



A Virima Technologies Case Study

Large Healthcare System Deploys Virima to Facilitate IT Discovery and Dependency Mapping

Provides an accurate and thorough single view of consolidated IT systems and infrastructure throughout the healthcare enterprise

Snapshot

Customer: Major healthcare system

Location: Upper Midwest

Solution: Virima Asset discovery and dependency mapping software

Situation: Three separate health care organizations consolidated resources and needed to understand IT data center assets, including the status of all applications and how those applications were being supported.

Benefits: Automatic and repeatable discovery of over 7,000 server configurations, 2,000 applications, and the underlying infrastructure components, as well as mapping of more than 150 enterprise services.

Customer Profile

For more than 20 years, the client has ranked among the top hospitals in the U.S. News & World Report's "America's Best Hospitals" rankings. As one of the region's largest health care systems (based on inpatient admissions and net patient revenue), the client was formed with the mergers of several hospital systems, resulting in a network of more than 170 health centers and hospitals, nearly 5,000 physicians and 35,000 employees.

One of the anticipated benefits of the mergers was streamlined processes and greater cost savings by modernizing technology platforms whenever possible. Another goal was improved care efficiency and patient safety by integrating patients' electronic medical records on the same IT platform for easy access by caregivers at hospitals and across all settings of care. Greater operational efficiency was expected as well as lowered costs through group purchasing of supplies and equipment.

However, it quickly became apparent that there was at least one problem: a lack of resource retention in the IT department meant the loss of substantial knowledge and expertise. Unfamiliar with much of the systems inherited after the mergers, the new IT operations team struggled to support the applications and underlying infrastructure. This not only meant consolidation of duplicate systems would be difficult, but responding to incidents was taking far too long and making changes often involved a lot of guesswork and trial and error.



The Situation: What IT assets do we have? How are they connected?

Like many enterprises of this size, the individual hospitals relied upon spreadsheets and a multitude of management tools not accessible across the entire IT organization for IT asset management. Not only was the process labor intensive and inefficient, but it was virtually impossible to obtain relevant information in a timely manner. Finding answers to questions such as these was difficult, if not impossible: What infrastructure components support which application? Who owns each asset? What operating systems do we have and are they being patched? What changes have been made? No one could answer the questions with certainty. The client needed to get a handle on all of this information STAT!



Another big challenge facing healthcare today are the new FDA guidelines regarding medical device cybersecurity. Although not traditionally supported by IT, medical devices are more and more commonly connected to the network and running versions of desktop operating systems. This means they can be vulnerable to viruses and malicious exploits, but in addition to causing a disruption to the business, patient care could be impacted with dire consequences. The client needed a plan to address medical device management as well.

Then, there are the numerous auditing requirements: HIPPA, SOX, PCI, security, software licensing, inventory, financial, and others. The client needed a way to support these audits with the ability to demonstrate who has admin access to systems, which systems support regulated processes, what changes have been made, they are protected accordingly, and are compliant on licensing.

The Solution

Virima Discovery, Dependency Mapping, and CMDB by Virima Technologies.

The Virima implementation began in early 2016, with a pilot program of two network segments and 200+ servers. Within several hours, Virima was running system scans and data mapping the IT environment. The software could identify a particular application, running on a particular server, as well as identify how these assets depend and relate to other assets and the business services they support.

Although the client looked at other vendors, they quickly chose to implement Virima for its robust features, accuracy, ease of use, and overall value.



Some of the key features include:

- Agentless network-based scanning via flexible WMI, SSH, and SNMP probes
- No impact on network or host performance
- Scan immediately or schedule scans to run automatically
- Perform deep scans of physical and virtual installs of Windows, Unix, Linux, and Mac
- Discover network infrastructure and edge devices
- Automatically discover software and configuration changes
- Optional agent available for real-time monitoring of servers and desktops
- Custom probes to support medical devices

Within just a few months of implementation, the client had discovered and cataloged configurations of over 7,000 servers and the underlying infrastructure components, including switches, routers, and load balancers from just one centrally loaded Discovery App. Dependencies for more than 2,000 applications were automatically mapped, allowing for easy linkage to more than 150 enterprises services they support.

Virima in Action

Three a.m. is known as the witching hour, with good reason. It's the time when demons tend to appear and in this scenario, it was often nightmare time for the client. In a health care system, many prescriptions are still written and sent via fax, around the clock. In one instance, a notification call came into the IT help desk that prescriptions could not be issued at one of the hospitals because the prescription transmitting system was down. In a hospital setting, prescriptions are a 24/7 necessity.

The engineer on call that morning was not familiar with the prescription transmitting system at that particular hospital so he quickly contacted the vendor responsible for supporting the software. The vendor informed the engineer that the application was running on four specific servers and that's where they needed to focus their attention.



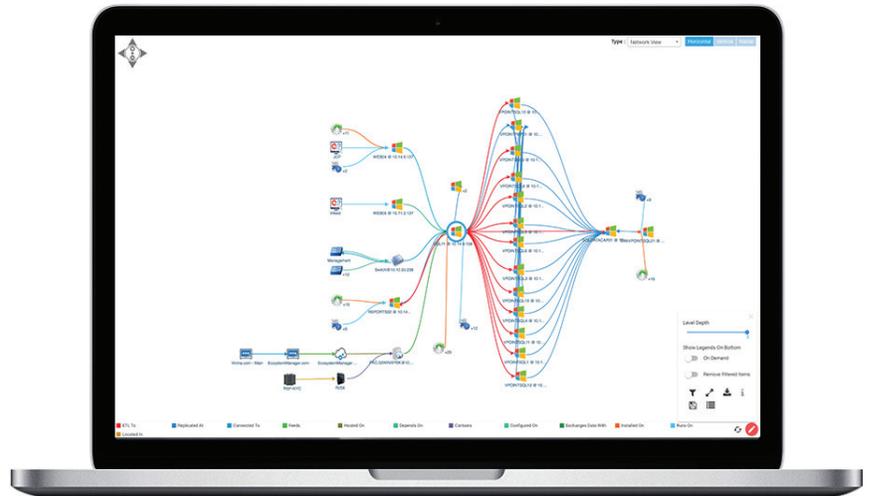
However, a quick check with Virima alerted the engineer that the software was actually running on 12 other servers that the vendor did not know about!



Virima Benefits

Because the engineer had Virima to rely on instead of only the vendor's inaccurate information, they understood the full extent of the problem and didn't waste time looking in the wrong place for the solution. Additional delays in restoring the delivery of patient care was avoided.

The client has experienced many such positive outcomes since Virima was installed. Onboarding (and off-boarding) new IT staff is easier because critical information is easily accessible and automatically kept up-to-date, ensuring it can be trusted. Guesswork about what hardware and software exists, how it is configured, or what is connected to what is a thing of the past.



Virima has started working with the client to create new discovery probes to improve their oversight and reporting of medical devices as well. Additionally, the client is extending Virima's discovery and asset management capabilities to their 64,000 end-user devices. Tying the asset information into their current service management system or replacing it altogether with Virima is also being explored.

About Virima Technologies

Headquartered in Atlanta, GA., Virima Technologies is an innovator of cloud-based and on-premise IT Asset Management and IT Service Management (ITAM & ITSM) solutions. Through advanced infrastructure discovery and visualization capabilities, Virima links the business processes to the technology and services business rely upon. Virima automates IT operations functions enabling improved service, security, risk and compliance management. The ITAM and ITSM capabilities of Virima deliver insight and value to each of their clients, enabling them to address their entire IT operational needs.

To learn more about Virima Technologies www.virima.com or contact sales at sales@virima.com