Empowering Legal Consulting Through **Scalable Cloud Architecture**

Revolutionizing Legal Consulting for An Influential Government Relations through Seamless Digital Integration.

Customer Overview

The client is an influential government relations firm—with over 30 years of experience—based in Washington, D.C.

Their service portfolio includes **strategic planning, direct advocacy, innovative issue monitoring, identifying contract lobbying support, public sector sales and engagement** with public officials groups and grass tops.

They are a boutique consulting firm offering its customers “curated” law and regulation related information through a subscription-based service. The span of information service covers all the facets of activities that occur within a law or regulation. From before the inception of a bill, through the legislative chambers of the State Government, to its ultimate signing into law by the State Governor. Even beyond, further implementation of regulations that are set by various State and local agencies charged with translating the law to implement policies and practices.

Capabilities Covered

- Amazon Web Services (AWS)
- My SQL and MSSQL DB
- CI/CD Pipeline
- Effective data life-cycle management

The client was losing valuable ground to competition due to growing business complexities with large data volume.



The MS Excel based approach was error-prone, time-consuming, and limited in processing and sharing information about newly introduced bills via public websites. Stateside was looking for the digital transformation of its existing method to process and deliver information to clients.

This was needed for bills related to all North American states and Canada, and for them to become a prominent and trusted player in the legal consulting industry.

To address the above-mentioned challenges, **Inadev implemented an integration of all sub applications i.e., Crawler, Statelink (Staff) and Statelink (Client)**.

The monolithic architecture of the application hindered scalability, maintainability, and innovation. Additionally, the reliance on virtual machines for deployment created operational bottlenecks and increased the risk of downtime. The lack of a robust CI/CD pipeline further exacerbated these issues, leading to frequent failures and security vulnerabilities in the application delivery process.

This was for seamless scraping of bill details from State public websites and processing it through well-defined workflows and related roles into meaningful insight for end clients.

The entire solution is hosted on AWS, leveraging its cloud infrastructure and native services like backup EBS volumes using snapshots to protect against data loss. Automate snapshot creation uses AWS Backup and custom scripts to store snapshots in a different AWS region for disaster recovery.

The application portals are hosted on AWS EC2 instances, wherein My SQL and MSSQL DB is used for operations data, and Amazon S3 are employed to store customer data files, images and emails.

AWS Backup and cross-region replication for S3 buckets supports implementation of robust backup and disaster recovery strategies for critical data.

Jenkins and Chef are used for Continuous Integration (CI) and Continuous Deployment (CD). Bit bucket repository is used to ensure code integrity and traceability and AWS S3 is used to manage and store build artifacts effectively.

In addition, AWS Simple Email Service (SES), AWS Simple Notification Service (SNS), AWS CloudWatch, NAT Gateway, CloudFront, Application Load Balancer and Route 53 are among the other AWS services utilized in the solution.

Adopting the AWS Cloud based services offered numerous benefits:

Consistent and reproducible infrastructure deployment.

Version control and auditability of IaC (Infrastructure as Code) and pipelines enhanced security and compliance efforts.

Reduced risk and downtime with automated code testing and deployment pipelines.

Consistent user and bills data across geographies was easily achieved.

