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CISCO   LOGICALIS

Irish Building Provider Upgrades its Own Plumbing

Logicalis, partnered with Cisco, provides one-stop shop to upgrade retailer's IT infrastructure

Customer summary

Customer name
McMahons Builders Providers

Industry
Retail

Location
Ireland

Number of stores
14

McMahons Builders Providers has been providing quality building supplies and DIY materials to the trade and public for over 190 years. It has become one of the largest independent builders' providers on the island of Ireland, with a network of 14 retail and trade branches and a Roof Truss manufacturing plant – all ensuring a nationwide offering. McMahons is headquartered in Limerick, employs more than 200 people, and has trading locations across the Republic and Northern Ireland.

Business challenge summary

- **Reliability** – The customer required a reliable robust solution, leveraging new technology, to eliminate the risk of infrastructure outages shutting down store sales.

- **Security** – As a forward-thinking, security-conscious company, McMahons wanted a best-in-class centralized security design for its systems and data.

- **Manageability** – McMahons' IT staff needed more control, increased automation, and remote management to improve productivity, enabling IT to focus resources on implementing key business enhancements and continuing to provide secure, stable services to its customer base.

Network solution summary

- Centralized infrastructure between headquarters and 14 retail stores

- Installed Cisco Meraki™ firewalls at all retail stores

Business results summary

- Eliminated WAN outages through network modernization

- Allowed IT staff to focus on customer-oriented issues, business application enhancements, and maintaining core services and security

Technology/application partner

Veeam

Channel/integrator partner

Logicalis

Business challenge

To improve reliability of IT services to its 14 retail stores, McMahons needed reliable WAN connectivity that was fully redundant and secure. It wanted to improve the manageability of and visibility into what was happening on the WAN. Being a retail outlet, any WAN outages meant disruption to sales and customers. As a customer-focused company, McMahons needed to ensure that when customers arrived at the company's outlets, the sales team always had access to the centralized point of sale system.

Cisco and Logicalis saw Meraki® as a perfect fit to meet these requirements. Leveraging McMahons' MPLS as a primary WAN connection, with DSL as a backup circuit on each site, ensured McMahons had tail, duct, and exchange redundancy. A Meraki solution provided improved visibility into what was happening on the WAN, enhanced security, and improved performance across the network.

McMahons also needed to upgrade its aged server environment. To accomplish this, McMahons management had requested a move from the existing distributed environment to a more centralized environment. Management had concerns about cloud security and costs and wanted a fully redundant system to allow for expansion, reduce cooling and power needs, and offer offsite backup and disaster recovery (DR) at an affordable cost point.

Logicalis and Cisco saw this as an opportunity to implement a Cisco HyperFlex™ solution with offsite Cisco® servers for backup and DR. This would help reduce rack space, cooling, and power consumption while minimizing the day-to-day management overhead. With this onsite steady-state environment, McMahons would gain more control of its resources and reduce costs.

Network solution

McMahons Builders Providers chose Cisco over its competitors because the Cisco solution best addressed McMahon's requirements, providing an easy-to-manage and reliable platform at a cost-effective price point, and, most importantly, all from a single solution provider. Basically, the new infrastructure—including servers, storage, network, and security—seamlessly works together.

The customer went with Logicalis Managed Services because Logicalis provided a one-stop shop to assess, design, and build the new environment. Logicalis didn't just sell a box and leave it with the customer to figure things out. Rather, Logicalis first worked with McMahons Builders to truly understand the business and technical challenges, and then designed and implemented a Cisco-based solution to meet their needs. And as part of its fully managed service offering, Logicalis provides on-going support.

In terms of the customer's new environment, Cisco Meraki MX64 network appliances are used at each store site. They route traffic via MPLS and auto VPN for failover. Meraki is the default gateway for all internal networks. From the remote store sites, all Internet traffic is backhauled via headquarters. For security, McMahons Builders leverages the entire suite of security features in the Meraki appliances, giving McMahons' IT staff the ability to control and secure its network from an easy to manage single window.

Two additional Meraki MX100s run in high availability mode, one at McMahons' headquarters data center and one in the separate DR location. These firewalls route traffic to other sites via MPLS. They are also used for auto VPN to other sites over the Internet as backup and for internet access for all sites. In addition, they enforce inbound and outbound firewall rules including network address translation (NAT), content filtering, advanced malware protection (AMP), intrusion prevention, and geo blocking. The firewalls act as the default gateway for DMZ networks. McMahons also leverages Cisco ASA firewalls in a high availability pair for SSL VPN remote access services.

From a server perspective, the new Cisco HyperFlex hyperconverged environment enabled the customer to consolidate their distributed 48 physical production servers down to a three-node cluster. These three Cisco HyperFlex nodes allow N+1 resilience. They helped McMahons reduce its cooling and power costs and make a significant improvement in system availability. More specifically, the Cisco HyperFlex M5 Edge hosts the McMahons' production environment, including active directory, file servers, ERP, and financial systems. The cluster is deployed with the VMware Hypervisor using Cisco SpringPath HCI VM to provide shared storage to the environment.

A Cisco C240 M5 server running VMware Hypervisor, located in a remote disaster recovery site, provides offsite disaster recovery. A separate Cisco UCS® C240 M5 server provides all system backups. This server runs Windows Server 2019 and uses Veeam Backup and Replication software. The Veeam software gives McMahons a reliable backup and recovery solution that simply works, requiring limited IT staff intervention.

Business results

At a high level, with its new environment, McMahons has seen increased performance and reliability, along with reduced cooling and power consumption. Store associates don't experience infrastructure downtime that might inhibit their ability to process transactions, so customers can buy merchandise any time the store is open.

The new Meraki- and HyperFlex-based environments are much more easily managed by the company's IT staff. For instance, previously, the IT staff would have to come in over the weekend to do a firewall upgrade. Now, an IT person can perform a firewall upgrade remotely through an app on an iPhone device.

IT staff productivity has increased as well. For instance, trips to the computer room are now a rare occurrence, and visits to remote sites to manage IT infrastructure have significantly reduced. This all helps to reduce ongoing McMahons IT costs and enable IT to focus on new projects and customer service improvements.

"Now with the Cisco solution designed and installed by Logicalis, we have the right infrastructure, in the right location, with the right backups, with the right DR, and with the right connectivity."

Brian O'Gorman
Group IT Manager,
McMahons Builders Providers

Going forward

As an area of special importance, McMahons continually explores how to further enhance the security of its IT environment. With security features upgraded and enhanced—such as content filtering, geo blocking, intrusion prevention, ingress and egress firewall rules, and active directory integration—the IT staff partnering with Logicalis implemented a new end-user desktop management system and an upgraded vulnerability scanning toolset. The implementation of these initiatives were greatly helped by having increased stability in core infrastructure allied to the relationship and knowledge of Logicalis being a one-stop solution service provider.

For more information on how Logicalis and Cisco can help you with IT infrastructure stability, enhanced security, and more efficient operations, please visit http://www.cisco.com/go/logicalis.

Product list

Data center
- Cisco HyperFlex M5 Edge
- Cisco UCS C240 M5

Routing and switching
- Cisco Meraki MX100, MX84, MX64
- Cisco ASA5506-K9
- Cisco Nexus® 3524x

Backup and recover
- Veeam Backup and Replication