

Netcool/Impact

Highlights

- Automatically correlate and prioritize event response according to business impact
- Help maximize productivity by leveraging a common platform for universal access to real-time data, events and indicators
- Improve time to resolution through real-time monitoring and analysis of business events
- Deliver actionable information in user-specific, Web-based views
- Automate workflows to help maximize operator efficiency and productivity
- Protect and leverage existing data stores by virtualizing access to distributed information

A persistent challenge for operations staff today lies in managing data across the distributed organization. While data access is needed to monitor mission-critical business functions and respond to developing problems, the essential information often resides in vast numbers of data stores and database formats. In addition, necessary limitations on user access — across lines of business and silos — make it nearly impossible to centralize data management. The costs of reengineering processes and replacing tools can be prohibitive, and out-of-the-box “integrations” often do not offer the flexibility needed to access all relevant data.

Netcool®/Impact™ meets this challenge by providing a common platform for ubiquitous data access that easily circumvents traditional organizational boundaries. Armed with data from virtually any data source, administrators can correlate, calculate, enrich, deliver,

visualize and perform a wide range of automated actions.

Netcool/Impact has an advanced policy engine that allows administrators to define exactly what actions should be taken and when. These actions can include adding business context to events — making it easier to perform essential functions such as event prioritization — as well as business impact analysis and advanced root cause analysis. Further, customizable Web-based views virtualize multiple data sources and provide a single point from which to view distributed data.

Speed time to resolution with real-time event monitoring

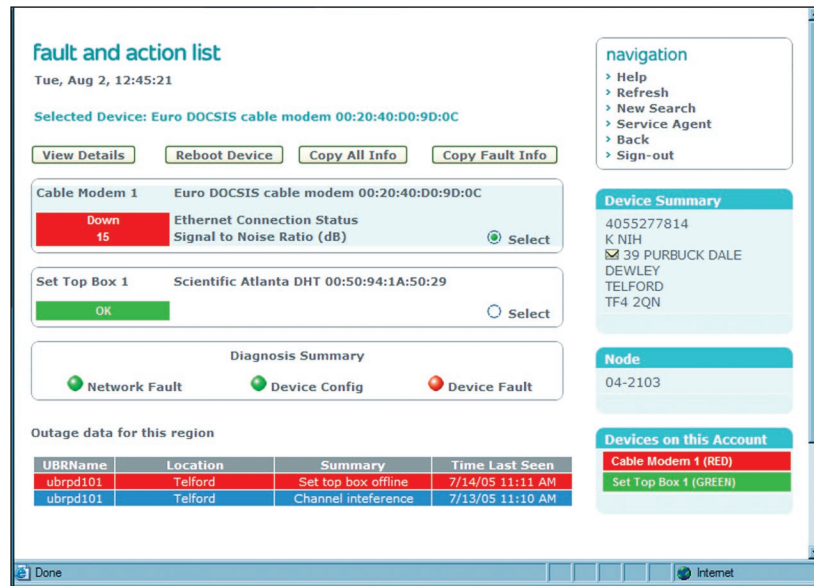
Netcool/Impact is a powerful tool for real-time monitoring of core business processes within your organization, such as trouble-ticket response and order fulfillment. It also enables you to assess how well key business

processes are performing, even across a broad range of systems and data-bases. Through this comprehensive and virtual data access, Netcool/Impact facilitates workflow automation and delivers actionable intelligence to business and operations users, helping to vastly improve productivity.

Since the software shows the immediate effect of events on the business, it can actually warn operations about pending problems before service disruption occurs. The software's robust analysis capabilities make it ideal for large organizations, especially those with business-critical functions that are closely tied to external customer service. And it is highly scalable, to grow as your event volume, data stores and organization grow.

Improve productivity with ubiquitous data access

In the past, establishing a single data management platform meant "ripping and replacing" existing tools, restructuring departmental processes and allocating valuable resources to integration. Netcool/Impact renders those steps obsolete. It allows you to quickly access the data you need to



The Operator View of Netcool/Impact virtualizes access, delivery and display of data according to target audience in a flexible Web-based interface.

solve problems and manage services by leveraging existing data stores where they are, and provides a simple, metadata access layer across them. Having this virtualized, single data store allows the data content to be flexible yet controllable — which helps avoid access and security issues.

By preserving the control of the original data owner to update and maintain their own content, and leveraging data where it resides, Netcool/Impact helps organizations greatly improve productivity.

In addition, Netcool/Impact integrates seamlessly with your existing configuration management database (CMDB), or trusted data sources, and can serve as a virtual data visualization and control layer. Even if a formalized CMDB does not exist in support of IT Infrastructure Library® (ITIL®) or enhanced Telecom Operations Map (eTOM) process frameworks, Netcool/Impact can provide this role as a virtualized CMDB that's driven by existing data stores, through which these best practices can be realized.

