Infoblox ❖
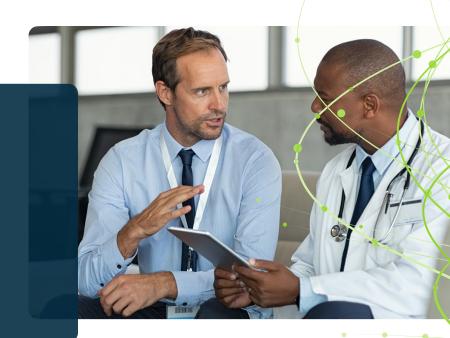
GlaxoSmithKline

The Customer

GlaxoSmithKline is a science-led global healthcare company that researches and develops a broad range of innovative products in three primary areas of pharmaceuticals, vaccines and consumer healthcare. It has a significant global presence with commercial operations, manufacturing sites and R&D centers around the world.

The Challenge

With the business growing, headcount dropping through cutbacks and outsourcing, and more servers being deployed every day, GSK set out to implement automated provisioning processes and to move toward a singletenancy cloud that could:

- Speed server spin-up and service delivery

- Eliminate human errors that were the main cause of time-consuming changes

- Integrate Infoblox DNS and DHCP appliances into their cloud-management platforms for automated provisioning

It was taking much too long for the network team to get new servers on the network—about one and a half working days to get the IPAM and DNS portion of server deployment done. "We didn't have an accurate list of our 70 – 80 DNS servers," says Chuck Dugan, GSK's DDI lead. "We were having service outages because the lists we did have weren't keeping up with the changes."

The delays were caused by an organically home-grown BIND and Microsoft legacy system running on UNIX servers. IPAM was disconnected from DNS, so changes being made in one system were not getting made in the other. All DNS and IPAM data was being entered manually into these various systems, resulting in data inaccuracies and inconsistencies. "It was inefficient and costly," says Dugan. "We had no centralized management, and I had to go through other organizations to get permissions. On top of that, we had

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The customer: GlaxoSmithKline develops and globally markets pharmaceuticals, vaccines and consumer healthcare products.

The challenge: Apply private-cloud technology to automate provisioning, reduce human error, improve troubleshooting capability and speed delivery of applications.

The solution:
- Infoblox Grid™ technology
- Integration with an Altiris/Symantec system for physical and virtual server provisioning
- Infoblox DNS and DHCP

The results:
- Automated network administration tasks
- Saved over half a million dollars in the first year in building 1,500 virtual servers
- Reduced server deployment time by 1.5 days per server, or 7 percent
- Improved time to market for new services with the potential to generate millions in revenue

multiple domains, and had to spend time documenting configurations in other regions."

GSK's multivendor infrastructure also included an Altiris/Symantec system for physical and virtual server provisioning. To meet its cloud-delivery goals, the company needed a single common infrastructure—and one tool for quick upgrades and for easy provisioning, visibility, and troubleshooting.

So GSK replaced its legacy systems with Infoblox DNS, DHCP, and IPAM (DDI). With the Infoblox Grid™ for DNS and DHCP core services, a solid foundation was in place for automated, dynamic provisioning and change to address the above problems.

The Solution

With its central database and its ability to automatically push out changes and upgrades to widely dispersed physical and virtual machines, Infoblox Grid reduced the operational cost of making changes. The Grid was integrated with the Altiris/Symantec system to automatically assign IP addresses and DNS names to servers. Since the initial integration, GSK has been using the Altiris/Symantec solution, integrated with Infoblox, as its primary platform for its production systems.

The Infoblox solution can automatically add metadata (Infoblox Extensible Attributes) to the various IP addresses, networks, and DNS zones, so the solution reduced provisioning errors and simplified troubleshooting. With a single Infoblox DNS solution for the entire network infrastructure, GSK now has a single point of management. It also has a single tracking, auditing, and DNS data management tool. All of this helps ensure data accuracy in the system.

"Our business units are willing to pay for it themselves to have Infoblox capabilities extended into their networks."

Chuck Dugan,
Lead, DDI, GlaxoSmithKline

The Result

"The Infoblox solution saves a lot of time and effort," says Dugan. "It eliminates errors. In the old system, a typo could result in duplicate folders, but now Infoblox automation prevents that. Management is simpler, and I can offload tasks to other organizations because it's easy to give specific access to other groups."

And by integrating the Infoblox Grid with the Altiris/Symantec solution, GlaxcoSmithKline created a single-tenant cloud that functions as a system of automated provisioning tools. Now network engineers who used to have to make all the manual changes themselves have a fully automated selfservice system—a big savings given that the company builds approximately 1,600 virtual machines a year and then destroys 500 – 600. Two weeks after full production, all manual activities associated with building new virtual servers had been eliminated, and the network team estimated savings of $90,000 per year.

As impressive as that sounds, it turned out to be low. After one year of operations, it had been surpassed by a wide margin. With automation being used to assign IP addresses and register DNS names for both Altiris and Cisco CIAC/IPCS, the time savings for building 1,500 servers was 1,893 process days. The cost savings were $519,792. Add the potential to gain business agility that can result in literally millions more in revenue, and the Infoblox solution has more than paid for itself.

The solution goes beyond DNS with a rollout of DHCP to Infoblox appliances and virtual appliances running on Riverbed machines. The solution has been installed at 60 sites with very few issues. "In fact," says Dugan, "most of the users didn't even notice the changeover. One of the big benefits of the Infoblox appliances is resiliency, which the old solution didn't offer. For budget reasons, the completion of the installation has been pushed out until next year, but Dugan notes that it's been a big hit with internal customers. "Our business units are willing to pay for it themselves," says Dugan, "to have Infoblox capabilities extended into their networks."