

**Objective**

Refresh network infrastructure and take advantage of SDN solution to meet growth challenges

Approach

Engage with HPE and its partner to deploy a converged infrastructure solution that utilizes SDN to simplify delivery of new services and lower overall TCO

IT Matters

- Enables a real-time, 360-degree view of the entire network through SDN Hyperglance and BlueCat apps
- Speeds network updates (instant, automated updates vs. 1 day)
- Delivers a secure, automated solution for BYOD across multiple facilities
- Centralizes management of servers, storage and networking

Business Matters

- Replaces standalone unified communications hardware with flexible, integrated solution
- Simplifies technology environment with server, storage and networking from one vendor
- Improves communications with customers around the globe
- Protects investment value with flexible and scalable SDN architecture

Improved network performance meets rising dough demand

The Bama Companies embrace Software-Defined Networking for global business



The Bama Companies' growth began in a Texas drugstore where Cornelia Marshall baked sweet potato pies for sale. Today, Bama supplies frozen baked goods to the world's largest restaurant chains. With global production and business booming, Bama asked HPE and ISG Technology to modernize its data center.

Delicious delivered

Even if you've never heard of The Bama Companies, you're probably familiar with their products. Anyone who's enjoyed a hand-held dessert pie from the No. 1 hamburger franchise in the world already has a taste for what Bama does best.

More than just a pie company, Bama creates, tests, and delivers new menu items to some of the world's largest restaurant chains through a network of eight massive production plants—four in the United States, and four international locations.

Coordinating the logistics to produce millions of baked goods each day takes careful tracking of deliveries and inventory. "IT is not

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– Eric Spille, IT Manager, The Bama Companies

the core of our business,” says IT Manager Eric Spille. “But technology plays a huge role in keeping our production cycles on track.”

Outgrowing siloed solutions

Keeping the production line moving during normal business conditions is a challenge in and of itself. Meeting those deadlines when your business is in a period of rapid expansion brings its own set of challenges.

With sales increasing year after year and the doubling of its workforce, the past decade has put Bama’s IT infrastructure to the test. To complicate matters further, the infrastructure in Bama’s data center was built on numerous vendors’ solutions, all nearing end-of-lease. “Equipment age was definitely an issue, but there were also a lot of things we wanted to do that just couldn’t be done with what we had,” Spille explains.

Spille and team began looking at network solutions from Cisco, Brocade, Entersys, and Extreme. They looked at server solutions from Dell and IBM, and storage solutions from EMC, Equal Logic, and NetApp. “What we started noticing is that each of these providers had a unique solution, but we didn’t see anyone offering the total solution,” Spille recalls.

Simplifying the data center

On the recommendation of Hewlett Packard Enterprise (HPE) Gold Partner ISG Technology, Spille and team looked into integrating networking, server, and storage solutions from HPE. “We didn’t really have much experience with HPE, but we trusted ISG, who had recently helped us with a successful virtual desktop infrastructure (VDI) deployment,” reports Spille. “Seeing the whole data center solution come from a single vendor was really refreshing for us.”

For Spille and team, the deal was sealed when they saw the potential benefits of Software Defined Networking (SDN), and its ability to swiftly and simply deploy network changes and services. “Our network is central to everything we do, so the idea of using apps to modify and roll out new network capabilities was exciting for us,” Spille relates. “We rely on wireless networking and hand-held devices to move product around the plants and keep track of inventory through barcoding. If our network goes down, we stop making product.”

Migrating to success

With the help of ISG Technology, Bama deployed HPE 5800 and 3800 Switch Series networking components with Intelligent Resilient Framework (IRF) technology and

HPE Intelligent Management Center (IMC) software. The team also purchased HPE ProLiant DL380 Servers and HPE 3PAR StoreServ 7200 Storage. HPE Technology Services helped with the installation of the HPE 3PAR storage area network.

When Spille and team were ready to migrate from their legacy infrastructure, there was some concern from management that the transition may cause hiccups in production—which could be catastrophic given the scale of Bama’s operations. “But when we transitioned, there were no outages during the migration,” recalls Spille. “My boss said that of all the big projects we’ve been involved with, this one was the smoothest.”

