

INDUSTRY: Federal Government

DISYS SERVICE: Amazon Web Services & Automation

COMPANY: A prominent corporation providing independent technical and scientific research, development and advisory services to national security space (NSS) programs since 1960.



BUSINESS CHALLENGE

The client was using Monte Carlo simulations to perform risk analysis by running hundreds of instances on AWS GovCloud. The customer was experiencing:

- EC2 instances launch capacity limitations due to high-volume, simultaneous requests
- Issues with integration, updates and communication between ad-hoc scripts that couldn't run as requested
- Inability to count and give status updates on individual requests due to system limitations
- Traceability risks due to lack of access, login control



THE DISYS SOLUTION

The DISYS AWS & Automation Teams developed and created a 'run book' approach that:

- Compiled & automated all routine procedures and operations
- Created an Amazon CloudFormation template
- Utilized Auto Scaling groups to request the instances accepting counts and image IDs
- Implemented the DISYS award-winning Cloud Accelerator, Sirro ®
- Provided an easy-access web portal to maintain template library and launch CloudFormation without required login to AWS Management Console



RESULTS & BENEFITS

Due to this customized, optimized implementation, the client now:

- Runs Monte Carlo simulations without facing capacity issues
- Speedily requests, launches and understands the status of the Monte Carlo simulation through the use of Sirro®
- Experiences increased adoption and usage of automated simulations
- Allows multiple users access to the system via individual login, improved security and access control