network administrators or others who need to configure the Adapter Platform, the SNMP Trap Adapter (Receiver), or the Syslog Adapter. This guide also includes information on using the `sm_ems` command line utility to convert information from third-party applications into events.

InCharge Service Assurance Manager Failover System User's Guide

This guide begins by describing the Service Assurance Failover System, its components, and how and when a secondary global manager becomes activated. The guide then focuses on how to get your failover system up and running. It covers special considerations when implementing the failover system, such as how to install the broker, the primary, and secondary global manager, configure the failover start-up scripts, and secure your failover system. System or network administrators responsible for deploying the failover system should refer to this guide.

InCharge Service Assurance Manager User's Guide for Business Impact Manager

Business Impact Manager extends the capability of Service Assurance to calculate the business impact of events and to propagate the impacts to the affected business elements in your topology. This user's guide describes how to import service topology and how to customize your business impact analysis. This guide also discusses ICIM, with emphasis on the business-related ICIM classes. Administrators or others who need to implement and use Business Impact Manager should refer to this guide.

InCharge Service Assurance Manager User's Guide for Report Manager

Report Manager complements the extensive capabilities of CNCC NCM Service Assurance Manager by enabling network administrators to produce and display or print network operations, management, and business impact reports. Reports can be produced either through Crystal Enterprise or another user-selected report application.

This guide begins by describing the Report Manager system architecture and its component processes. It then goes on to explain how to install and configure the Report Manager and how to set up Crystal Enterprise. The pre-defined reports provides with CNCC Report Manager are illustrated and explained. The reports are in Crystal Enterprise format and can be used with Crystal Enterprise Reports, or they can serve as templates for reports in another report application. The database schema and the views used by Report Manager are also included in this document.

InCharge Service Assurance Manager User's Guide for SDI Adapter

This guide explains how to set up, configure and use the CNCC Structured Query Language (SQL) Data Interface Adapter. The adapter, which is a component process of Report Manager that can be purchased separately, subscribes to Service Assurance Manager notifications, passes them to an ODBC driver, and stores the notification information in a relational database. If you are using the SDI Adapter as a stand-alone process, you should read this document.

InCharge Service Assurance Manager Notification Adapters User's Guide

This guide is relevant to network or administrators. It describes the notification adapters, how to configure them, and how to operate them. NCM notification adapters include the SNMP Trap Adapter, Log File Adapter, E-mail Adapter, Script Adapter, and TIBCO Rendezvous Adapter. These adapters pass NCM notifications to other applications or users. This guide also includes an example of how to customize a notification adapter.

InCharge XML Adapter User's Guide

This guide introduces the CNCC XML Adapter and explains how to use it to exchange topological information between CNCC and other applications. Topology elements are exchanged using an XML document, expressed in a format that complies with the ICIM/XML standard described in this document. The XML Document Type Definition (DTD) is specified and both the XML import and export functions are explained.

InCharge Service Assurance Manager User's Guide for Remedy

This guide explains how to configure and use the CNCC Adapter for Remedy. This adapter translates Service Assurance Manager notifications into open, get, and close Remedy ARS tickets. Remedy ARS requirements are defined in this document as well.

InCharge Service Assurance Manager User's Guide for Concord eHealth Adapter

This guide explains how to configure and use the CNCC Adapter for Concord eHealth.

InCharge Service Assurance Manager User's Guide for InfoVista Adapter

This guide explains how to configure and use the CNCC Adapter for InfoVista.

InCharge Application Management Documentation

In addition to the first set of documents described in this roadmap, the following documents are distributed with the InCharge Application Management product suite:

- *InCharge Application Management Suite Installation Guide*
- *InCharge Application Services Manager User's Guide*
- *InCharge Application Services Manager Discovery Guide*
- *InCharge Application Connectivity Monitor User's Guide*

InCharge Application Management Suite Installation Guide

This guide explains how to install and uninstall Incharge Application Management products. In addition, it identifies supported platforms for the Application Management products and summarizes the preinstallation hardware, software, and patch requirements of each. Requirements include those of third-party applications (for example, IBM WebSphere) that can interface with this suite's products.

