Symantec Replaces its Legacy VitalQIP Core Network Services with Infoblox

The Customer
Symantec sees more threats and protects more customers from the next generation of attacks. Founded in 1982, the company has evolved to become the global leader in cybersecurity, with more than 11,000 employees in more than 35 countries. Symantec helps companies, governments and individuals secure their most important data wherever it lives.

The Challenge
Replace its legacy VitalQIP core network services with a modern DDI infrastructure and bring its IT services in house, in order to continue to deliver excellent service to its customers.

The Solution
- Infoblox Grid™
- Infoblox DDI
- Infoblox Network Insight
- Infoblox Virtual and Physical 2220, 1410, and 4010 Appliances
- Technical Training

The Results
- Replaced 80 Microsoft servers with 40 Infoblox appliances
- Eliminated time-consuming validation tasks by ensuring data accuracy
- Reduced the time it takes to request IP addresses for VMs from 48 – 72 hours to 10 minutes
- Seamlessly integrated virtual and physical assets for central management and consistent performance

Symantec Migrates VitalQIP and Elevates to Infoblox Enterprise-Grade DDI
Symantec had grown dissatisfied with the performance of its outsourced IT operation, which relied on a legacy VitalQIP implementation. According to Russell Moore, VitalQIP was fine for database purposes, but it had not been updated or modernized to meet the rapidly changing demands placed on DDI services.
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Russell Moore
Lead Infrastructure Architect, Symantec

Symantec decided to replace it and take it back in house. Given that this process is a very large undertaking, the company was naturally concerned about its ability to deliver services effectively while migrating services from the outsource vendor to a new infrastructure.

A key part of the solution was to implement Infoblox DDI as a foundation. Symantec was looking for a system with reliability and expandable functionality, integrated DDI, discovery, and support for cloud.

Moore points out that this was a major shortcoming for a business like Symantec. “We deliver services,” he says. “We’re interested in the innovations that are driving business agility and efficiency today—virtualization, cloud, automation, and so forth. If you’re a partner of ours and you’re not interested in those things, you’re less interesting to us.”

In addition, instead of DDI residing in one group working toward the goals of DNS, DHCP, and IPAM, network services were broken down into sub-silos. DNS was deployed on top of IPAM. DHCP was a separate service deployed on Microsoft DHCP servers, and IPAM was inadequately handled in VitalQIP. Stepping up to next-level networking from Infoblox presented an opportunity to replace Symantec’s legacy point products with a DDI solution that has kept pace with the times.

Choosing the DDI Market Leader Over the Competition

“When I rejoined Symantec in January 2015,” says Moore, “vendor selection had already been reduced to two players: Infoblox and BlueCat.” Ultimately, Symantec selected Infoblox because of its recognition as a market leader. “There’s significant weight to the fact that Infoblox owns the largest portion of the DDI market,” says Moore. “In effect, the market in general has selected Infoblox by popular vote.”

Moore was thinking about the technology and what services it delivered and about how easy it is to manage and incorporate into the Symantec infrastructure. He was also thinking about having the skills on staff to get the full advantage of it. Leveraging Infoblox Training Services, he has effectively turned a small army of talented engineers into a highly skilled unit capable of administering the vast feature set inherent within the Infoblox solution. “You’re better off investing in and turning your resources into highly qualified, skilled individuals who understand the product and how to integrate it instead of training legions to log data.”

A True Partnership Based on an Aligned Worldview

There was much more involved in the decision than Infoblox’s position as market leader. “One place where Infoblox really shines,” says Moore, “is in its alignment with our principles of security.” A key selling point for Moore was Infoblox’s next-level security, as demonstrated through its substantial experience with Federal Government organizations and the attendant compliance with regulations and security standards.

“These are of enormous value to a company like Symantec,” he says. “Our brand is security. Infoblox’s stance on what they do with security is aligned with Symantec’s view of the world, and that means that we have trust. The data we rely on from Infoblox can be trusted, and that means that things will move faster. With Infoblox, we’re going to make sure that our data model of IP addresses and the attributes assigned to them is accurate, thus eliminating a lot of extra work for the security team as they spend less time validating data. And because the system is integrated with a discovery system, we can start to utilize more accurate data and quit wasting a lot of time with manual discovery.”

An Integrated Solution For Enhanced Efficiency and Reduced Cost

“One of the biggest values that we’ve already seen with Infoblox,” Moore says, “is that we’ve eliminated the need for the Microsoft servers. We’ve modernized the whole DDI infrastructure—it’s all integrated, and we have practical, ready-to-use knowledge about what’s going on in our network. Before, there could be any number of teams involved in trying to get that information. Now there’s one team, and they are authoritative for all that information.”