Netcool/Impact flexibly integrates with a multitude of data sources, including:

- SQL databases (Oracle, IBM DB2®, Sybase, MS-SQL, MySQL, Informix®, PostgreSQL, ODBC).
- Third-party applications (Cramer Dimension, Alcatel 5620, TIBCO/Rendezvous, Smallworld, Netcool/OMNIbus™, Netcool/PrecisionIP™).
- Industry-standard interfaces (Java™ Messaging Service [JMS], Web Services, Extensible Markup Language [XML], Simple Network Management Protocol [SNMP], Lightweight Directory Access Protocol [LDAP]).
- Custom applications (Flatfile, TCP/IP Sockets, e-mail, command line).

Event enrichment helps prioritize response according to impact analysis

When a customer-facing service has failed, time is of the essence. Yet checking the status of a trouble ticket against that service, for instance, can be time-consuming and can require access to data spread across multiple departments.

Netcool/Impact collects relevant contextual information from existing data stores and injects that content directly into events to make them

actionable and to reduce response and resolution time. The process of injecting this information is called “event enrichment” and typically includes the following types of contextual data:

- Service impacted
- Customer impacted
- Device location
- Application owner
- Maintenance details
- Support contact information, among others

Its unique event enrichment capabilities deliver actionable data that enables faster response and resolution of service and process-impacting problems. By enriching events with business context, Netcool/Impact enables advanced correlation of events and data for appropriate action and, more importantly, prioritizes responses and escalation based on the true impact to the business.

Get real-time visualization of aggregated data in a Web interface

The unique Web interface of Netcool/Impact enables you to virtualize access, delivery and display of data according to the audience.

For example, for support staff that relies on multiple applications and sources to resolve problems, Netcool/Impact can act as the single point of reference by:

- Collecting information about the device, maintenance contract, location and owner from an existing inventory database.
- Collecting trouble-ticket information related to a specific service from the help desk or trouble-ticketing system.
- Collecting information on device configuration from a network management tool or CMDB.
- Collecting information on resolution history from a problem database.
- Displaying all this information in a single, tailored Web view to enable and enhance operational processes.

Protect integrity of data stores

Also of key importance in data management is limiting user access to separate databases in which proprietary, essential business data is stored, such as financial, billing and inventory systems. Netcool/Impact delivers a sophisticated policy engine that controls the secure collection of relevant information from data sources. It works by triggering action policies that you have established. Since the data is never actually

moved from its original source, the integrity of the data source is never compromised, and user access does not become a liability to your corporate or regulatory requirements. Further, action policies can be used to control the delivery of information to or from virtually any data source or other workflow application, to keep data sources current and accurate.

Improve customer experience by correlating events to business functions

A primary cause of operational inefficiency is the inability to judge which events are actually vital to your business objectives. Netcool/Impact enables you to easily identify and prioritize business-impacting events.

When problems occur, Netcool/Impact gives your organization the contextual information needed to effectively prioritize urgent problems. Netcool/Impact links users, customers, services and vital business processes to events in your infrastructure by allowing you to define the location of relevant data across distributed business and operational data sources.

Event enrichment helps operators understand the customer or service impacted by incoming events, identify

what really constitutes a problem and help prioritize response over less significant events. By providing a business context to events, Netcool/Impact helps you employ the best practices needed to facilitate essential business services and processes.

Monitor key performance and process measurements

Policies can also be defined to measure and provide real-time visibility into the performance of core business and operational functions such as order fulfillment and billing. Netcool/Impact can monitor, collect and perform complex calculations using multiple events or other real-time data. Policies can include a variety of variables to derive actionable key performance indicators that support your business and operational objectives. When business activity does not fall within specified parameters, Netcool/Impact can automatically identify these exceptions and take a variety of customizable actions.

Streamline notification and escalation

User-defined notification policies enable Netcool/Impact to communicate problems through an organization via phone, pager, instant messenger and other means — to facilitate quick

response. Once the resolution for a specific problem is established, you can define policies to automatically recognize and take action if that problem recurs and escalate that problem as far as necessary in your organization. The software will also track the time it takes until a problem is acknowledged and resolved, and automatically tracks the resolution history throughout the notification and escalation process. This productivity tracking is provided in the form of a return on investment (ROI) report and is commonly leveraged to justify a company's investment in Netcool/Impact.

Define and enforce policies for improved productivity

Valuable time is wasted in almost any organization by processing duplicate or extraneous events. Netcool/Impact helps improve productivity by enabling organizations to easily define and enforce policies for handling incoming events, from the most simple — such as an e-mail notification or field update — to the most complex, involving interrelated decisions using advanced logic.

Netcool/Impact even lets you associate an existing document or diagram with a policy, linking individuals to problem

types and automating what before would have been a manual process for troubleshooting and problem resolution.

Netcool/Impact can provide policies to automate:

- Event enrichment, to gather additional information and aid in decision making.
- Correlation of events to business functions.
- Collection and sharing of data among diverse resources.
- Filtering and suppression of extraneous events (devices in maintenance mode).
- Notifications to users, applications and systems regarding high-priority conditions.
- Escalation of business-critical events.
- Problem resolution and troubleshooting.

