

# Enterprise-Class Management Success with SolarWinds Solutions: Five Case Studies

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## Introduction

SolarWinds is a fast-growing, innovative IT management software company focused on modular breadth of functionality and ease of use coupled with quick time to value. SolarWinds has been well known as a solution provider for smaller and mid-sized businesses, but its use within larger enterprise settings has grown significantly as well. This report looks at five case studies of SolarWinds portfolio adoptions in mid- to large-size enterprises and service providers. Each case examines the context within the organization's IT infrastructure and management architecture as well as specific business priorities and operational objectives. These examples are drawn from a substantial and growing number of such deployments and offer clear evidence of enterprise-class management success.

Within SolarWinds' portfolio, the dominant product relevant to these adoptions is [Orion Network Performance Monitor \(NPM\)](#), which SolarWinds describes as a “modular, Web-based fault and performance management platform for networks and enterprise systems.” It is expandable to incorporate additional scope of management capabilities by adding [Orion NetFlow Traffic Analyzer \(NTA\)](#) and [Orion IP SLA Manager](#). Also relevant to enterprises, SolarWinds offers [Orion Application Performance Monitor \(APM\)](#), [Orion Network Configuration Manager \(NCM\)](#), [Orion IP Address Manager \(IPAM\)](#), and the [Profiler](#) suite of storage management tools.

## Changing Needs for Enterprise Data Center Management

The face of enterprise IT infrastructure is being radically transformed by factors such as data center consolidation, branch growth, server virtualization and Cloud services. This not only creates new and complex architectures to which management tools, technologies and practices must adapt, but the rate of change in standard operations is reaching sustained levels that would have been considered impossible to deal with not all that long ago. And despite this demand, very little help is on the horizon in terms of new or additional human resources. While networking staffs are getting renewed attention, the standard operating directive in most organizations has been to make do with the staff on hand, and don't replace the people that leave.

Infrastructure managers could easily be overwhelmed with these challenges, but answers (and help) are available. Current, contemporary applications, the datacenters that host them, and networks that tie it all together require current, contemporary management tools and technology. Enterprise network and data center managers need to pay attention to the following criteria when examining management solutions:

1. **Scalability/Reliability** – Management tools need to demonstrate a proven ability to accommodate large environments with managed elements numbering in the thousands or tens of thousands, as well as a solid answer for resiliency and high availability.
2. **Flexibility** – Change is now a constant, so tools must be up to the task by offering automated capabilities for recognizing changes and incorporating them into management profiles and views, along with efficient options for extension and reconfiguration to accommodate new technologies.

3. **Ease of Use** – Even the most capable management tools out there are doomed to become shelfware if they are not easy to deploy, easy to adapt, and easy to use. This has been a major area of progress over the past several years, and there is no longer reason to “settle” for anything less than flexible, intuitive operator interfaces that accelerate deployment and rapidly accommodate changing needs.
4. **Collaboration** – Perhaps one of the most important capabilities a management solution can possess is the ability to easily share management views and insights across organizational teams and with the served IT consumer community. Such features promote efficient, effective communication and successful coordination of work efforts.
5. **Cost Effectiveness** – The intense focus on controlling IT expenses is not likely to change even in good times, and so management solutions must show quick ROI when first deployed and reasonable sustaining costs for the long term.

## SolarWinds in Five Enterprise Environments

SolarWinds long ago recognized these core requirements and evolved their solutions through the Orion family of products. They also continue to refine and add to that base of capabilities on a regular basis through a rapid release cycle and tight interactions with their customer community. The following five case examples come from the healthy and growing base of large enterprise organizations who are benefiting from SolarWinds IT management products in their operations environments. The details of their networks, data centers and application mixes vary greatly, but they all share a common need for solid, reliable and capable management tools to help them keep on top and in front of any situation that might threaten the stability of their networks, servers and applications.

### International Broadcasting Company

#### **\$4 billion in revenue**

This US-based broadcast media organization has five data centers and over 5,000 employees with 40 remote sites around the globe. With round-the-clock operations in place to collect and broadcast content across multiple outbound channels, this organization moves a lot of data and requires high levels of efficiency and reliability from their network. All told, the three-man operations team is responsible for daily monitoring and managing of nearly 2,000 network elements and servers.

