

Service Provider Delivers Reliable Managed Services with Cisco UCS



Executive Summary

- **Customer Name:** Business Communications, Inc.
- **Industry:** Information technology services
- **Location:** Southeastern United States
- **Number of Employees:** 82

Challenge

- Establish flexible data center environment
- Streamline data center management to increase operational efficiencies
- Minimize outages for customers when updating services or firmware

Solution

- Built flexible and scalable data center
- Implemented Unitrends Enterprise Backup as backup, archiving, instant recovery, and replication solution

Results

- Reduces customers' recovery time from days to hours
- Streamlined management of data center from single pane of glass
- Increased scalability and flexibility

Technology / Application Partner

- Unitrends

BCI delivers disaster recovery performance using Unitrends Enterprise Backup and Cisco Unified Data Center solutions.

Challenge

From its inception in 1993, Business Communications, Inc. (BCI) has grown to become one of the top information technology companies in the southeastern United States. BCI is passionate about understanding customer needs and helping clients find creative ways to deploy technologies that improve operational efficiencies and drive business outcomes. Leveraging the years of know-how from BCI's network of experts, customers in commercial, government, education, and healthcare industries can spend less time grappling with technology and more time focusing on their core business.

BCI has evolved over the years from a structured cabling company to an IT services company providing cabling, networking, web hosting, email, and telecommunications services. Two years ago, BCI decided to expand its product portfolio by offering a full range of virtual managed services via a new US\$3.5 million data center. To accomplish this goal, the company needed to transition from its network of physical HP and Dell servers to an enterprise-ready, easy-to-manage data center environment.

"In a competitive environment, we needed a data center solution that would enable us to deploy services quickly for customers and keep up with future demands," says Greg Latour, COO at BCI. "Cisco Unified Data Centers solutions give us the power and flexibility that our customers need with a simplified, one-point management system that enables us to serve our customers much more efficiently."

To give BCI's managed services an extra competitive edge, the company also implemented a new backup and recovery solution from Unitrends. BCI had previously worked with an expensive hosted backup solution that charged by the gigabyte of backup and limited the types of data and machines that could be protected.

“Cisco UCS and Unitrends dramatically reduce downtimes for customers, which is particularly important for healthcare and government organizations who need to demonstrate compliance with business continuity regulations.”

– **Chris Bird**
Virtualization Engineer
Business Communications,
Inc.

The Unitrends solution, which is a Unified Data Protection solution and Cisco Compatible product, removes these limitations and enables BCI to offer customers reliable and affordable backup and archiving from a leader in data protection. The Unitrends solution works closely with Cisco Unified Computing Systems™ (UCS®) servers to provide a certified combination of solutions and hardware that protects all virtual and physical data center environments.

Solution

Forming the compute core of BCI’s new data center environment are 21 Cisco® UCS B200 M2 and M3 Blade Servers. The UCS B200 Blade Servers balance performance with simplicity and ease of management. Rather than managing each physical server separately, the UCS B200 Blade Servers are managed and cabled on the chassis level. In the BCI environment, Cisco UCS 6120 Fabric Interconnects provide low-latency network connectivity and management capabilities to all blades through the chassis. Not only does this approach reduce points of management, but it makes expanding capacity or replacing servers as easy as plugging a server into the chassis.

Cisco Nexus® Switches form the high-speed network in the data center. In the core, Cisco Nexus 7010 Series Switches deliver high-density Gigabit Ethernet connectivity with strong support for virtualization and operational continuity. On the aggregation layer, Cisco Nexus 5548 Series Switches deliver broad connectivity support including Ethernet, Fibre Channel, and Fibre Channel over Ethernet connections to simplify the infrastructure and decrease total cost of ownership. Flexible Cisco MDS 9148 Multilayer Fabric Switches connect the network to NetApp storage.