You can also set policies for errors in Netcool/Impact that enable you to automatically correct error conditions within the policy engine. The Netcool/Impact engine can actually be instructed, from start to finish, regarding what error conditions to target and what repair actions to take, based on parameters that you set. Automating your workflows helps the proper individuals get information regarding service-affecting events and respond more quickly.

Automate steps in business processes

In addition, Netcool/Impact provides flexible links into external systems and leverages corporate knowledge in inventory, provisioning and customer relationship management (CRM) systems. You can use it to define custom actions to automate steps in a process like change management and order fulfillment and eliminate the need for manual intervention. For instance, Netcool/Impact can monitor the order fulfillment system to ensure the correct volume and rate of orders are being processed and detect any bottlenecks. If the proper threshold for any step is not met, Netcool/Impact can send a notification to other steps in the process, can automatically act to resolve the problem, or can alert staff by messaging (e-mail, Netcool event, pager, text message, instant message) or by sending an event to the Netcool/Impact console.

Automate data synchronization

While you are monitoring data stores for updates or changes, you can also automate action for those changes. For example, administrators can create dynamic links between two applications

or data stores by setting a policy that when changes are made in one data store, they are updated and reflected in another data store. Through both passive and active monitoring, Netcool/Impact can detect when changes are made to database tables and immediately take action. You can customize monitoring according to your business goals, based on a variety of variables that you establish and organize:

- By changes to specific tables.
- By combinations of changes.
- By changes that occur within certain time periods.

Aggregate and filter multiple events

Multiple events happening in rapid succession can signal a serious problem or could simply be the result of normal operations. The unique event wizard of Netcool/Impact enables you to aggregate multiple events and view them as a whole — to speed assessment and decrease time to resolution. You can also use it to suppress normal events, such as those that occur for maintenance for applications, systems and networks.

Execute policies according to severity of need

Also essential in prioritizing and sorting events is the flexibility to set policies according to the severity of the event. For example, administrators can configure Netcool/Impact to:

- Automatically adjust the severity field according to time-of-day criteria.
- Return the modified event to Netcool/OMNIBus for collection and storage.
- Process requests for information about procedures for handling certain events.
- Let operators select an event.
- Issue a request to Netcool/Impact to send all documentation, affected users and information associated with that type of event.

Customize data formatting

Data formatting is another obstacle to data access, as table configurations and storage locations can vary considerably. Netcool/Impact can be configured to support mixed data formats, taking information from one data store and normalizing that data to fit the format of another data store, making it easy to aggregate and adapt data to meet the needs of any user or application. Netcool/Impact can

also abstractly represent the data in underlying data stores as metadata for use within policies. If the data representation or storage location changes, your policies and logic need not change, providing protection from uncoordinated changes to systems.

Conclusion

Netcool/Impact enables you to automate and customize workflows, analyze service impact and monitor changes to data in real time, allowing you to take your existing data, event and operational management workflow, view it in context of your entire infrastructure and correlate it to essential business functions.

About Netcool software

The IBM Tivoli® Netcool software portfolio is used by many of the world's leading enterprise, service provider and government organizations for its ability to consolidate and manage events across some of the largest, most complex, heterogeneous environments. The Tivoli Netcool software portfolio offers broad collection, consolidation and correlation capabilities to help organizations rapidly identify

and resolve problems and improve operational efficiency. By combining real-time service modeling and impact analysis capabilities with scalable fault management, the Tivoli Netcool software portfolio helps organizations to effectively manage the availability, performance and security of business applications and services.

About Tivoli software from IBM

Tivoli software from IBM helps organizations efficiently and effectively manage information technology (IT) resources, tasks and processes in order to meet ever-shifting business requirements and deliver flexible and responsive service management, while helping to reduce costs. The Tivoli portfolio spans software for security, compliance, storage, performance, availability, configuration, operations and IT life-cycle management, and is backed by world-class IBM services, support and research.

For more information

To learn more about how Netcool/Impact can help you automate event responses and impact analysis, contact your IBM representative or IBM Business Partner, or visit ibm.com/tivoli/solutions/security

Netcool/Impact at a glance

Netcool/Impact integrates with the following add-on data source adapters (DSAs):

- SQL databases (Oracle, DB2, Sybase, MS-SQL, MySQL, Informix, PostgreSQL, ODBC)
 - Third-party applications (Cramer Dimension, Alcatel 5620, TIBCO/Rendezvous, Smallworld, Netcool/OMNibus, Netcool/PrecisionIP)
 - Industry-standard interfaces (JMS, Web Services, XML, SNMP, LDAP)
 - Custom applications (Flatfile, TCP/IP Sockets, e-mail, command line)
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Netcool/Impact supports the following operating systems:

- Sun Solaris 7, 8, 9
 - IBM AIX® 5.1, 5.2
 - HP-UX 11i
 - Red Hat Linux® 9 and Red Hat Enterprise Linux 3.0
 - Microsoft® Windows® 2000, 2003, XP
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Netcool/Impact is designed to work with:

- Netcool/OMNibus



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Software Group
Route 100
Somers, NY 10589
U.S.A.

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