IT Services Provider Deploys Cloud-Ready Infrastructure

EarthLink Business cuts operational costs and improves network performance with help from Cisco Cloud Enablement Services.

EXECUTIVE SUMMARY

Customer name: EarthLink Business
Industry: IT services
Location: Atlanta, Georgia
Number of employees: 3000

Challenge
· Expand service set to include cloud offering for small to medium-size businesses
· Achieve greater scalability than possible with legacy cloud infrastructure
· Help ensure better redundancy by building infrastructure across multiple regions

Solution
· Cisco UCS combines network and compute in easy-to-manage environment
· Cisco Cloud Enablement Services determines infrastructure necessary to support cloud-ready environment
· Cisco Data Center Optimization Services facilitates transition to infrastructure as a service

Results
· Reduced time to deploy, replace, and upgrade hardware by 25 percent
· Cut firmware upgrade time from days to hours
· Delivered more reliable uptime and significantly improved customer experience

Challenge

Founded in 1994, EarthLink is an IT services, network, and communications provider with an extensive network spanning 29,421 fiber route miles. The company began as a residential ISP (Internet service provider) and continues to deliver a broad range of online services to approximately 1 million homes throughout the United States.

In recent years, EarthLink expanded its operational model to include IT services for small and medium-size businesses, forming a division called EarthLink Business. Company management realized that a viable cloud offering was necessary to remain competitive with other providers in their space. "Our first foray into the cloud was not ideal," says Joe Reazor, director of product engineering at EarthLink Business. "We had acquired a small cloud provider and we were using their infrastructure to deliver cloud services. The infrastructure wasn't robust or agile enough to easily scale, and the hardware was all housed in a single region, so our failover capabilities were very limited. We knew that we needed a much more dependable, scalable solution to keep pace with the rest of the industry."

Solution

EarthLink Business looked at a number of different vendors that could provide a cloud offering, but Cisco quickly emerged as the one to beat. "Cisco had the next-generation approach, with the Unified Computing System (Cisco® UCS®) blending network and compute in a single environment," says Stephen Currie, director of product management at EarthLink Business. "We also liked the FlexPod offering, which is Cisco UCS coupled with NetApp for storage and VMware for virtualization. The whole package was more intelligently designed and more mature than anything else we considered."

> "Better performance is the single biggest benefit we've seen from working with Cisco."

Joe Reazor
Director of Product Engineering
EarthLink Business

With help from Cisco Cloud Enablement Services, the EarthLink Business team was able to design and implement a cloud-ready environment capable of supporting the company's infrastructure-as-a-service offering. The first step was to establish five data centers, each in a different region of the United States, and furnish them with high-performance hardware. That hardware included Cisco UCS B200 M3 Blade Servers, along with Cisco UCS Fabric Interconnects connecting into Cisco Nexus® switches. All network connections pass through a Cisco ASR 9000 Series Aggregation Services Router.

With Cisco UCS Manager, the EarthLink Business IT team also gains the ability to monitor and manage all five data center environments through a single pane of glass.

Throughout the process, EarthLink Business relied on the assistance of Cisco Gold Partner World Wide Technologies (WWT), with key support from cloud optimization experts via Cisco Data Center Optimization Services. Together, these teams of advisors offered information and recommendations to facilitate the transition to infrastructure as a service. "We think of Cisco and WWT the same way," says Reazor. "They're both trusted, reliable partners. We have total confidence that our cloud offering will comply with the latest best practices because these people simply know what they're doing."

To prepare for the launch of its cloud offering, EarthLink Business is participating in the Cisco Cloud and Managed Services Program, a key component of the certification process for delivering infrastructure as a service. "The Cisco team meets with us every week to review the steps we need to take to achieve certified status," says Currie. "That level of guidance is just invaluable."

Results

By migrating to the Cisco UCS platform, the EarthLink Business IT team has saved significant amounts of time, leading to considerable reductions in operational costs. "UCS is just so easy to manage," says Currie. "For example, we can create service profiles that enable us to respond to hardware issues much more quickly. With that one feature, we cut 25 percent of the time necessary to deploy, replace, or upgrade hardware. Firmware upgrades are much easier, too. In our old environment, a firmware upgrade would take several days to complete. With UCS, we can finish one in a single night. Since we do that roughly once per quarter, we're saving about a week's worth of time every year on that one task alone."

Customers benefit from the UCS implementation as well, though they might not realize it. "We have better uptime, and we can deliver a more consistently reliable experience," says Reazor. "As long as everything is up and running, customers are happy. They may not care who's responsible for the improvements, but we care. Better performance is the single biggest benefit we've seen from working with Cisco."

As EarthLink Business prepares to unveil its new cloud services offering for small and medium-size businesses, the company is poised to raise the competitive stakes. Cisco will be right there to support it at every turn. "You always need to be looking for the next big thing that will set you apart," says Reazor. "This is our next big thing. We're really excited about it. And we're very pleased that we chose Cisco to help make it happen."

Next Steps

Going forward, the EarthLink Business team hopes to expand its implementation of the UCS platform, which may include upgrading and consolidating older platforms from other parts of the business. "We've had a lot of success working with Cisco, and we expect more success in the future," says Reazor. "We'll never stop looking for new ways to improve performance at a lower cost or with greater efficiency. And Cisco clearly feels the same."

More Information

· To read more about the Cisco cloud portfolio, go to www.cisco.com/go/cloud.

· To find out more about Cisco Services, visit www.cisco.com/go/services.

Product List

Data Center Solutions

· Cisco Unified Computing System™ (UCS)
  – Cisco UCS B200 M3 Blade Servers

· Cisco UCS Fabric Interconnects

· Cisco Nexus 7000, 5000, and 2000 Series Switches

· Cisco ASR 9000 Series Aggregation Services Router

Services List

· Cisco Cloud Enablement Services

· Cisco Cloud and Managed Services Program

· Cisco Data Center Optimization Services

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