

# Nimsoft RCA and Topology Manager

## Automated Visibility that Speeds Troubleshooting

### Features

- Intuitive, customizable, and flexible views of network topologies.
- Network topologies automatically created and updated.
- Intelligent root cause analysis based on network device associations.

### Benefits

- Accelerates problem resolution.
- Enables quick prioritization based on affected possible impact to the business and SLA's.
- Boosts network performance and availability through more timely and intuitive insights into network status and issues.
- Improves administrator efficiency, enabling faster diagnosis and repair of network problems and suppressing distracting false alarms.
- Eliminates the time and expense of manual network topology generation and updates.

### Introduction

Your network is complex and constantly changing. With so many interdependent systems, processes, and services supporting your business, comprehensive, continuous monitoring is critical. How can you gain a complete, real-time, and intuitive view of your changing network infrastructure?

### The Solution

Nimsoft RCA and Topology Manager automatically discovers any IP device, and maps out the relationships and dependencies in your network environment. This knowledge helps mitigate risks from planned changes and accelerates troubleshooting efforts.

RCA and Topology Manager provides an intuitive user interface for viewing the hierarchical and dependent structure of large, complex networks. It enables administrators to filter their view by network component, and generate network topology maps that are accurate and current.

For service providers with many clients, our multi-tenant capabilities allow you and your customers to safely segregate and view subsets of large, distributed networks and service provider infrastructures.

### Intuitive and Flexible Topology Views

RCA and Topology Manager offers a visual topology and relationship viewer that enables you to select from different layout formats, including orthogonal, hierarchical, circuit, circular, and natural or organic. To support large scale networks, an automatic micromap is provided to view the entire layout. You may traverse the micromap and zoom in on different network segments as required. Plus, you can mouse over individual IP devices and see specific details of that device.

The topology view is automatically overlaid with availability status data of all monitored IP devices. Connection properties are displayed when you click on a line or connection between two devices. The connection properties show the connection status (SNMP operational and administrative status), connection speed, each device, and each interface on either end of the connection.

### Intelligent Root Cause Analysis

RCA and Topology Manager features an engine that analyzes alarms for likely root causes, based on the layer 2 relationships identified. When a likely root

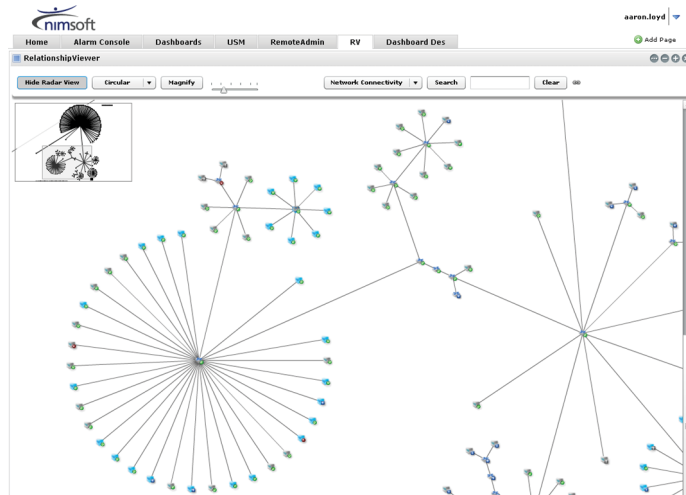
Data Sheet

cause is determined, sympathetic alarms being generated by related IP devices will be suppressed so operators only have to deal with events that need action. Where root causes are identified, a single root cause event will be generated and visible via the topology map through a glowing icon making it easy for you to see root causes and their associated impact. Automatic discovery is used to gather layer 2 relationships automatically and is a requirement for layer 2 root cause analysis. However, the relationship service will support multiple relationship types. These may include some custom relationships like customer, location, service, and more.

