DATA SHEET

CISCO NETWORK CONNECTIVITY CENTER

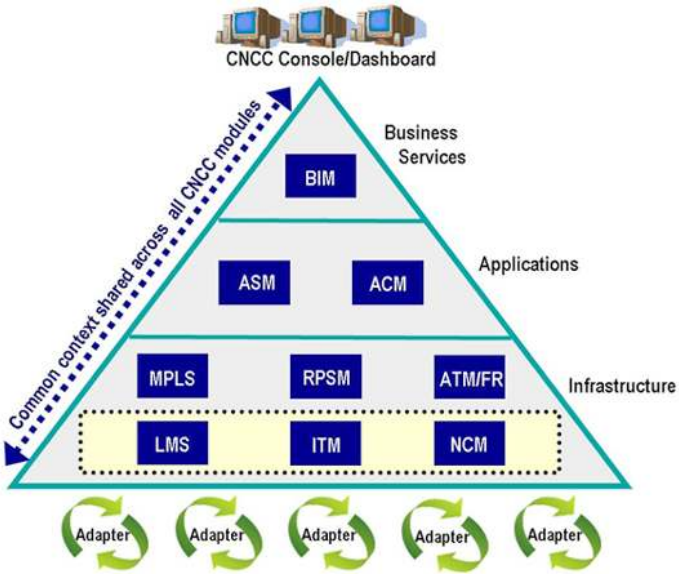
The Cisco® Network Connectivity Center (NCC) delivers end-to-end management across multiple tools, technologies, and silos. From networks and applications to business impact and dashboard views, Cisco NCC manages the entire IT environment in alignment with an organization's business objectives.

Organizations continue to measure IT investments against how they contribute to business objectives. Primary organizational goals include improving service levels and reducing operating costs by optimizing the performance of the infrastructure and the applications that deliver critical business services.

Cisco NCC is a suite of network and service management software that manage increasingly complex and distributed IT environments in alignment with business priorities. Using sophisticated modeling, analysis, and automation technologies, Cisco NCC provides end-to-end insight into how IT health relates to business services. It automatically pinpoints service-affecting faults and calculates their business impact, giving you the information you need to maximize service delivery while lowering operating costs and reducing business risk.

Cisco NCC builds on industry-leading, ready-to-use root cause and impact analysis technology that pinpoints connectivity problems in real time and identifies their impact. Cisco NCC extends that analysis from end to end across the IT environment, including multitechnology, multivendor networks; operations support system (OSS), packaged, and proprietary applications; and business services and processes.

Figure 1
Cisco NCC Overview



Cisco NCC features include (Figure 1):

- Fast, accurate discovery of the entire environment
- Built-in information model that maps components and their relationships across layers
- Automated root cause analysis—no rules writing required.
- Business impact analysis that aligns IT with business objectives
- Advanced automation, including analysis, escalation, and updates
- Scalable architecture to manage the world's largest infrastructures
- Flexible, Web-based dashboard views

FAST, ACCURATE DISCOVERY

Cisco NCC provides comprehensive autodiscovery of a rich set of components and relationships in Layer 2, the IP layer, and the application layer, including hosts, network devices, cards, ports, VLANs, cables, network connections, interfaces, IP networks, databases, application processes, and application agents. Autodiscovery uses several data sources and interfaces, including Simple Network Management Protocol (SNMP), system, and application agents. In addition, open APIs support the importing of data from proprietary element and network managers and provisioning systems, and GUI tools are available to compile a complete picture of the environment.

BUILT-IN INFORMATION MODEL

A common information model is needed to understand how underlying network and application resources support services and customers. Cisco NCC uses patented technology to build a comprehensive model of the managed environment, including all components and their relationships, behaviors, and interactions—from the network to the business level. Detailed maps display exactly what exists in the environment, including where the components are located, their interdependencies, and their real-time status.

Cisco NCC models more than 100 abstract classes of objects and more than 50 types of relationships between them; new class models are constantly being added. While business services are not autodiscoverable, Cisco NCC provides several GUI-based tools for modeling these services and their relationships to the "last mile" of the infrastructure.

