Sheffield Group retools its infrastructure for Microsoft Azure

National distributor and wholesaler improves connectivity, scalability for future growth

Power tool accessories manufacturer and distributor Sheffield Group has boosted efficiency, resolved connectivity issues, and cleared the way for future growth after migrating its entire IT infrastructure onto the Microsoft Azure platform.

With around 65 staff managing the Australian distribution of its range of abrasive, cutting, drilling, measuring and other tools – sold under brands including Alpha, Sterling, Austsaw, Tracer, Nextorch and Euroboor – Sheffield had developed a high volume, heavily automated warehouse operation.

This operation, which handles thousands of transactions per day as product moves through Sheffield's supply chain, was built on a data centre architecture that used locally hosted virtual machines (VMs) and extensive interconnectivity to operate.

THE PROBLEM

Existing infrastructure was functional, but the weight of the legacy technology was starting to exert drag on the company's growth – consuming a disproportionate amount of the time available to its small IT team, who were predominantly focused on developing the company's in-house software tools.

Connectivity between the company's city data centre and regional warehouse – in Boolaroo, outside of Newcastle, NSW – had proven problematic and the 50 year old company was encountering challenges scaling its legacy architecture to support continued business growth.

This had led Sheffield's management to consider embracing the global trend towards digital transformation. They were already considering how the company might take advantage of evolving cloud platforms when they began talking with managed service provider Cloud Made Simple (CMS) about some IT support services that Sheffield required.

The scope of the conversation rapidly expanded, and it became clear that the time was right for migrating to a cloud platform that would not only modernise Sheffield's IT infrastructure, but improve the security and scalability that would help it expand its business and support staff working from anywhere, at any time.

"Our legacy IT infrastructure had served us well for many years, but our desire to improve efficiency and tap the benefits of cloud architectures led us to consider how we might embrace digital transformation while maintaining the continuity of our mission-critical business operations," said Martin Allbut, Chief Executive Officer with Sheffield Group.

THE SOLUTION

When it began talking with CMS specialists about the best cloud architecture to adopt, Sheffield was open to any of the major cloud platforms.

CMS got in touch with the Ingram Micro team to access its expert services, including the comprehensive cloud migration services leveraging Azure Migration & Modernisation (AMM) initiative.

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Ingram Micro is the indirect service provider with advanced specialisation in Infra and Database Migration to Microsoft Azure & Microsoft Azure Virtual Desktop, which validates its comprehensive range of services spanning data centre migration, virtual desktop infrastructure, discovery and assessment, architecture and design, proof of concept, and migration services.

The IMC Azure experts assessed the Sheffield Groups' on-premises environment to better understand, classify and size existing workloads.

Completion of a Microsoft Azure Readiness Assessment & Migration Plan identified the challenges with Sheffield's existing environment and laid down a strategy for moving the company into the cloud.

IMC and CMS defined a process that included, among other things, careful examination of the utilisation of Sheffield's existing VMs, the workloads that each machine was carrying, and interdependencies with other systems.

Because of the extensive integration between Sheffield's workloads, IMC proposed that the best migration approach was a 'lift and shift' process that would keep carefully tuned automations intact – ensuring a seamless transition to the cloud platform.

Sheffield could then integrate new technologies and incrementally replace aging legacy tools with the confidence that its core infrastructure would benefit from the scalability, flexibility, and security of the Microsoft Azure platform.

"Because Sheffield's environment was based entirely on Microsoft technologies, it was using Microsoft standards, protocols, and communications," said Casey Gordon, general manager of infrastructure with Cloud Made Simple. "This does make it easier to move all of that into Microsoft Azure: it's just a matter of using Azure migration tools to click and deploy."

"The challenge," he added, "is around making sure everything works once you get into the cloud environment – especially because we were adding extra security features like Azure Firewall and Microsoft Defender for Servers. We needed to make sure that communication would continue to work across all of Sheffield's different systems."

To make sure the migration would go smoothly, specialists from CMS, Sheffield, and Ingram Micro ran a three-month proof of concept (PoC) deployment to test every element of Sheffield's infrastructure – ranging from business ERP systems to printing, automated picking systems, existing VM workloads, and more – to ensure that they would transition smoothly to the Azure cloud.

THE BENEFITS

After nearly four months of preparation, the project team was convinced that the infrastructure would transition to the cloud effectively – and pushed the button on a weekend migration that, thanks to a carefully authored 'run book' that covered plans for every aspect of the migration, went as smoothly as could have been hoped.

"The Azure Migrate tool, which does all the heavy lifting for you, makes it really easy to move infrastructure," Gordon said. "At any point we can reassess resource utilisation, then move up or move down so everyone is comfortable with the amount of resource needed for the environment to run."

Benefits are already flowing, with the new Azure cloud environment costing Sheffield around 30% less to run thanks to built-in efficiencies and consolidation of services during the migration.

Expanding existing Microsoft licensing arrangements meant Sheffield could smoothly integrate security features, such as Azure AD Privileged Identity Management and Azure Information Protection, that have improved Sheffield's overall operational risk profile.

Access to scalable cloud infrastructure not only ensures Sheffield can grow its infrastructure as necessary, but has changed its IT infrastructure cost base by translating capital expenses into operational expenses.

"Our successful migration to the cloud has been a major business transformation for Sheffield," said Allbut. "We have not only gained the reliability, performance and connectivity of a world-leading cloud platform, but we have repositioned our business infrastructure to take advantage of new technologies as we continue to grow."