



Meet National Gypsum

[National Gypsum](#) is one of the world's largest gypsum board producers, operating over 40 plants, mines, quarries, and supporting facilities throughout the US and Canada. Headquartered in Charlotte, NC, National Gypsum (NGC) is a full-line supplier organized by three business lines: Gypsum Board, Interior Finishing Products, and Cement Board. Known for its customer service and product quality, the work safe, work hard, have fun corporation continues to innovate and add value to the communities and customers it serves.

With a persistent focus on improving business operations to best serve its customers and employees, NGC has been on a journey to advance its modern workplace and move much of their infrastructure to the Microsoft Azure cloud.

Selecting a Partner

In June of 2019, National Gypsum selected [Forsyte I.T. Solutions](#) as its technology consulting and systems integration partner. Forsyte was chosen to review NGC's current Azure environment and provide design and architectural recommendations, best practices, and knowledge to support the migration to and/or new activation of Azure based systems.

As a cloud-first Microsoft Gold Partner, Forsyte entered into a cloud-focused training agreement with NGC to set up their migration workloads for success.

The Azure Project Scope & Plan

With such a large Azure focus for National Gypsum, Forsyte's team of certified Azure architects and engineers wanted to ensure that NGC had the proper Azure architecture, migration, backup, and recovery strategy, governance, and security in place to support a smooth transition from the exiting on-premise environment to the Cloud. NGC identified 200 virtual machines that needed assessing, as they wanted to take as many as they could into the cloud over a 3-year time period. Forsyte created a template of major tasks and milestones with due dates and assigned responsibilities to roll out a recommended 2 phase plan.

Phase 1

Phase 1 included the Azure design and architectural review. Forsyte conducted an on-site review of NGC's existing on-premise and Azure environments to understand goals and objectives related to using Azure and migrating workloads to Azure. It then discussed options and strategies for data storage, backup, and disaster recovery. Details such as hybrid datacenter requirements and CommVault's HyperScale backup appliance with Azure storage were examined. A full review of network security and resource management was also conducted.

Forsyte is known for heavily considering and monitoring Azure budgets and spend for its customers, and as NGC moves more of its infrastructure into the cloud, this is an area that Forsyte recommended it examine closely. Forsyte helped define policies and processes for tagging Azure resources for internal chargebacks and better monitoring of Azure consumption and spending. It identified the need for design changes and reviewed best practices to help in this effort.

Phase 2

Phase 2 involved migration planning and knowledge transfer with National Gypsum from Forsyte's infrastructure assessment findings. Based on outputs provided by [Movere](#), Forsyte made the required modifications to NGC's Azure design and architecture to fully support the migration to or new activation of the Azure-based systems. Forsyte provided the recommended process and tools needed to estimate costs for new and/or migrated systems slated for Azure. The team also refined options and strategies for data storage, backup, and disaster recovery, including Geo-Region backup/DR options.

Forsyte reviewed and demonstrated best practices based on real-world experience for managing and maintaining NGC's Azure-based systems. Recommendations were made for the use of tools and methods for controlling and monitoring the Azure systems. Azure Governance was a key aspect, incorporating policies, management groups, and blueprints. Since security is a key concern, Forsyte reviewed security and monitoring options with National Gypsum, including Azure Monitor, Azure Security Center, and Azure Sentinel.

The final stage included the review and knowledge transfer of Azure Business Continuity, including ASR (On-Prem to Azure) document steps for use and the migration of one server to Azure and ASR (Azure to Azure). Forsyte assisted each of the NGC IT teams with the migration of one server/application to Azure and provide guidance and support for the successful setup and testing of Disaster Recovery using data backed up by CommVault HyperScale.

Collaboration Continues

Following this project, Forsyte continues to engage with National Gypsum to help guide and facilitate Azure-based activities. NGC is making great strides in the journey to support its large corporate infrastructure and evolving modern workplace with Microsoft Azure-focused changes.

For further information, please contact Forsyte I.T. Solutions at contact@forsyteit.com.