AUTOMATED ROOT CAUSE ANALYSIS

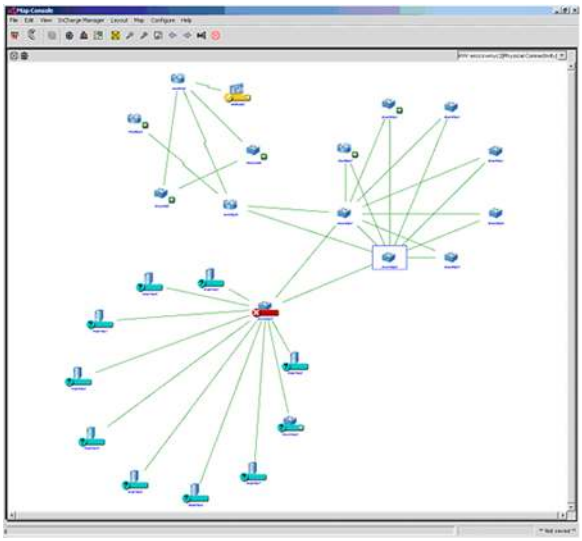
Cisco NCC provides real-time, detailed network and application analysis for complex IT environments. Analysis is built into each module, so resource-intensive rules writing is not required.

At the network level, Cisco NCC automates root cause and impact analysis for IP, ATM/Frame Relay, and Multiprotocol Label Switching (MPLS) VPNs and routing protocols, and can cross-correlate events and their impacts across domains. At the application level, Cisco NCC pinpoints the root cause of application problems wherever they happen—in the network, in the application itself, or in related systems or applications. Cisco NCC's cross-domain correlation links analysis from multiple domains for an end-to-end analysis solution.

This powerful analysis delivers significant benefits:

- Reduces costs by automating root cause and impact analysis and eliminating rules writing
- Maximizes IT availability by helping you find and fix problems that matter—before they affect business
- Allows you to deliver better, more reliable services to your customers by turning thousands of confusing events into specific problems and impacts

Figure 2
Automated Root Cause Analysis

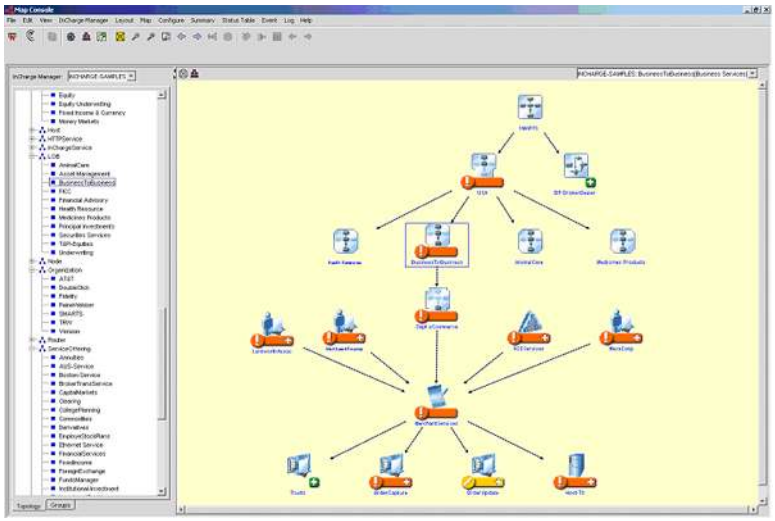


BUSINESS IMPACT ANALYSIS

Cisco NCC's Business Impact Module automatically calculates the effect of infrastructure and application faults on business services. Impact calculations are based on values that users assign to customer, service, and infrastructure components, according to business importance. Analysis can be customized to include external data and non-IT notifications.

Business impact analysis relies on Cisco NCC's built-in information model, which maps complex business processes across infrastructures and applications to the business level, including the relationships between business processes and any infrastructure, applications, or services that support them, and lateral relationships and impacts between related business processes.

Figure 3
Cisco NCC Business Impact Analysis



Business impact analysis supports business goals by:

- Improving service-level agreement (SLA) compliance by calculating which underlying faults affect customers and services
- Optimizing use of skilled resources and allowing organizations to prioritize corrective action on the problems that matter most
- Maximizing service availability and performance for better competitive advantage, profitability, and customer loyalty

ADVANCED AUTOMATION

As infrastructures become more complex, so does management—but IT teams still must find ways to do more with less. Cisco NCC automates the most challenging and error-prone management tasks, including discovery, modeling, analysis, workflow/escalation, and updates. By automating these high-cost, labor-intensive functions, Cisco NCC helps organizations to lower operating costs, improve productivity, increase revenue, and reduce business risk.