Instant network updates

Today, Spille can update his network in a fraction of the time it used to take. “Using HPE IMC, I can look at the downtime schedule and proactively schedule a new firmware configuration to be deployed, and it just happens,” Spille explains.

Previously, updating firmware would have meant manually visiting each switch. “If you have all these pieces of hardware you need to update, and there’s no good way of centralizing and automating that job, it’s going to take you a day to go out and manually update each one,” Spille reports. “Now, I can go for a run while IMC performs the update and review the log when I get back.”

BYOD-friendly

IMC is also a key component of Spille’s plan to create a secure, robust bring-your-own-device (BYOD) initiative at all Bama locations. “The complexities of managing an internal and guest wireless network make it almost impossible to manage using conventional tools,” Spille says.

Bama is currently testing the BYOD solution over its wireless LAN environment using IMC. “The intent is that if you’re a Bama employee, and you come into a conference room with your laptop, IMC will automatically put you

on the production network. If you’re a visitor, IMC will automatically put you on the guest network. If you plug in a printer, IMC will enable wireless printing,” Spille explains.

Compared to the labor-intensive practices of manually enabling ports to accommodate devices and users, IMC will not only give back a significant amount of productivity to IT, but keep Bama’s production environment safer. “The more manual enabling of devices and users an organization does, the more security holes you develop over time,” Spille says. “IMC will save us a lot of time and worry.”

Liberating unified communications

Its new HPE Converged Infrastructure also allows Bama to think more freely about how it approaches network-intensive services such as unified communications. Typically delivered in a proprietary, third-party hardware-software solution, Spille has already begun deploying test environments using Microsoft® Lync over its existing HPE network.

By using HPE Network Optimizer—a SDN application for Microsoft Lync—Spille and team can deliver real-time communications over the network without disrupting the performance of other business-critical services. “SDN allows us to take voice or video packets and transmit them over the network without touching email and Internet traffic.”

Moving unified communications to its HPE Converged Infrastructure and eliminating the need for siloed, standalone solutions could benefit Bama not just in terms of capital investment, but integration headaches as well.

“In delivering frozen dough products to some of the largest retail chains in the world, it’s important to ensure that our communication applications are reliable,” Spille explains. “We are currently deploying Microsoft Lync with HPE’s Network Optimizer, which provides a higher performance in terms of user experience and lowers our overall IT infrastructure cost.”

Case study

The Bama
Companies

Industry

Food & Beverage

Customer at a glance

Hardware

- HPE 5800 Switch Series
- HPE 3800 Switch Series
- HPE ProLiant DL380 Servers
- HPE 3PAR StoreServ T400 & 7200 Storage

Software/Management

- HPE Intelligent Management Center
- HPE Network Optimizer SDN Application for Microsoft Lync
- Bluecat DNS Director SDN Application
- Real Status Hyperglance SDN Application

HPE services

- HPE Proactive Care Services
- HPE Installation Services
- HPE Financial Services

Ready for what comes next

Spille and team are currently testing other SDN applications for eventual deployment on the Bama network. Using Bluecat DNS Director, Bama can drive network agility through automated, orchestrated DNS and DHCP services. Using Hyperglance by Real Status, Spille and team can gain real-time, 360-degree visibility over the Bama network. Bluecat, Hyperglance and Network Optimizer are among many apps already available from the HPE SDN App Store.

For Spille and team, it's all about simplifying the entire IT landscape at Bama while delivering improved performance and a user-friendly experience. From a storage perspective, it means that Spille can allocate resources with flexibility and ease. "We used to have to allocate storage at the disk level, which meant we were always guessing at what we were going to need," Spille recalls. "With HPE 3PAR, you pick your LUN, drop it into a host group, and you're off and running. Or you can perform that from VMware."

"In our previous environment we had blades at our data center and rack mount servers at other locations," Spille relates. "When we standardized on HPE, we decided to go with all DL380's to have a consistent environment at all facilities. Now, when we install patches or updates, all sites are the same."

Now Bama is ready to grow when business demands it. "We certainly have a lot of capabilities we didn't have before, but the main thing is that we don't have any single points of failure now," says Spille. "Every network switch is connected to two network cores through IRF. With HPE at the center of our technology environment, we're ready for what comes next."



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