Much of the traffic moving across their network from remote operations and locations is comprised of video content files, which carries a heavy bandwidth price. But the greatest factor causing them to re-evaluate their network architecture and operational approach is the fast-growing use of video conferencing. Concerns over quality of video conferencing, in fact, forced a recent change in WAN strategy. The company had moved from MPLS VPNs to point-to-point and Internet VPN, primarily as a cost saving measure, but video conferencing quality challenges have forced them to move back to MPLS. Across both the WAN and LAN, the operations team has needed to assure proper prioritization of video conferencing traffic.

The organization first started using SolarWinds [Orion NPM](#) about five years ago, and have since added both [Orion NTA](#) as well as [Orion NCM](#). This set of products comprises the operation team's primary network monitoring platform, both for planning/engineering as well as in the NOC. The system is also used for basic monitoring of servers, although the bulk of detailed server (as well as application performance) monitoring is accomplished using HP Operations Manager. [Orion NPM](#) has been integrated into HP-OM for event forwarding, and the team has also built their own wiki for pulling historical data from Orion.

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"We probably got a complete ROI in less than one year."

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Cost control was a major factor driving the decision to move to a SolarWinds solution, but the system's capabilities closed the deal. When they realized that they could no longer afford the ongoing maintenance and administrative costs of their legacy network management tools, they began considering alternatives. "We were amazed to find that we could do pretty much everything we were getting out of our existing tools with the SolarWinds solution, full licensed and deployed at less cost than our annual maintenance for our existing tools. We probably got a complete ROI in less than one year."

## Nationwide Healthcare Provider

### \$40 billion in revenue

As one of the largest providers in North America, this company is perhaps the epitome of a modern IT-enabled healthcare organization. Their network infrastructure is vast, connecting over 150,000 employees and 600 remote sites and boasting over 800,000 LAN ports. They have five data centers, including one for disaster recovery, and two more slated to go online in the coming months. While they outsource primary management of both their WAN and LAN environments, they also keep a full complement of management tools in-house to supplement monitoring and fill the gaps between what they get from their service providers.

As a healthcare organization, there are a number of critical roles that the network plays – in particular 100% secure and reliable transfer of medical data, which increasingly includes heavyweight medical imaging and video from both fixed and mobile devices. They also make heavy use of virtualization within servers, and serve a substantial portion of their employees via virtual desktop infrastructure.

The organization selected SolarWinds [Orion NPM](#), [Orion APM](#), and [Orion IP SLA Manager](#) for a variety of monitoring and management purposes. The products are used to monitor network devices of all types and varieties as well as virtual server deployments. One fairly unique application is monitoring the health and performance of WLAN-connected medical equipment carts. Over 25,000 such carts exist around the country, each containing network-connected monitoring and testing equipment that tie back into the electronic medical records systems.

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"Their IP SLA solution is better than anyone else's in that it's really easy to set up paths and tests."

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The network management team has been particularly pleased with the SolarWinds solution's ease of use and span of capabilities. "Their IP SLA solution is better than anyone else's in that it's really easy to set up paths and tests. For example, SolarWinds extended the solution beyond SNMP to parse CLI, which makes the hugely valuable Path jitter and ICMP Path tests practical in a sustained operations mode. And the APM piece is really powerful – especially all of the templates for monitoring applications like SQL Server, Exchange and Blackberry that come out of the box." The team also found adding their own extensions, for instance monitoring critical processes on their packet-inspection appliance tools, was essentially trivial, taking a mere ten minutes to build, test, and deploy. "Our managed services covers most of what we need from a basic infrastructure perspective, but we need to take care of the bulk of the application-layer control and monitoring devices, and the SolarWinds solution is how we meet that goal."

## Large Regional Commercial Bank

**\$6 billion in assets**

Serving business customers across a large portion of the U.S. Southwest, this banking organization has a network connecting their primary data center to over 50 branch locations. The operations staff is responsible for overseeing more than 75 key applications delivered by 500 collective managed devices, including network elements and servers. They have transitioned about two-thirds of their computing to virtualized servers, all using VMware.

