

# Babb Technology Services

## Case Study

### ON PREMISE TO AWS AND AZURE CLOUD INFRASTRUCTURE

#### Customer Profile

CX-Analytics LLC – Software company specializing in analytic Value Management tools for the card and lending industry.

#### At-A-Glance

This was a multiyear engagement to architect, engineer, and document a complete rebuild of customer's on-premise infrastructure across multiple offices in the USA and Thailand. This was a green field multiple clouds AWS and Azure, hybridized Azure with on-prem, hybridized Azure with AWS, as well as Office365 integration. Infrastructure as code was used for both AWS and Azure platforms. Due to the ad-hoc nature of the clients requests, the project methodology was highly agile and delivered in an immediate on demand fashion.

#### Lessons Learned

On demand / ad-hoc work can be surprisingly productive if the client is willing to contractually accept the down time and risks. These "methods" can lead to long hours to fix or work around unexpected situations causing unnecessary stress on the project and participants. Full stack engineers that understand all design aspects of the project are key to the success of the project.

#### Outcome

Overall the client was very satisfied with all deployments and now have the flexibility to rework infrastructure on demand with automated deployments. This work led to other multiyear long-term engagement with the CEO's other companies.

#### Project Highlights

- ✓ Built complex global MPLS network for multiple offices in USA and Thailand that also integrated with AWS and Azure VPN networks.
- ✓ Multiple deployments and geo replication into Azure and AWS. Migration from AWS to Azure (cross cloud migration).
- ✓ Delivered automated deployments for infrastructure in AWS and Azure.
- ✓ Azure Two Factor Authentication, SSO, ADFS, RMS, VM, Virtual Network, Azure Active Directory Domain Services. Azure 2FA was integrated with AWS driven applications.
- ✓ Custom .NET Azure SSO integration with financial analytics program.
- ✓ Complete datacenter retooling from the ground up to upgrade all components to allow for maximum throughput on 10Gbps network rebuild.
- ✓ Designed and configured on-premise Meraki routers, Cisco ASA 5500 routers, Cisco Nexus 5596 switches with Fabric extenders, and Microsoft RRAS server for Dynamic VPN. Integrated into AWS and Azure VPN networks.
- ✓ Delivered Office 365 migration.
  - Provisioned, migrated, and Customize portal
  - Used Active Directory Federation Services for Single Sign-On, hybrid on-premise AWS, and Azure Active Directory
  - Custom C# .Net Azure Multi Factor Authentication application integrations with apps and IIS server that involved Office365 integration with Azure Active Directory