Cloud VistA Adaptive Maintenance

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Introduction

VA is currently migrating VistA to the VA Enterprise Cloud ("Cloud VistA"). To take advantage of VistA's new cloud infrastructure to improve delivery of care, three specific types of VistA Adaptive Maintenance (VAM) should proceed in parallel: Cloud Security, Cloud Profiling, and Cloud Microservices (table below). All three VAM components have been demonstrated and proven.

Cloud VistA Adaptive Maintenance

VAM	Benefits	Task	Schedule	Cost
Cloud Microservices	***Improved performance of all VistA clients and applications [1]*** Optional integrations improve both security and performance [2]	Identify RPC traffic latency hotspots and accelerate via cloud-native emulation microservices [3]	24 months (requires profiling)	$2.0 M
Cloud Profiling	***First ever comprehensive profile of all users, all clients, all applications, and all transactional data flows of VistA [3]*** Guides and prioritizes Cloud Microservices and Security to deliver performance and security improvements for all clients and applications.	Profile of every RPC from every VistA client and application [3]	12 months	$2.0 M
Cloud Security	***First ever comprehensive security monitoring of Veteran health information systems.*** Zero-Trust security monitoring of all *VistA* users, clients, applications, and activity	RPC traffic mirroring, analytics, and security classification of all *VistA* RPCs [3] Integration of RPC security rules to VA's monitoring platforms to provide zero-trust security [4]	24 months (requires profiling)	$2.0 M

[1] VistA clients and applications include CPRS, JLV, Vista Imaging, Brillians, and over 50 others. All of VA's 380,000 clinicians and staff use at least one VistA client as an essential part of their workflow.

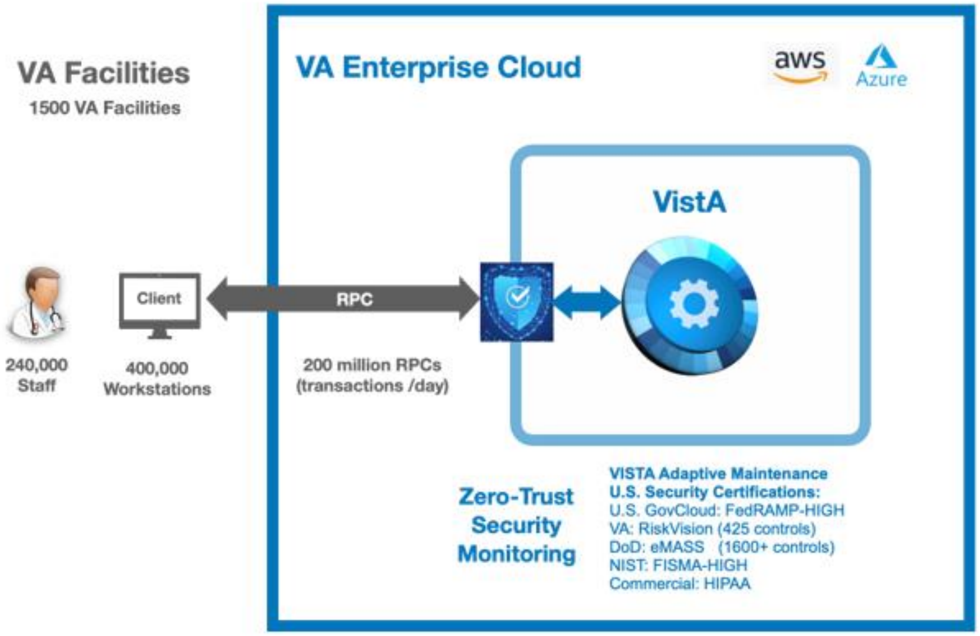
[2] Interfacing VistA Cloud Microservices with VA's enterprise identity and authentication service would provide the same single sign-on across all VistA systems and clients as all other Windows desktop applications (Outlook, Teams,..).

[3] VistA's remote procedure call (RPC) interface is VistA's remote access and transaction interface. It enables over 50 clients and applications on 400,000 VA workstations to remotely access and perform transactions on all 130 VistA systems. Every day in VA clinicians generate over 200 million RPCs while creating four million new documents, lab orders, pharmacy refills, and imaging studies in VistA. In FY22, VA clinical staff provided over 108 million veteran care encounters, which required transmission and execution of nearly 100 billion RPCs. Each RPC contains both business logic and data. RPCs are currently transmitted as plain text in-the-clear with no encryption and with no monitoring, making VA and veteran data vulnerable. When emulated as a cloud-native microservice, the RPC interface has been demonstrated to be as much as ten times faster.

[4] Commercial security monitoring tools do not understand and cannot parse or classify RPC traffic. The output of the RPC security analytics provides the necessary classification rules to enable third-party COTS/SaaS security monitoring tools to provide meaningful interpretation and near real-time alerts for suspicious activity.

Cloud VistA Adaptive Maintenance
Zero Trust Security

Cloud VistA Adaptive Maintenance enables Zero Trust Security. This provides comprehensive security for all clients, all applications, all endpoints, and all transactions of all Cloud VistA systems. In addition, Cloud VistA is certified and authorized to operate to VA, DoD, and Federal security standards, making Cloud VistA data securely interoperable between federal agencies.


VA Facilities
1500 VA Facilities
VA Enterprise Cloud
aws
Azure
VistA
Client
RPC
240,000 Staff
400,000 Workstations
200 million RPCs (transactions /day)
Zero-Trust Security Monitoring
VISTA Adaptive Maintenance
U.S. Security Certifications:
U.S. GovCloud: FedRAMP-HIGH
VA: RiskVision (425 controls)
DoD: eMASS (1600+ controls)
NIST: FISMA-HIGH
Commercial: HIPAA

Cloud VistA zero-trust security is certified and meets or exceeds the most stringent U.S. government security regulations, policies, and standards