Insight | Cloud + Data Center Transformation

Case Study

Emergency Response Software Group Divests From Larger Company, Achieving Complex Migration of Servers and SaaS Applications

The client

Facing divestiture from a larger healthcare company, the client is a software development team specializing in emergency preparedness and response. Their Software as a Service (SaaS)-based applications and tools are relied upon by 600 emergency management agencies, 50 federal agencies, 4,000 hospitals and public health departments, and many Fortune 500® companies and higher education institutions during crises, natural disasters, and other public health emergencies.

The challenge: Divestiture of the software group's SaaS-based applications and data servers from the company's data centers prior to the finalization of the company's sale

Insight Cloud + Data Center Transformation (CDCT) was tasked with helping the client divest from the larger company prior to the finalization of the sale. First and foremost, the client needed to migrate their SaaS-based applications and data servers out of the on-site data center and migrate to AWS®. With approximately 175 servers, comprised of a mixture of Windows® and Linux® platforms, running on FreeBSD and seven SaaS-based applications, the client faced a complicated transition on an accelerated timeline due to the requirements of the sale.

Additionally, the client needed to migrate their Office 365® suite, including SharePoint® and OneDrive for Business, from the old system to a new Azure-based Windows environment.

Industry:

Software development

CDCT provided:

- Infrastructure evaluation
- Comprehensive multicloud infrastructure design and implementation
- Tenant to tenant email migration of Office 365 accounts
- Architecture, design, and deployment services for AWS, Azure, and on-premises servers and WAN infrastructure

CDCT services:

- IT Architecture
- Migration
- Support Services
- Managed Services

The solution: A new multicloud infrastructure to house the client's extensive data and SaaS-based applications

While the client had planned to upgrade everything to a new platform after divestiture, the team soon realized that the transition would require a "lift and shift" motion. After consulting with the team, the client decided to migrate from the data center via VMware® infrastructure to AWS.

The company's chief technology officer wanted to implement a multicloud infrastructure strategy. Since the client had previously relied on an infrastructure of Cisco® routers and firewalls, transitioning to the complex and fully secure multicloud environment proved challenging and required the team to work closely with the Cisco engineer to ensure communication with Azure® and AWS.

The migration to AWS included a five-phase process:

Phase 1: Application and Mapping Discovery to provide a clear migration plan, including network topology mapping of all servers and application services; CAM and IAS servers, network, and application services mapping; and a script for leveraging migration tooling for automated migration.

Phase 2: Application Migration Architecture and Staging Build, involving updating the AWS reference architecture from application and server dependency mapping; updating the migration planning and server cutover grouping design; updating the shared service dependency architecture; creating the AWS reference architecture and network lab environment; and creating the Terraform® scripts and testing modification of the scripts for deployment.

Phase 3: Application Staging Migration and Regressive Testing, including migration of database clusters to AWS lab; creation of web servers and application servers to AWS lab via scripts; migration of supporting infrastructure servers to AWS labs; application unit test; full system level testing; system performance testing; and remediation and retesting.

Phase 4: Application Migration of All Environments, including full updates to the staging environment; database consistency checks; database quiesce; DNS and network cutover to AWS; application restart; application regression test; remediation and regress; and migration cutover complete.

Phase 5: Post Migration Support, including writing and updating the Terraform scripts, and assisting the client to update and AWS code change.

The benefits: Secure, cost-effective, and cloud-enabled data access with network upgrades

In the end, CDCT was able to work with the client to achieve a "lift and shift" development and production server migration from a VMware data center-based infrastructure to an AWS cloud-based infrastructure. CDCT provided architecture, design, and deployment services for Active Directory® and DNS infrastructure, as well as Cisco Engineering for AWS, Azure, and on-premises-based routers and firewalls that provide secure communication between multiple regional AWS and Azure data centers.

CDCT also completed file and data migration from Windows File Servers to SharePoint Online and OneDrive for Business. At the end of the project, the client was left with a complex and secure multicloud system to support their data and SaaS applications.

Benefits:

Fully divested from former company

A secure multicloud infrastructure

Successful migration of 7 SaaS applications and more than 175 servers