Both Cisco UCS and the Unitrends Enterprise Backup are built on the idea of unified, simple, single point of management that works across the entire environment. Cisco UCS Manager enables BCI to manage the entire data center, including physical and virtual environments, from a single pane of glass. Automation and templates increase agility, while reducing the need to manage and configure each device individually.

Unitrends also operates with a single administrative interface that can be used to manage multiple instances and locations. “Like Cisco UCS, Unitrends works to unify and simplify the environment with a single management point across heterogeneous compute environments,” says Maria Pressley, chief evangelist at Unitrends. “The similarity in value propositions and the fact that Unitrends Enterprise Backup protects not only virtual environments but physical as well as cloud is the reason together we deliver such a unique offering.”

The close relationship between Unitrends and Cisco also enables Unitrends to deliver unique protections for Cisco UCS environments. In addition to all types of data, Unitrends protects applications, storage, and proprietary UCS network configurations. Unitrends also provides protection to physical and virtual assets provisioned by UCS, including OS and hypervisors. With incremental backup, Unitrends also increases backup storage efficiency by distributing the backup load throughout the day and reducing drops in network performance that can be caused by other backup processes.



Results

The ability to manage the entire Cisco data center environment from a single point has significantly improved productivity and efficiency at BCI. “Cisco UCS is much more flexible compared to other servers that we’ve worked with,” says Bob Milner, director of the data center and core networking group at BCI. “With centralized management, we can adjust configurations and move data across virtual servers to create more efficiencies in our environment.” Using the flexible, central management, BCI can move data and schedule rolling updates to minimize the effect of maintenance to customers.

Cisco UCS Manager also simplifies scaling the data center. In a competitive market, BCI needs to deploy services as quickly as possible and avoid static architecture that inhibits growth. Customers unsure about managed solutions could decide against working with BCI if they were faced with long delays. Using templates and automated provisioning, BCI can provision new virtual environments to add customers or capacity in just a few minutes.

The fast scalability of Cisco UCS combines with Unitrends backup solutions to improve disaster recovery options for customers. Even when backup solutions are in place, a disaster such as a physical server failure can cause lengthy downtimes for customers. It might take a week to order and replace the failed server, causing potential loss in operations and productivity. But BCI can restore backup data to a virtual environment and have customers running at full strength in a fraction of the time. The unique protections for UCS through Unitrends accelerate the process even further by enabling BCI to easily and quickly replicate even the configurations and applications in the data center environment.

“Working on Cisco UCS, we can provision an extra virtual server with just a click and have the customers’ data restored within hours” says Chris Bird, virtualization engineer at BCI. “Cisco UCS and Unitrends dramatically reduce downtimes for customers, which is particularly important for healthcare and government organizations who need to demonstrate compliance with business continuity regulations.”

Next Steps

BCI plans to continue expanding its managed data center business with Cisco UCS to meet customers’ demands for more data. “When we started our managed services two years ago, we could have never imagined the demands from data centers today,” says Latour. “Businesses of all sizes are using more analytics and big data as core parts of their business and planning. With Cisco UCS and Unitrends, we have confidence that we will be able to scale and continue providing our customers with the services that they need.”

Product List

Data Center Solutions

- Cisco Unified Computing System (UCS)
- Cisco UCS B200 M2/M3 Blade Servers

Fabric Interconnects

- Cisco UCS 6120 Fabric Interconnects

Routing and Switching

- Cisco Nexus 7010 Series Switches
- Cisco Nexus 5548 Series Switches
- Cisco MDS 9148 Multilayer Fabric Switches

Network Management

- Cisco UCS Manager

Backup

- Unitrends

Virtualization

- VMware

Storage

- NetApp



For More Information

To find out more about Cisco Unified Data Center, please visit: www.cisco.com/go/unifieddatacenter.

To find out more about Cisco UCS, please visit: www.cisco.com/go/ucs.

To learn more about Unitrends, please visit: www.unitrends.com.

To learn more about Unitrends Enterprise Backup, please visit: <https://marketplace.cisco.com/catalog/companies/unitrends-2>.



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