

Advanced Management Solutions AWS Migration



Executive Summary

Advanced Urology (Advanced Management Solutions) offers compassionate and exceptional Atlanta urology care to both women and men treating a number of conditions, and different urological procedures. Advanced Management Solutions (AMS) utilizes an Electronic Medical Records (EMR) application for management and reporting of patient medical and treatment history to better identify which patients are due for preventive screenings or checkups.

Historically, AMS's EMR application has been hosted and maintained by an EMR vendor hosted in the vendors private cloud. AMS needed a to strategic partner to assist with the migration of the business critical EMR migration from the vendor hosted environment to the preferred cloud provider (AWS).

Customer Challenge

AMS had been dealing with the challenges of limited visibility and accessibility in managing their infrastructure within the EMR environment. These challenges are related to the EMR application which is hosted by a third-party vendor where AMS was dependent on the vendor for application and infrastructure support. This support model was expensive and lacked the service, reliability and scale they required to allow their organization to meet their future growth expectations.

Why AWS

AMS had initially experimented with AWS and cloud technologies with a proof of concept utilizing a non-production EMR environment which was deployed and hosted in a default VPC. During this initial exposure, AMS realized the benefits of AWS reliability, accessibility, flexibility of deployments and reduced costs. However, they also realized they required additional guidance and assistance in the architecture design, implementation and migration of the production systems to a central AWS environment. Furthermore, AMS required a cloud provider which provides HIPAA compliant services and features to meet their healthcare governance requirements.

Why the Customer Chose the Partner

In addition to Synoptek being an AWS Advanced Partner, Synoptek employs highly knowledgeable and certified AWS solution Architects which provide exceptional migration, architectural, infrastructure design and planning activities. Synoptek is also a top-tier managed service provider of AWS and traditional on-premises infrastructure. Furthermore, Synoptek was able to assist AMS in clearly defining the project scope and deliver additional value by obtaining project funding from AWS to help offset migration costs.

About Advanced Management Solutions (dba: Advanced Urology)



Company Goal:

Provide Innovative treatments, exceptional service and deliver superior outcomes to our valued patients.

Our Mission:

At Advanced Urology, we are committed to giving our patients the best experience possible by focusing on innovative treatments, exceptional service and superior outcomes. Our highly skilled medical professionals work within our own state-of-the-art facilities where we are dedicated to making our patients feel comfortable and valued. Our patients are our highest priority, and we pride ourselves on offering exceptional care and service.

