

HP OpenView Route Analytics Management System 2.5 software

Data sheet



HP OpenView Route Analytics Management System (RAMS) is specifically designed for network engineers managing today's complex, mission-critical enterprise and service provider networks. It provides visibility into the dynamic routing operation of the IP network—for the first time, enabling fast identification and resolution of difficult-to-diagnose network problems, effective and trouble-free network maintenance, and the ability to easily and accurately plan for network changes and optimization.

HP's RAMS integrates with HP OpenView Network Node Manager Advanced Edition to provide enhanced management of dynamic IP networks.

Key features and benefits

- Maximizes network availability and customer satisfaction by rapidly identifying and diagnosing IP routing faults
- Boosts network performance by detecting and isolating the root cause of layer 3 network instabilities and anomalies
- Reduces total operating cost by improving productivity of both network resources and network engineering staff
- Validates desired network operation after maintenance activities, helping to avert router misconfigurations that cause one third of all network problems
- Reduces the finger-pointing often associated with difficult-to-diagnose network problems, while minimizing demands on scarce engineering resources

- Enables network engineers to predict routing problems and take action before they occur
- Verifies and alerts on changes to routing redundancy, preventing costly service outages

Harnessing the intelligence of IP IP route analysis—a necessity for today's mission-critical networks

Modern, well-designed IP networks are dynamic, with the inherent intelligence of IP automatically rerouting traffic when problems occur. Until now, there have not been any tools available that provide network engineers and operators with visibility into real-time network-wide routing behavior.

HP OpenView Route Analytics Management System delivers the most accurate, up-to-date picture of how the network is operating, enabling IT staff to be much more effective at maintenance, troubleshooting and planning.

Without the ability to visualize, monitor and analyze the logical (or layer 3) operation of an IP network, pinpointing and correcting problems is a tedious and manually intensive effort for routing experts, resulting in excessive operational costs, time-consuming problem resolution and lost productivity.

HP OpenView RAMS

See the network as the network sees itself

RAMS leverages the intelligence of the IP routing protocols to let network engineers and operators visualize and understand the dynamic operation of the network. By monitoring the routing protocols that direct the flow of traffic throughout the network, RAMS constructs the routers' view of the network, computing and displaying changes in routes and topology in real time.

Loss of IP-layer connectivity is immediately detected and analyzed, and alerts can be sent to Network Node Manager Advanced Editor so that further analysis and corrective action can be taken. Routing instabilities or changes that go unnoticed by conventional SNMP-based management systems, but which impact network availability and performance, are visible within seconds, leading to early detection or prevention of service outages and the fastest mean time-to-repair (MTTR).

Since RAMS does not forward any traffic, it is neither a bottleneck nor a failure point. It places virtually no load on the network infrastructure while scaling to manage large networks. RAMS is easily installed, providing extremely rapid time-to-value.

Unified monitoring and analysis of complex IP networks

RAMS is the only IP route analysis system to handle most of the popular routing protocols in use on today's service provider and large enterprise networks. From a single RAMS system, network engineers and operators can view the real-time routing structure of their entire network as a seamless topology map, even when the network is running multiple protocols and spans multiple domains.

Many of today's large enterprises employ a network architecture composed of multiple domains or Autonomous Systems (ASs) running one or more interior gateway protocols, or IGP, (e.g. OSPF, IS-IS) that are interconnected via an exterior gateway protocol, or EGP, (such as BGP). RAMS concurrently monitors all routing protocols within these "private enterprise internets," enabling network engineers to see the entire, diverse network as a single, integrated system, including the unprecedented ability to highlight complete end-to-end paths across multiple ASs and IGP types.

Detailed information from all monitored routing domains is saved in a hierarchical topology database for historical and forensic analysis of routing events.

RAMS similarly supports the major service provider networks, monitoring multiple BGP connections to peer and customer networks, while analyzing full Internet routes. For the first time, enterprise and service provider network staff can actually see how IP traffic traverses their routed networks. This provides tremendous insight into how a network is performing, while saving significant time and cost in managing, troubleshooting and maintaining the most complex networks.

Real-time layer 3 network visibility—gain new insights into how your network is operating

RAMS displays a real-time, layer 3 topology map of an IP network, so that engineers always have an accurate view of the network route status at their fingertips.