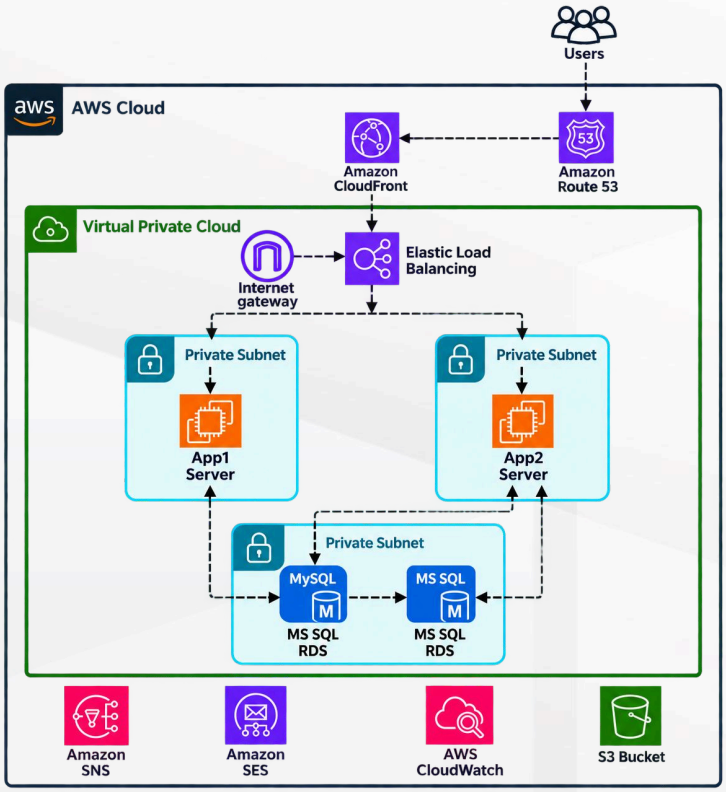
The solution enabled Stateside to accomplish the following:

The data lifecycle approach utilized for various types of Storage in AWS, such as S3, RDS snapshots, and EBS volumes, created cost effective optimizations for Stateside.

A global architecture empowering Stateside with capturing and processing of bills in regions other than the US and Canada.

Ability to quickly identify and address performance and issues improved operational efficiency, staff and customer satisfaction, & overall operational excellence.

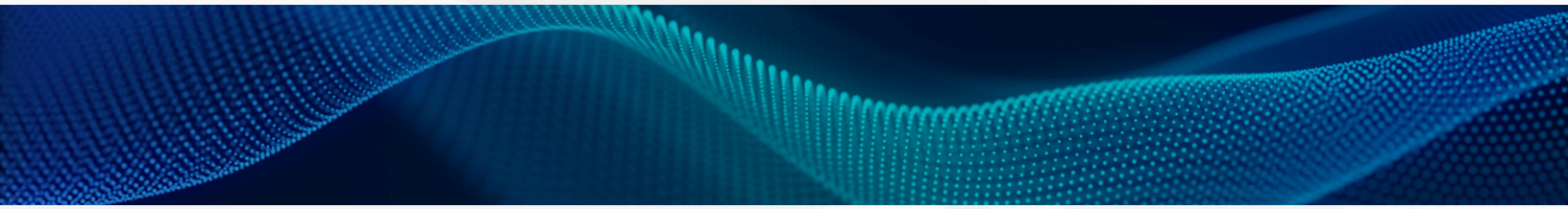
Architectural Diagram:



Note: This diagram is for reference only. Please reach out to our sales or support for more information!

- **Virtual Private Cloud (VPC), Dev Subnet 01, 02:** Hosts AWS, development resources in isolated network/subnets.
- **Database, Public Subnet, Jumpbox:** Hosts Isolated subnet for databases, and internet-accessible resources with Jumpbox providing secure instances.
- **Amazon Route 53:** Translates domain names into IP addresses to route user traffic.
- **Amazon CloudFront:** Distributes content globally for faster delivery.
- **AWS WAF:** Protects web apps from common web exploits. Currently using CloudFront.
- **Amazon SNS, SES:** Sends marketing, notifications and transactional emails to subscribers.

- **S3 Bucket:** Stores and retrieves data. Internet Gateway: Connects the VPC to the internet.
- **Elastic Load Balancing (ELB):** Distributes incoming traffic across multiple instances.
- **Auto Scaling:** Adjusts the number of instances based on demand.
- **MySQL RDS:** Manages MySQL database service.
- **CloudWatch:** Monitors and logs AWS resources and applications.



Business outcomes

Inadev provided significant value add to the project which translated to 12% reduction of costs annually, year on year. Additionally, changed EBS volume from type GP2 to GP3 brought down costs by 20%.

High availability during business hours Application uptime increased to 99.99%, backed by AWS service SLAs.

Improved TAT by 30% from the point of marking of bill details till the time of translating the information to meaningful insights.

Empowered with AWS resilience services and Inadev support, Stateside improved their business uptime by more than 99%.