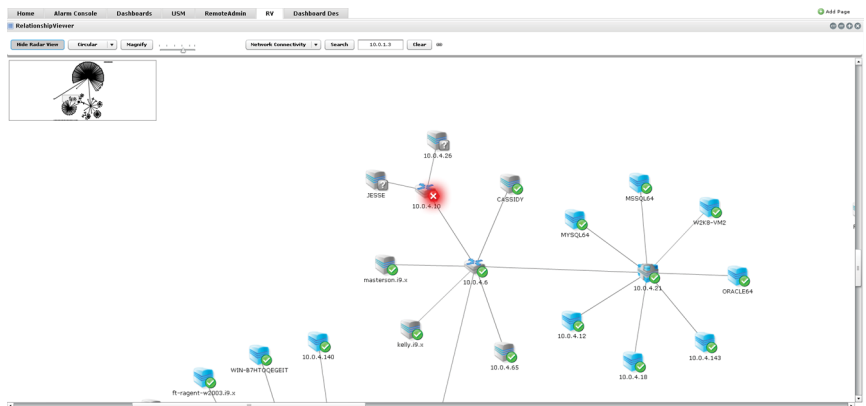
### Key Features

#### Root Cause Analysis

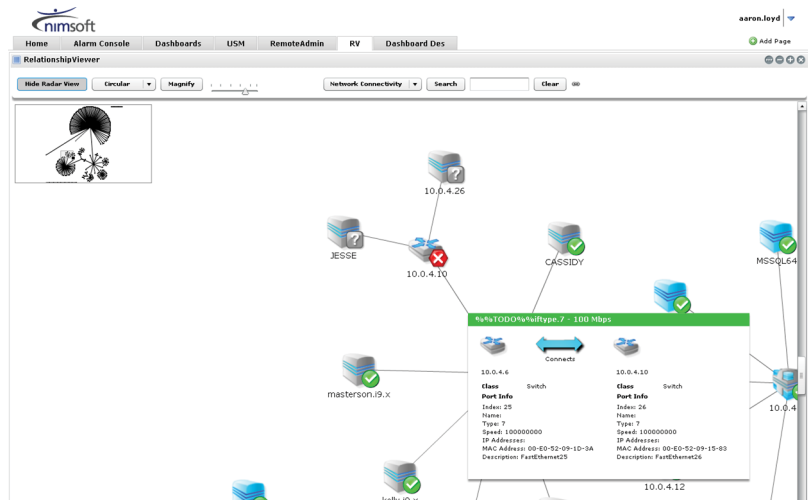
- Distinguishes between causal and symptomatic alarms in many situations.
- Suppresses alarms from systems downstream of a router or switch failure.
- Distinguishes link failures from switch or router failures where sufficient information is available.
- Distinguishes between administrative disablement and operational failures.
- Distinguishes between single failures with multiple symptoms and multiple failures.
- Distinguishes between failure of a device's agent and a failure in forwarding.
- Eliminates spurious alarms—doing "alarm hold-down" until enough data has been obtained, and then produces a single alarm per causal problem.



Nimsoft RCA and Topology Manager showing a complete network topology.



Nimsoft RCA and Topology Manager in zoom mode.



Nimsoft RCA and Topology Manager displaying link status.

### Discovery

- Delivers scalability, featuring multiple discovery agents that can work in parallel to scan different network areas.
- Allows duplicate addresses in different network areas e.g., in NAT environments.
- Discovers both router and switch based connections across LAN, WAN, and meshed architectures.
- Features cluster awareness—correctly mapping clustered systems using a common MAC address.
- Offers VM awareness, distinguishing between physical and virtual machines to present an accurate topology.

### Topology Viewer

- Uses common “relationship viewer” technology so that various physical and logical relationships between elements can be viewed consistently.
- Dynamically reflects the state of each element using animated glows to lead the eyes to the most critical issues.
- Uses both color and shape to distinguish element state, supporting vision impaired personnel.
- Provides a “radar view” of the overall topology, allowing easy navigation to areas of interest without losing the context.

- Offers easily understood interrelationships by having intersecting lines bridging over or tunneling under each other.
- Makes it easy for users to zoom in or out of views through mouse commands.
- Enables users to view topology by pre-defined “service groups”, using the Unified Service Manager (USM), or by selecting individual nodes and seeing their place in the network topology.
- Supports multi-tenant service provider environments by enforcing multi-tenancy, and limiting topology viewing to the authorized customer scope of each client.

## About Nimsoft

Nimsoft is a global leader in IT Management-as-a-Service. The company’s lightweight ITMaaS solutions make it easy for enterprises and service providers to implement comprehensive, adaptable monitoring and service desk capabilities essential for managing today’s dynamic computing environments. Learn more at [www.nimsoft.com](http://www.nimsoft.com).

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