One of the interesting challenges this organization has faced is the convergence of their entire infrastructure towards IP, and thus common use of the network for connectivity. For instance, all of the bank's ATMs (Automated Teller Machines) use the IP network for connecting back to central banking applications. They are also using IP-based video surveillance technologies for branch security and compliance, both for real-time monitoring as well as retrieval of video playbacks from security DVR systems. As a result, they require both high availability as well as high performance from their network.

The operations team first started using [Orion NPM](#) and [Orion APM](#) over three years ago, and more recently introduced [Orion NCM](#) for better network device configuration control. Collectively, the Orion suite comprises the primary day-to-day management platform for their network, servers and applications. They have found particular value in the way that Orion was easy to set up to generate immediate notifications of key issues without overwhelming them with alarms. "Orion NPM really helps us to keep a finger on the pulse of the network. It works so well that we usually know when there is a problem and are already looking into it before we start getting calls from the help desk."

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The team also sees great value in the SolarWinds solution's ability to handle the changing nature of their computing environment, bringing systems and network monitoring together into a common viewpoint. "We really love the ability that Orion NPM has given us for monitoring our VMware deployment. We are able to monitor performance metrics at both the VM and host levels while also keeping track of the relationships between hosts and guests. This level of visibility gives us much greater confidence in the health of the new environment and our ability to troubleshoot issues."

## Pan-American Telecommunications Services Provider

**Over \$30 billion in revenues**

When this service provider began the conversion of their call center infrastructure to VoIP, they realized that they would need a better approach to network management. The Call Center Services organization is a group within the larger IT department, and their primary role is to provide, monitor and manage the technology platform used to deliver VoIP calls to both internal and contract call center providers spread around the Americas. The volume of VoIP traffic is impressive, handling hundreds of calls per second during peak times. This requires the infrastructure to be reliable and to perform at levels far higher than is expected of most traditional IT services.

Managing such an environment would be challenging in most any situation, but in this case, there has been an additional challenge laid at the feet of the operations team. They've been tasked with operating this mission-critical network with hundreds of nodes and thousands of total elements with only two full-time network managers. So the tools and procedures required had to fit into a significantly constrained human resource profile.

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**"It was easy to use and easy to set up – it just plain works."**

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The team considered a broad range of network management products, testing them thoroughly, and reached the conclusion that SolarWinds [Orion NPM](#) was the only product that worked out-of-the-box as advertised. Besides using [Orion NPM](#), the team is also using [Orion IP SLA Manager](#), and has found the proactive network layer and voice quality tests to be especially valuable. They have also deployed [Orion NCM](#) and have migrated away from the element management tools of another supplier in favor of the SolarWinds solution over the past year. Plans are also in place to add [Orion IPAM](#) and [Orion APM](#) so the server operations team can also benefit from Orion's capabilities. "The system has been very reliable and stable. It was easy to use and easy to set up – it just plain works. There is no way that we could keep up with this network with such a small team if not for the SolarWinds Orion system."

## Global Entertainment Media Company

**\$38 billion in revenues**

With thousands of applications and Web content clusters to support, this organization had deployed over 5,000 servers across three major data centers in the U.S. Half of those servers have been virtualized, and are running either VMware ESX 3.5 or vSphere 4. The team responsible for monitoring and managing these servers provides a common, central service for the entire company, across all lines of business.

One of the major challenges that this operations team faced was the \$1+ million they had sunk into a big-name systems management platform, which was being used for both availability and performance monitoring. There were able to collect management metrics with this legacy platform, but had real trouble getting that data back out for analysis, reporting and collaboration.

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“We really appreciate the easy access and visibility for the operations people.”

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The operations team brought in SolarWinds [Orion NPM](#) and [Orion APM](#), and was able to install and bring the system up to 90% equivalency with the legacy system within a mere three days. While they are still using a variety of other management tools for specific focal points, the Orion system has now become their primary monitoring platform. “Besides the fast and easy deployment, we really appreciate the easy access and visibility for the operations people. They can pop in and get to whatever they want to see for their servers very quickly. We even share some of the views with the application developers, so they can get a sense for how things are running.”

