



### SMBCTEX-001 - Design Document

### **Project Overview**

Project Name: IX-RD-PS-Autohall-01 Implementación acceso seguro y bitácora de compra

AWS Partner: Intcomex Cloud Region: US-EAST (N. Virginia)

This document outlines the architecture, components, operational strategies, and best practices used in deploying a secure, scalable, and cost-optimized cloud infrastructure for Autohall using Amazon Web Services (AWS).

# **Objectives**

- Provide a tool for access to different auction platforms
- Have a record of who makes a purchase transaction
- Improve infrastructure scalability, reliability, and security
- Reduce operational costs
- Modernize legacy systems and enable future DevOps practices

### **Architecture Overview**

### **Key Components:**

Compute: Amazon Appstream

• Storage: Amazon S3

Directory Services: AWS Cognito

Web Services: API Gateway

• DNS & Load Balancing: Route 53, Cloudfront

Security: AWS WAF, Security Groups, AWS Certificate Manager

Monitoring & Management: AWS CloudWatch

• Networking: VPC, Subnets, Security Groups, Landing Zone





### Scalability & Availability:

The infrastructure is deployed in one Availability Zone but is designed to scale across two AZs.

### **Security and Compliance**

- IAM Policies: Least privilege, role-based access, temporary credentials
- Root User: MFA enabled, secured roles
- Encryption: Data at rest and in transit using KMS and Certificate Manager
- Network Security: Fine-grained security groups, private subnets

# **Operations & Monitoring**

- Monitoring Tools: Amazon CloudWatch
- Logging: CloudTrail for auditing, CloudWatch Logs
- Alarms: Threshold-based alerts (Appstream metrics)

#### Maintenance & Support

- Patch Management: manual patching
- Backup & Recovery: AWS S3 Versioning
- Operational Playbooks: Documented procedures, training sessions conducted

### **Cost Optimization**

- Initial Cost Estimate: Provided using AWS Calculator
- **Cost Controls:** Auto-scaling, right-sizing of resources

#### **Dev/Test Recommendations**

- Separate Dev and Test environments recommended
- Staging environment under consideration for future rollouts

# **Diagrams & Documentation**

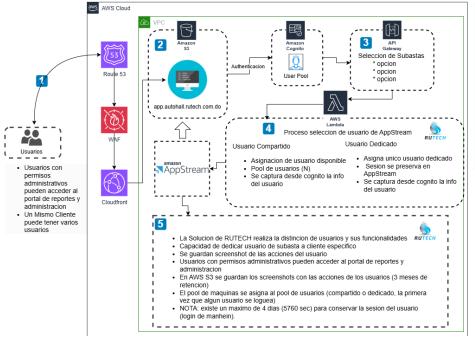
Architectural diagram





# **AUTOHALL**

Proyecto SUBASTAS



- 1 Usuarios se loguean
- Pagina de Acceso se muestra a los usuarios
- 3 Usuarios seleccionan Subastas
- Solucion de Rutech elige usuario de AppStream
- 5 Solucion de Rutech le da acceso a la subasta