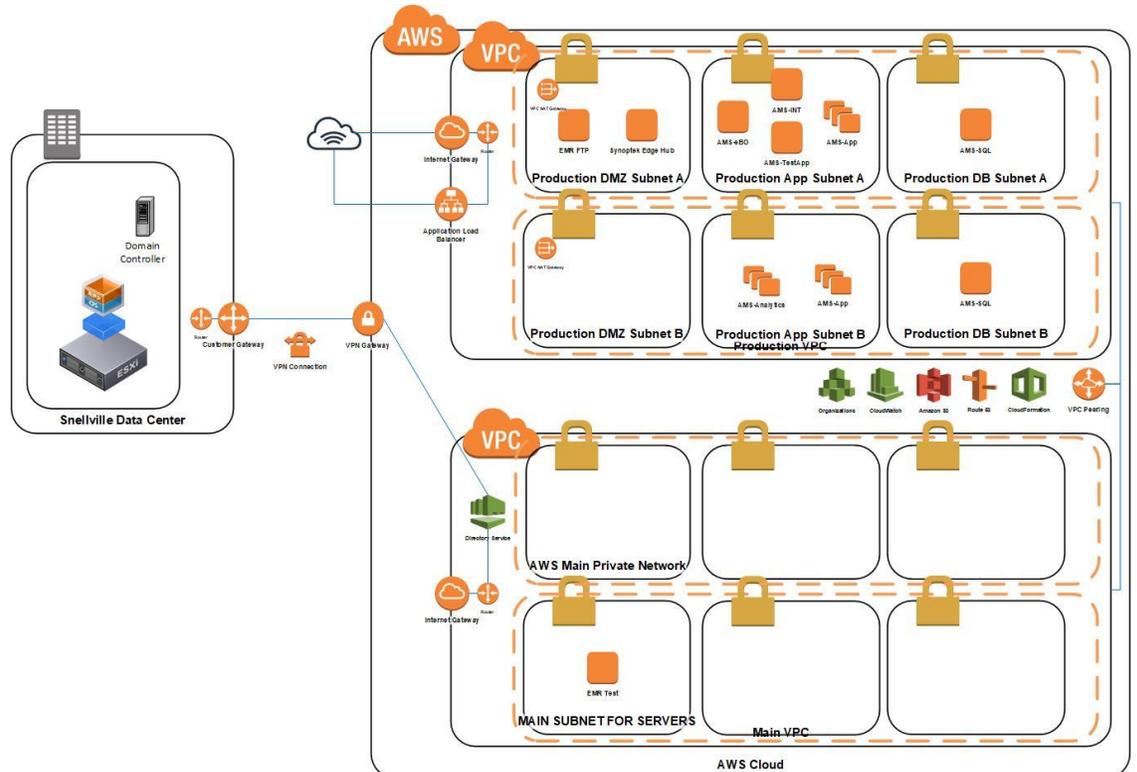
Partner Solution

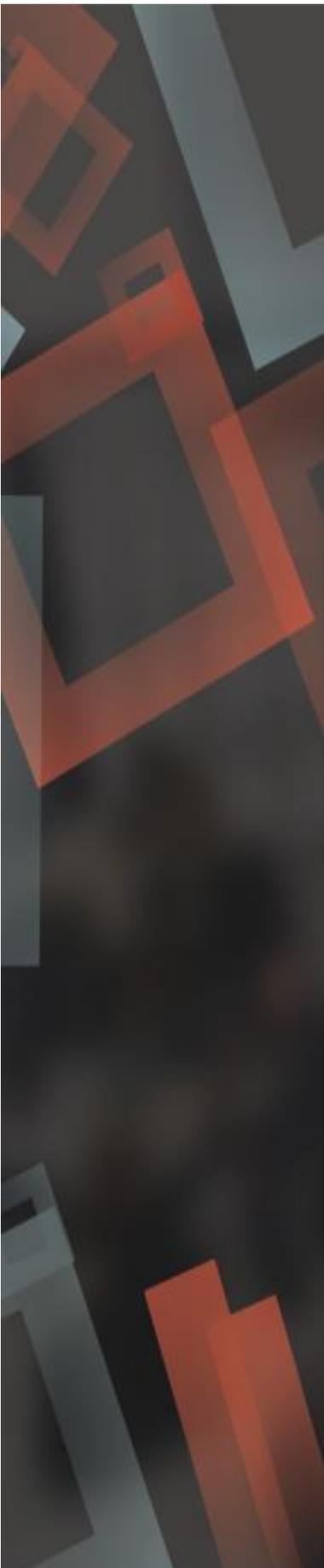
To meet the app migration requirement, Synoptek provided exceptional migration, architectural, infrastructure design and planning services to the client. Being a top-tier managed service provider of AWS and traditional on-premises infrastructure, Synoptek was successful in assisting the client in clearly defining the project scope and obtaining project funding from AWS to help offset migration costs.

To migrate the client's EMR from vendor cloud environment to AWS cloud, we carried out the following activities:

- Validated design and architecture of the existing AWS Virtual Private Cloud for HIPAA compliance.
- Re-architected source servers by building new AWS EC2 instances and reinstalled the application components in the cloud – including front end (app/web) servers with a load balancer connecting to a Microsoft SQL server cluster for high availability.
- Rearchitected the interface, business objects, patient record repository servers and other complementary components of the client's business-critical production EMR system as highly available multi AZ (Availability Zone) instances.
- Deployed new AWS EC2 compute resources to enable seamless application installation and configuration.
- Migrated workloads from vendor-hosted cloud into an existing AWS VPC to host the production EMR environment.

AMS Migration Arch Diagram:





Results and Benefits

Despite challenges faced with respect to application configuration and installation, vendor resource unavailability and workload scope additions, with Synoptek's guidance and support, the client was able to successfully move workloads to the AWS environment. By having their EMR in the AWS cloud, the client is able to enjoy a number of benefits:

- Increased reliability of business-critical workloads with the availability of latest generation AWS instances.
- Reduced costs of hosting and supporting front-end application and back-end database servers.
- Unification of dispersed workloads into a single cloud platform and environment.
- Simplified application traffic and seamless system access with the confidence of long-term AWS support.

Next Steps

Due to the successful AWS migration and continued world class support by Synoptek, the relationship between the two parties continues to strengthen. In addition to the mission critical production workload migrations Synoptek has assisted in deploying additional access control, security and EMR analytics systems. In the near term Synoptek plans on providing post migration Cost Optimization and periodic Well-Architected Framework reviews to ensure AWS costs remain low and the workloads operate optimally.

About the Partner

Synoptek delivers a set of IT services to clients, both proactively and as needed. For more than 20 years, mid-size and large enterprises have relied on Synoptek to manage information and customer workloads. Partnering with Synoptek provides our clients with technology resources, necessary skills, and the ability to address a range of issues related to cost, quality of service, and risk.

Synoptek is proud to be a:

- Advanced Tier Consulting Partner
- Service Delivery Program Partner
- Solution Delivery Program Partner - AWS Public Sector Partner: Government, Education, Non-Profit
- Recognized as a Partner Specialized in Managed Microsoft Workloads in AWS

About Synoptek

Synoptek is a global systems integrator and managed IT services provider offering comprehensive IT management and consultancy services to organizations worldwide. Founded in 2001; headquartered in Irvine, CA, we have offices and resources across North America and delivery centers in Asia.

