Case Study

- Cloud Challenge
- nubeGo Engagement
- Realised Benefits
- Tools Used

nubeGo

www.nubego.io

citaldoc

EC2 Compliance & Automation with SSM

*Cital**doc** was created to meet the needs of both patients and health professionals, with the aim of complementing and strengthening the traditional doctor-patient relationship through computerised channels. The Citaldoc platform was created to provide access to quality, personalised, effective medical care under strict safety regulations.*

As an organisation dedicated to telemedicine, the security and protection of data on the Cital**doc** platform is imperative, therefore, daily checks need to be made by Cital**doc** technical staff to ensure that operating systems have the latest patches, and that data security settings are complied with. Until recently, these checks had been manual and time-consuming.
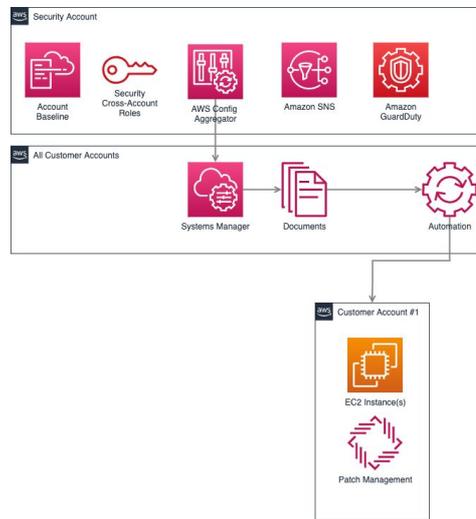
nubeGo onboarded Cital**doc** into the NCMS cloud managed service platform which automates security compliance monitoring of AWS assets. Regular automated checks are performed to ensure that EC2 compute instances are being managed by the central AWS Systems Manager tool, and automatically brings them into line, if not.

Systems Manager's Patch Manager is then used to automatically install operating system patches for important security updates. CloudWatch monitoring agent is installed and an inventory is taken to ensure that each instance is in compliance with HIPAA regulations.

Automation of everyday security checks has resulted in Cital**doc** technical staff reducing the number of hours each month spent configuring patching needs for compute instances. Until this level of operational automation was in place, Cital**doc** did not feel ready to add in any new services to the platform, because of the additional operational burden. By automating the compliance checks and patch management of the EC2 fleet, Cital**doc** team members now feel confident about expanding and evolving their platform service offerings.

The entire NCMS solution is built using AWS tools and leverages AWS security services including AWS Config, AWS Systems Manager, CloudTrail, Amazon GuardDuty and the security control policies of AWS Organizations. The solution is deployed and managed through Cloudformation and AWS CodePipeline.

More than 65 AWS Config rules, 20+ security control policies, and 10+ SSM automation documents are configured and regularly updated in the Cital**doc** environment. Automatic remediations of selected AWS Config rules are built using Lambda functions and API calls to AWS services. Currently, the solution protects S3 buckets and patches EC2 instances using AWS Systems Manager Patch Manager.

> **Relying on an automated security remediation solution gave us the time and confidence, in different areas of the organization, to create new customer services.**

Jorge Nasanovsky, CEO