Most significant are the automation of analysis adaptation and updates. At deployment, Cisco NCC's intelligent analysis adapts automatically to the managed environment, eliminating high development costs and speeding time-to-value. The analysis also adjusts automatically as the environment changes, eliminating high-cost maintenance of rules and scripts, and enabling organizations to add new technology with confidence.

SCALABLE ARCHITECTURE

Cisco NCC architecture follows the most advanced distributed systems software technology principles. It uses object-oriented design and development, programming languages, compilers, operating systems, middleware, networking protocols, and other software technology disciplines to provide a highly scalable solution.

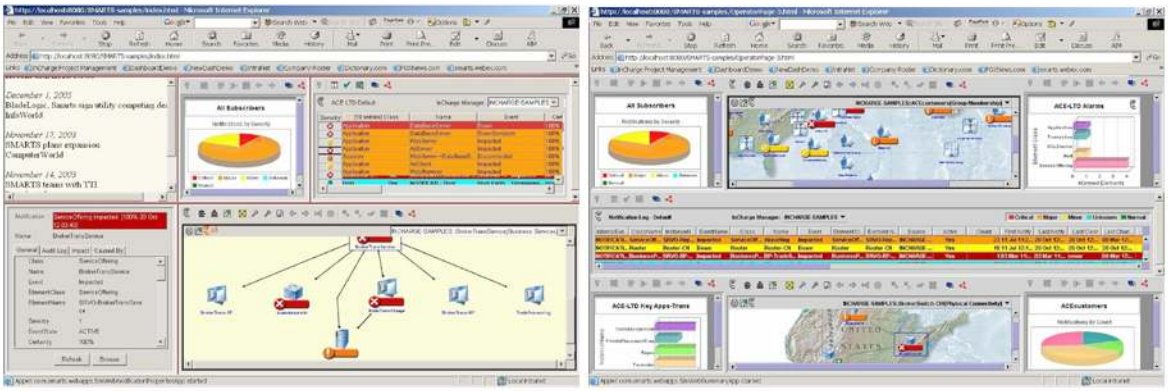
Cisco NCC's recursive architecture distributes both data collection and data analysis to eliminate scalability bottlenecks. It synchronizes multiple cooperating distributed processes to provide a single system image. Patented analysis technology contributes to scalability by precomputing logic, which remove computation-intensive operations from the real-time critical path, and by using exceptionally fast and robust computational algorithms. These design factors enable Cisco NCC to manage the world's largest and most complex infrastructures.

FLEXIBLE, WEB-BASED DASHBOARD VIEWS

The Cisco NCC Business Dashboard combines data-driven analysis and high-level graphics to deliver role-based views to business and operations users. Users can customize their screens with several view components—including summaries, notifications, maps, and status charts—that are enhanced by a selection of icons, colors, and backgrounds. These components can also be embedded into third-party portals or custom Web pages, creating a desktop layout with multiple interactive sources of content. The state-of-the-art Business Dashboard includes advanced features, such as access control with single sign-on and context sharing among screen components.

As Cisco NCC's presentation layer, the Business Dashboard is populated by intelligent, real-time analysis (Figure 4). Topology views show problems in context of the entire infrastructure. Users can drill down through the business service to see the health and status of components, as well as the impact of service-affecting faults. Because Cisco NCC isolates faults automatically and differentiates real problems from their symptoms, it eliminates the data overload that can clutter dashboard screens. Instead, users have just the information they need to ensure availability and performance of business-critical services. And, this information updates dynamically as the environment changes, so the Business Dashboard display is always accurate and up-to-date.

Figure 4
Cisco NCC Business Dashboard



SYSTEM REQUIREMENTS

Table 1 lists Cisco NCC system requirements.

Table 1

Cisco NCC System Requirements

Software	Solaris 2.8 or 2.9, Windows 2000 Server, Windows XP (console only)

SERVICE AND SUPPORT

Cisco Systems® offers numerous innovative services programs to accelerate customer success. These programs are delivered through a unique combination of people, processes, tools, and partners, resulting in high levels of customer satisfaction. Cisco services help you to protect your network investment, optimize network operations, and prepare the network for new applications to extend network intelligence and the power of your business. For more information about Cisco services, see Cisco Technical Support Services or Cisco Advanced Services.

FOR MORE INFORMATION

For more information about the Cisco NCC, contact your local account representative or visit:

http://www.cisco.com/en/US/products/ps5934/index.html

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