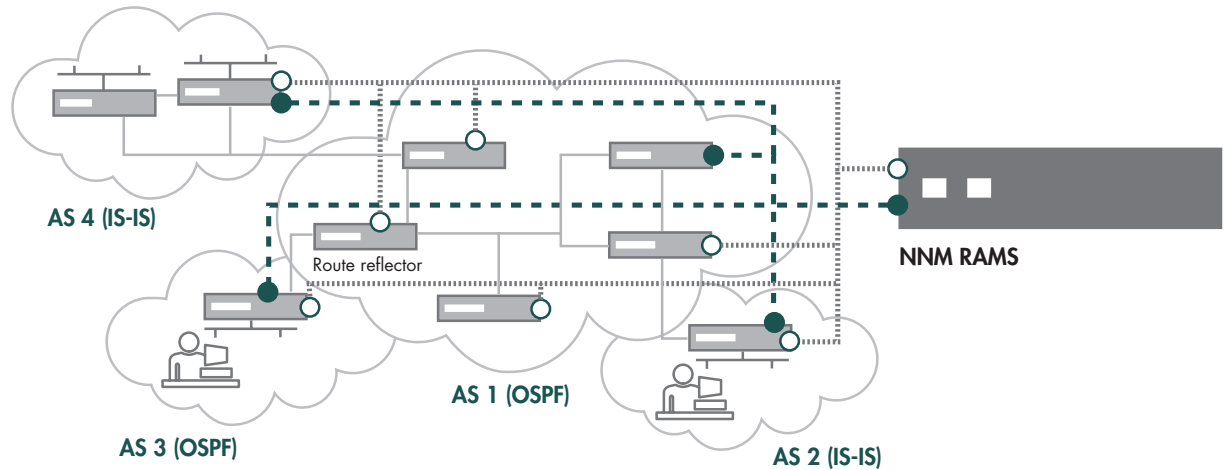
Detailed data about routing events—such as link status, link metrics and new prefixes—can be easily displayed to diagnose and troubleshoot problems.

Users can select a high-level view of the network topology showing the status of all routers and links, focus in on a specific area of the network, or view only specific types of routers, such as backbone routers. Selecting any source/destination pair will highlight the active route between the nodes, allowing operators to focus their attention on relevant devices and links when diagnosing problems. RAMS delivers the most accurate, up-to-date picture of how the network is operating, enabling IT staff to be much more effective at maintenance, troubleshooting and planning.

A scalable solution

A single RAMS system can concurrently monitor and analyze complex IP networks that may have multiple routing protocols (OSPF, IS-IS, BGP) and may span multiple autonomous systems.

A single RAMS appliance can concurrently monitor and analyze complex IP networks which may have multiple routing protocols (OSPF, IS-IS, BGP) and span multiple autonomous systems.



- Key**
- NNM RAMS user
 - IGP routing adjacencies
 - BGP routing adjacencies

Extending HP OpenView Network Node Manager

As part of the HP OpenView family of network management products, RAMS is integrated with HP OpenView Network Node Manager Advanced Edition to provide enhanced management of dynamic IP networks, including advanced root-cause analysis and network service impact assessment.

Upon detecting losses in IP-layer connectivity, RAMS immediately alerts Network Node Manager Advanced Edition's Active Problem Analyzer to pinpoint the underlying root cause of the problem. The ability to perform root-cause analysis across the physical network topology and logical IP network services ensures early detection and reduced mean time-to-repair (MTTR) for most common IP-layer problems.

A complete solution

Getting the most from your software investment

HP provides high-quality software services that address all aspects of your software application life-cycle needs and align with your business goals. With HP as your partner, you have access to standards-based, modular, multi-platform software coupled with HP's best-in-class services and support portfolio. HP offers a scalable set of services for HP OpenView and HP OpenCall products and solutions. This wide range of service offerings enables you to choose the services that best match your business needs.

For more information on HP software services available to address your specific business needs, visit www.openview.hp.com/services.

Comprehensive training

HP provides a comprehensive curriculum of HP OpenView and IT Service Management courses. These offerings provide the training you need to realize the full potential of your HP solutions, increase your network optimization and responsiveness, and achieve better return on your IT investments.

With more than 25 years experience meeting complex education challenges worldwide, HP knows training. This experience, coupled with unique insights into HP OpenView software, positions HP to deliver the optimum training experience. For more information about these educational courses, visit www.hp.com/learn.

The smartest way to invest in IT

HP Financial Services provides innovative financing and financial asset management programs to help you cost-effectively acquire, manage and ultimately retire your HP solutions. For more information on these services, please contact your HP sales representative or find us on the web at www.hp.com/go/hpfinancialservices.

Ordering information

Solution

BA120AA	HP OpenView Route Analytics Management System 2.5 appliance
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Related software for expanding the RAMS solution

BA121AA	HP OpenView Route Analytics Management System 2.5, 25-router pack LTU
BA122AA	HP OpenView Route Analytics Management System 2.5, 100-router pack LTU
BA123AA	HP OpenView Route Analytics Management System 2.5, Unlimited-router pack LTU
BA124AA	HP OpenView Route Analytics Management System SPI for BGP LTU
BA126AA	HP OpenView Route Analytics Management System SPI for IS-IS LTU
BA127AA	HP OpenView Route Analytics Management System SPI for OSPF LTU

Media and documentation

BA128AA	HP OpenView Route Analytics Management System 2.5 Media
BA129AA	HP OpenView Route Analytics Management System 2.5 Documentation, English

Technical specifications

HP hardware and software	HP ProLiant DL 360 G3 Embedded Linux OS RAM for server: 4 GB recommended Free disk space: 120 GB recommended
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Related software

Network Node Manager Advanced Edition	www.openview.hp.com/products/nnm
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Contact information

To find an HP OpenView sales office or reseller near you, visit: www.openview.hp.com/buy

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