InCharge Application Services Manager User's Guide

This guide describes the elements that are discovered and managed by the InCharge Application Services Manager—WebSphere Edition solution. It includes the failures and faults diagnosed for each element. It goes on to describe how application topology is represented in the Global Console. This document also defines the default polling and threshold groups and the default settings associated with each managed group (including those settings used by the InCharge Beacon for WebSphere). Finally, this document provides instructions for InCharge administrators who wish to modify groups, tailor settings, create new groups, or modify the management policies of their InCharge Beacon for WebSphere. Operators will find the element and failure information useful.

InCharge Application Services Manager Discovery Guide

This guide begins with an architectural overview of the InCharge Application Services Manager—WebSphere Edition solution. It follows with a brief configuration overview, including prerequisite configuration of the WebSphere Application Server. It discusses the InCharge Adapter for WebSphere Beacon and its discovery process. It also explains how to use the Domain Manager Administration Console to import WAS managed elements to the InCharge Beacon and add sources (including the InCharge Beacon) to the Application Services Manager server. Finally, the guide describes how to enhance your application topology using the Topology Builder Console. Anyone responsible for deploying and administering the InCharge Application Services Manager—WebSphere Edition solution will find this document useful.

InCharge Application Connectivity Monitor User's Guide

This guide offers information about configuring and using the Application Connectivity Monitor, which is a type of InCharge Beacon. This beacon discovers TCP applications services and measures their availability and response time. Network administrators or others who use this beacon will find this guide useful.

Note: Additional documentation is available for other products in the InCharge Application Management suite (for example, InCharge Adapter for BMC Patrol, and InCharge Adapter for Concord SystemEDGE). These products are available as pre-6.0 InCharge software. For information about these products, refer to the documentation that accompanied them.

InCharge Security Infrastructure Management Documentation

In addition to the first set of documents described in this roadmap, the following documents are distributed with the InCharge Security Infrastructure Management Suite:

- *InCharge Security Infrastructure Management Suite Installation Guide*
- *InCharge Security Infrastructure Manager User's Guide*

InCharge Security Infrastructure Management Suite Installation Guide

This guide explains how to install and uninstall InCharge Security Infrastructure Management products. In addition, it identifies supported platforms for the Security Infrastructure Management products and summarizes the preinstallation hardware, software, and patch requirements of each. Requirements include those of third-party applications that interface or can be integrated with this suite's products.

InCharge Security Infrastructure Manager User's Guide

This user's guide offers general information about Security Infrastructure Manager, the firewalls and their internal elements being managed, and the security events being diagnosed. It also provides deployment information and explains how to configure the communication between Security Infrastructure Manager, Firewall Performance Manager and security adapter(s). Individuals responsible for configuring and deploying Security Infrastructure Manager and operations personnel responsible for monitoring the health and performance of firewalls will find this guide useful.

Software Development Kit Documentation

In addition to the first set of documents described in this roadmap, the following documents are distributed with the InCharge Software Development Kit (SDK):

- *InCharge Software Development Kit Installation Guide*
- *InCharge Software Development Kit Remote API Programmer's Guide*
- *InCharge Software Development Kit MODEL Reference Guide*

SDK documentation distributed in HTML format is installed to ***BASEDIR/smarts/doc/html/sdk***. SDK documentation distributed as PDF is installed to ***BASEDIR/smarts/doc/pdf***.

InCharge Software Development Kit Installation Guide

This guide explains how to install and uninstall the InCharge Software Development Kit. In addition, it identifies supported platforms for the Software Development Kit and summarizes the preinstallation hardware, software, and patch requirements of each. Requirements for the C++ compiler are also included.

InCharge Software Development Kit Remote API for Java

This documentation is distributed in HTML format and describes the programmer's interface to the Java classes used to develop remote applications. It provides detailed descriptions of the InCharge Java packages and classes.

InCharge Software Development Kit Remote API Programmer's Guide

This guide describes the development environment and procedures needed to create application programs using the Remote API. It also describes general concepts of remote programming and the remote application development process.

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JfreeChart – Java library for GIF generation

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