The team is also taking advantage of the Orion solution’s support for virtualized server environments, including monitoring of health and performance down to the VM level. This includes recognizing and capturing the relationships between VMs and host systems, automatically updated on a periodic basis to account for vMotions.

## EMA Perspective

As shown in these five enterprise examples, SolarWinds customers leveraged the versatility and fast time-to-value to meet substantially all management requirements within large, complex, networked environments. These adoptions tell of challenges that are becoming increasingly common in IT shops large and small around the globe – growth, complexity, virtualization and resource constraints. The stories are also of distinctive interest given the fact that while SolarWinds is aware of some of the strategic value its solutions can bring up market, it has traditionally focused its messaging and positioning at technical buyers and users rather than broader, more executive-level pain points and concerns. This includes a “try-and-buy” approach in which all of its products can be downloaded and evaluated directly from the SolarWinds Web site. Its usage in enterprises is thus, most often, a “bottoms-up” phenomenon even as more executive level respondents are already quite capable of assimilating SolarWinds’ value once in deployment, as the case examples show. EMA believes that this suggests both an opportunity for SolarWinds, and a trend across the broader industry towards more modular solutions that marry ease-of-deployment and ease-of-use with more cohesive approaches to management.

## About SolarWinds

**SolarWinds’ software supports a wide range of customers, IT needs.**

SolarWinds’ flagship Orion family of IT management solutions offers IT professionals a comprehensive and easy-to-understand view of their network and applications’ performance from a single pane of glass. Designed with feedback from SolarWinds’ user-community of 55,000+ IT managers, [Orion Network Performance Monitor \(NPM\)](#) is designed to manage the rapid changes in dynamic IT environments and allow IT professionals to simply, and visually, manage networks of all sizes.

With [Orion NPM](#) as the foundation, IT professionals can add additional Orion modules as needed to build an IT management system that fits most enterprises’ evolving needs – from configuration, to application performance, to network performance and traffic analysis. Users can view the real-time

statistics and availability of their IT environment from any Web browser, providing a convenient way for administrators to stay in tune with their networks at any time, from anywhere. Available Orion modules include:

- [Orion Network Configuration Manager](#) – Network configuration and change management
- [Orion Application Performance Monitor](#) – In-depth performance monitoring for applications
- [Orion NetFlow Traffic Analyzer](#) – Flow-based network traffic analysis
- [Orion IP Address Manager](#) – Easy-to-use IP address space management
- [Orion IP SLA Manager](#) – Monitor WAN performance from multiple perspectives

For enterprises looking for solutions that offer control and visibility across the entire IT infrastructure, the SolarWinds Profiler suite adds deeper storage and virtualization management to the SolarWinds' Orion portfolio, delivering broader IT management capabilities and increasing IT organizations efficiency and responsiveness.

- [Storage Profiler](#) – Access industry-leading, multi-vendor real-time storage monitoring, reporting, alerting and forecasting for DAS, NAS, and SAN systems
- [Virtual and Server Profiler](#) – Consolidated view into the physical server performance, along with VMware® cluster, host and virtual machine performance
- [Backup Profiler](#) – Centralized backup management software that works with all major backup applications, operating systems and storage technologies

SolarWinds (NYSE: SWI) provides powerful and affordable IT management software to more than 97,000 customers worldwide – from Fortune 500 enterprises to small businesses. We work to put our users first and remove the obstacles that have become “status quo” in traditional enterprise software. SolarWinds products are downloadable, easy to use and maintain, and provide the power, scale, and flexibility needed to address users' management priorities. Our online user community, [thwack](#), is a gathering-place where tens of thousands of IT pros solve problems, share technology, and participate in product development for all of SolarWinds' products. Learn more today at <http://www.solarwinds.com>.

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## About Enterprise Management Associates, Inc.

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that provides deep insight across the full spectrum of IT and data management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help its clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise IT professionals, lines of business users, and IT vendors at [www.enterprisemanagement.com](http://www.enterprisemanagement.com) or follow [EMA on Twitter](#).

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