“In addition, we’ll be stripping out somewhere in the neighborhood of 80 servers throughout the organization, and putting in closer to 40 Infoblox appliances. The duplication resulted from siloed services, with each group believing it had to have its own set of redundancies and capabilities inherent within its particular service. Once we use the capabilities of the Infoblox Grid™ architecture to combine them, they get to take advantage of each other’s enhanced redundancies and capabilities.”
Symantec will also take advantage of the well-integrated Anycast capabilities of the Infoblox system. "Before," says Moore, "if an organization wanted to create a new system in a particular area, they had to know very detailed information about where they existed in the topology to find information about DNS servers and IP addresses they could leverage. Now, all they have to know is which region they're in."

With the enhanced efficiency Infoblox provides, Moore expects to drive down costs caused by delays in introducing systems, processing tickets, and requests for information. "Those services should just work," he says. "It should be easy to leverage them and easy to consume them. If you talk to people about their woes and concerns in deploying services, DDI services should not be anywhere on their lists."

Next Level Automation Gets IP Addresses Faster

"One of the biggest complaints about the previous system," says Moore, "came from the Cloud Services team in the data center. It went something like, 'Really guys, it can take up to a week to get an IP address. That's just stupid.' And they're right."

Lead Systems Engineer, Gilbert Martin, who works with the Cloud Services team, was familiar with Infoblox from another job, and asked whether the deployment team could use the Infoblox APIs to integrate with their VMware products and automate IP provisioning. "IP address requests were taking 48 to 72 hours," he says, "and then it still had to be configured. We needed help fast."

Infoblox rose to the occasion in the middle of the project with a contained Infoblox system that the Cloud Services team could develop against, so they could start writing their automation code and get it functional. "It was a big win for us," says Moore. "There's nothing like working with a partner like Infoblox, who not only has the technology and interest to go after new technologies, but steps right up in a crunch and says 'yeah, we can do this.' And it was a success that we could show to our management before the project was even over."

It's not uncommon for the organization that selects and deploys an IT solution to paint a prettier picture of the results than the organizations that ultimately have to depend on it, but that's not so in this case. Martin says, "Nowadays we're looking at ten minutes for the whole IP address process. It's all integrated now as part of Infoblox. It automatically gets an IP address. It automatically registers DNS, automatically has an "A" record, and automatically gets configured in the VM. Huge, huge improvement."

"It turns us into an agile delivery service," Russell adds. "When our customers have services that are overloaded, or need capacity, or they want to spin up something, we can do it in our cloud infrastructure—which Infoblox is a part of now—within a few minutes. We've basically eliminated one entire class of tickets. Now the system says: resource needed, resource requested, request fulfilled, done. Move on." That's what Infoblox next level automation delivers.

More Reliable Data to Determine Risk Versus Cost

Another situation a security company like Symantec can’t tolerate is not knowing, in detail, what assets are on its networks and how they are allocated. "With the old system," says Moore, "our IPAM data was so unreliable that nobody would look at it, and some people wouldn't even believe it if they did. That was another problem we had to solve. Another big value that Infoblox delivered was the discovery component we purchased."

Infoblox gives Symantec a central repository of information from which scanning tools can retrieve and deliver the latest tables of all the networks and their classifications. This helps uncover security vulnerabilities—and to prioritize response. "Security is about risk versus cost," Moore says. "If we have a network that has been flagged as PCI tier-3, which should be one of our most secure networks, and there's a vulnerability, then that has to be solved right now. That's a live incident. We get on call and we fix that."
Something We Truly Love about Infoblox

“Virtualization is a targeted priority at Symantec,” says Moore, “and something we truly love about Infoblox is that both virtual and physical appliances are supported and are equal to each other. If I deploy a virtual appliance from Infoblox, I expect it to behave and perform exactly the same as the same model on a hardware appliance. That enables us to structure our system so that the same models do the same things, and there are no worries or performance issues related to whether they are VMs or not.”

This, too, makes Symantec more responsive to its customers. “I wholeheartedly believe,” Moore says, “that having Infoblox as a part of our ability to automatically deploy assets and resources on demand means that our customers will see better services from us. We don’t have to predict utilization rates as far out to accommodate a build process. And in the modern IT of trial-based services where people get excited over the latest YouTube video and you see astronomical spikes and surges in a short period of time, you have to be able to respond quickly.”

Part of the Fabric of Symantec’s Ability to Deliver

“Infoblox is part of the fabric of our ability to deliver” Moore concludes. “They’re a significant partner with aligned interests, they’re passionate about delivery of their services, and they’re interested in their customers’ success just as we are. They have the right mix of technology for DDI, and their continued focus on improving the product and expanding into other areas is of big interest to us. It’s not about what you can do now, but what you can do in the next two years, or five years. That’s why we keep investing in Infoblox.”