Validated Data Center Architecture Sees Fast Benefits



GTS Central Europe cloud services offer customers choice and economies of scale while improving cost effectiveness

EXECUTIVE SUMMARY

Customer Name: GTS Central Europe

Industry: Service provider

Location: Czech Republic, Hungary, Poland, Romania, and Slovakia

Number of Employees: 1350 employees

Challenge

- Increase competitive advantage through cloud-based infrastructure services
- Reduce costs and drive financial performance across European data centers

Solution

• Pre-validated cloud architecture from Cisco, NetApp, and VMware provides greater efficiency and capabilities inside, between, and beyond data centers

Results

For customers

- Reduced risk and time-to-implementation, along with scalability of resources

For GTS

- New managed services for competitive edge, with annuity-style revenues
- Faster time to market; down from weeks to days

Challenge

GTS Central Europe (GTS) is a leading regional provider of integrated telecommunications services. Unlike many competitors, the company operates its own extensive fiber optic network, giving it the ability to provide connectivity throughout the region without relying on third parties. With greater control of end-to-end service delivery, GTS is able to provide unrivalled solutions—including complex virtual private networks and managed data centers—to 40,000 government and business customers and other carriers.

To help further differentiate itself, GTS set its sights on developing new cloud-based infrastructure as a service (laaS) offerings such as virtual hosting, data storage, data backup, and managed security. By taking this course it sought to give customers greater choice and economies of scale, while improving its own bottom line financial performance.

Artur Ostrowski, senior vice president for customer solutions at GTS Central Europe, says: "Key requirements included an integrated architecture encompassing server virtualization and storage elements." In addition, the solution had to deliver cloud-bursting capability and integrate data centers across five European countries: the Czech Republic, Hungary, Poland, Romania, and Slovakia.

"Cloud services are a very important part of our business and vital for future growth. In order to really deliver the quality of service that our customers expect we needed to team up with the market leaders," says David Sita, managing director of GTS Czech. An end-to-end cloud solution from Cisco with VMware virtualization and NetApp storage was chosen.

Solution

The foundation for the GTS cloud-based infrastructure is the Cisco[®] <u>Unified Data</u> <u>Center</u> architecture, which forms a single service delivery platform by fusing computing, storage, and switching into a scalable virtual system.



Customer Case Study

"Working with Cisco, NetApp, and VMware helped significantly reduce complexity of operations and offered faster time to market-down from weeks to days. It also enabled us to centralize platform design, deployment, and monitoring."

Artur Ostrowski

Senior Vice President, Customer Solutions GTS Central Europe



Within the Cisco Unified Data Center solution designed for GTS, the Cisco Unified Computing System[™] (UCS[™]) C-Series Rack-Mount Servers employed address fluctuating workloads through a varying balance of processing, memory, I/O, and internal storage resources. Virtualization is provided by VMware vSphere Enterprise Plus Hypervisor based on VMware ESX platform, which sets the industry standard for reliability and performance. Storage comprises NetApp FAS 3140 clusters with RAID arrays.

Cisco Nexus 5000 Series Switches and Cisco Nexus[®] 2000 Series Fabric Extenders provide server and SAN connectivity. Routing is provided by Cisco ASR 1000 Series Aggregation Services Routers, while security is enabled by Cisco ASA 5585 Series Adaptive Security Appliances.

Cisco Unified Data Center is a pre-validated architecture, giving GTS the assurance that it works from Day One. Other key advantages include:

- · Ready-to-use virtual servers with pre-installed operating systems
- · Complete redundancy to mitigate unexpected downtime due to infrastructure failures
- Secure multi-tenancy by providing secure levels of customer server separation
- Data backup, customizable security, and advanced monitoring capabilities
- Simplified software updates and maintenance

"Working with Cisco, NetApp, and VMware helped significantly reduce complexity of operations and offered faster time to market–down from weeks to days," says Ostrowski. "It also enabled us to centralize platform design, deployment, and monitoring."

With a unified service delivery platform, GTS has created an integrated European data center model for delivering cloud-based infrastructure services. The solution, installed by Cisco Gold Partner Alef Nula, is currently deployed in Prague, Warsaw, and Budapest, but also serves customers in Slovakia and Romania.

Results

Combining cloud technologies from Cisco, VMware, and NetApp has given GTS extra competitive edge by providing greater efficiency and functionality within and between its data centers. Moreover, these newfound capabilities have enabled the provider to develop attractive laaS value propositions for customers in Central Europe.

The first of these, GTS Virtual Private Server (VPS), was launched in 2011 and offers businesses the ability to dynamically select, allocate, and move computing resources when and where they are needed. "A big benefit for our customers is that no capital expenditure is required," says Richard Novak, director of strategy at GTS Czech. "They get fast delivery, flexibility, and security along with a service level agreement covering everything from bandwidth to outsourced data center services,"

VPS represents a radical change in how computing and storage resources are implemented and funded. Pavel Brabenec, chief marketing officer at GTS Czech, says: "It's often very difficult for internal IT teams to accurately measure total cost of ownership. With cloud services our customers know exactly what the bill will be."

The new services will, for example, enable clients to control operating systems, applications, and programming frameworks, while not needing to directly manage the infrastructure itself. VPS is suitable for smaller businesses while Virtual Hosting Environment (VHE), another new GTS cloud-based service, complements VPS for large enterprises and public sector organizations.

Customer Case Study

"We're able to use our people much more flexibly while also reducing our total cost of ownership. Cisco, VMware, and NetApp are helping us customize solutions for different customers and sectors, giving us competitive advantage now and in the future."

David Sita Managing Director GTS Czech



As fully managed solutions, VPS and VHE allow customers to reduce risk, time-to-implementation, and cost (there is no upfront hardware or ongoing maintenance expense). Other benefits that GTS customers will see include self-service tools for monitoring and control, plus the ability to match IT resources more closely to variable demand. "By adopting our cloud services, customers can achieve up to 30 percent cost reduction," says Sita. "They can design the solution according to the initial capacity they require and scale it up or down as they wish."

Meanwhile, GTS benefits by moving to a utility-like monthly pricing model with predictable annuity revenues. "We're able to use our people much more flexibly while also reducing our TCO," says Sita. "Cisco, VMware, and NetApp are helping us to customize solutions for different customers and sectors, giving us competitive advantage now and in the future."

Next Steps

GTS has boosted security and resilience, two key concerns for business customers considering a move to cloud. "The future of cloud services lies in a combination of private and public clouds," says Brabenec. "GTS is a trusted partner that can help businesses to smoothly make this transition."

For More Information

To discover how Cisco, NetApp, and VMware can help you to transform your cloud strategy, please <u>click here</u>

Product List

Data Center Solution

- Cisco Unified Computing System (UCS)
- Cisco UCS C-Series Rack-Mount Servers

Routing and Switching

- Cisco Nexus 5000 Series Switches
- Cisco Nexus 2000 Series Fabric Extenders

Security and VPN

Cisco ASA 5800 Series

Storage

NetApp FAS 3140 Series

Applications

VMware vSphere Enterprise Plus Hypervisor

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