## VistA Audit Solution (VAS 2.1) Deployment, Installation, Back-out, and Rollback Guide



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## **Revision History**

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## 1 Introduction

The Veterans Information System and Technology Architecture (VistA) Audit Solution (VAS) is a real-time web-based interface.

It provides a nationwide Health Insurance Portability and Accountability Act (HIPAA) compliant Audit Tracking Solution with the ability to track and report on access logs for patients' Personal Identifiable Information (PII)/ Protected Health Information (PHI) data across all VistA instances. VAS end-users are Privacy Officers (PO) and Information Systems Security Officers (ISSO) and their authorized representatives who need the ability to view the log of Create, Read, Update and/or Delete (CRUD) operations on patient information to respond to HIPAA, employee and Inspector General (IG) requests. This data originates from VistA and flows through in-memory database servers to be stored in the Veterans Affairs Enterprise Cloud (VAEC) Amazon Web Services (AWS). VAS web-based User Interface will access and display the data stored in AWS.

Authorized VAS users may view the patient data that was accessed and modified as well as the individual that performed the actions.

## 1.1 Purpose

The VAS Deployment, Installation, Back-Out, Rollback Guide v2.1 documents the steps and procedures required to deploy and install various components of VAS 2.1.

## 1.2 Dependencies

There are three dependencies for VAS 2.1:

- Hardware Requirements
- Software Requirements
- Installation of VAS 2.0

#### 1.3 Constraints

To deploy into the target physical environment, installers require the following access:

- A Personal Identity Verification (PIV) card for Authentication
- Zero account access is required for authorization to install and deploy software configuration changes on the systems
- Electronic Permission Access System (ePAS) authorization to the environment
- Secure Shell (SSH) key for environment access

## 2 Roles and Responsibilities

Table 1: DIBRG Roles and Responsibilities

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Team	Phase/Role	Tasks	Project Phase		
Austin Information Technology Center (AITC)	Deployment	Direct and manage all activities including orderly shutdown, startup, configuration, and deployment tasks	Planning		
Philadelphia Information Technology Center (PITC)	Deployment	Direct and manage all activities including orderly shutdown, startup, configuration, and deployment tasks	Planning		
Veterans Affairs Enterprise Cloud (VAEC)	Deployment	Provides GovCloud support for AWS services	Planning		
OIT Enterprise Program Management Office (EPMO)	Deployment	Participate in planning meetings, communicate to stakeholders the start/end of deployment and pertinent details of the current status of the System of Systems	Planning		
VA Office of Information and Technology (OIT), VA OIT Health Product Support, and Project Management Office (PMO)	Deployment	Plan and schedule deployment (including orchestration with vendors)	Planning		
Local individual Veterans Administration Medical Centers (VAMCs)	Deployment	Determine and document the roles and responsibilities of those involved in the deployment	Planning		
Field Testing (Initial Operating Capability (IOC)), Health Product Support Testing	Deployment	Test for operational readiness	Completed		
Health Product Support and Field Operations	Deployment	Execute deployment	Deployment		
VAMCs	Installation	Plan and schedule installation	Deployment		
VAS ATO Team	Installation	Obtain authority to operate and that certificate authority security documentation is in place	Deployment		
VAS Team	Installation	Coordinate knowledge transfer with the team responsible for user training	Deployment		
VAS Team	Post- Deployment	Hardware, Software, and System Support	Warranty		

## 3 Deployment

Deployment is planned as a concurrent online rollout. Detailed deployment information for the VAS 2.1 User Interface is located in the Department of Veterans Affairs Github repository for VAS. Detailed instructions for creating a new GitHub account and requesting access to the VA organization's GitHub can be reviewed in the VA GitHub Handbook.

WEBS is the VistA namespace assigned for the VAS User Interface (UI). All releases involving the VAS UI will be communicated nationally to VistA sites through the release of informational WEBS patches. The initial release of VAS 2.1 is being released with patch WEBS\*2\*2.

#### 3.1 Timeline

The deployment and installation are scheduled to run 1 day.

#### 3.2 Site Readiness Assessment

The deployment is taking place within the REDACTED. The target servers are on-premises machines and VAEC Cloud Virtual Servers or Environment. The site names and locations are listed in section 3.2.2.

## 3.2.1 Deployment Topology (Targeted Architecture)

The current detailed architecture information for VAS 2.1 is available in the Department of Veterans Affairs Github repository for VAS.

## 3.2.2 Site Information (Locations, Deployment Recipients)

The deployment is taking place at the following data centers:

REDACTED

The Initial Operating Capability (IOC) Test Sites are:

- On Premises (On-Prem) Sites
  - o REDACTED
  - REDACTED

## 3.2.3 Site Preparation

No special preparation is required by the site prior to deployment.

#### 3.3 Resources

The list of the resources are as follows:

## 3.3.1 Facility Specifics

There are no facility-specific features required for deployment.

#### 3.3.2 Hardware

The following table describes hardware specifications required at each site prior to deployment.

**Table 2: Hardware Requirements** 

Required Hardware	Model	Version	Configuration	Manufacturer	Other

#### 3.3.3 Software

Detailed software requirements for VAS 2.1 can be reviewed as part of the README.md file in the VAS GitHub repository.

#### 3.3.4 Communications

Sites participating in IOC field testing will use the "Patch Tracking" Outlook message to communicate with the VAS team, the developers, and product support personnel.

#### 3.3.4.1 Deployment / Installation / Back-out Checklist

The assigned Health Information Governance (HIG) team will deploy the WEBS\*2\*2 patch, which is tracked nationally for all Veterans Administration Medical Centers (VAMCs) in the National Patch Module (NPM) in FORUM. FORUM automatically tracks the patches as they are installed in the different VAMC production systems. A report in FORUM can be run to identify when the patch was installed in VistA production at each site. A report can also be run to identify which sites have not currently installed the patch in their VistA production system. Therefore Table 3 below is not needed to manually track installation.

Table 3: Deployment / Installation / Back-out Checklist

Activity	Day	Time	Individual who completed task
Deploy	N/A	N/A	N/A
Install	N/A	N/A	N/A
Back-Out	N/A	N/A	N/A

## 4 Installation

## 4.1 Pre-installation and System Requirements

All requirements are available in the Department of Veterans Affairs Github repository for VAS (code) Readme folder.

## 4.1.1 Patch Dependencies

None

## 4.2 Platform Installation and Preparation

All requirements are available in the Department of Veterans Affairs Github repository for VAS (code) Readme folder.

#### 4.3 Download and Extract Files

Actions to download and extract files does not apply to VAS 2.1.

#### 4.4 Database Creation

The required updates utilizes an existing VistA database and therefore this section is not applicable.

The details are in the README (Code Repository) in GitHub for VAS.

## 4.5 Installation Scripts

Any Installation Scripts are in the Github repository for VAS.

## 4.6 Cron Scripts

Any Cron scripts are available in the GitHub repository for VAS.

## 4.7 Access Requirements and Skills Needed for the Installation

An individual will require access to the National VA Network, Veterans Affairs Organization GitHub access, as well as access to the VAS-Code private GitHub repository.

Additionally, a full-spectrum Developer with advanced knowledge and skills in Knowledge system, Docker Containers, AWS, databases, Apache hypertext server, and Linux system administration is needed for installation. An AWS Administrator is required to resolve any issue for COPY command.

If COPY command error(s) are received, then a ServiceNow (SNOW) ticket will need to be submitted to resolve COPY command error(s).

## **5 Installation Procedure**

See Readme file.

## 5.1 Installation Verification Procedure

The software is set up and configured in the central enterprise wide server. Hence, no installation verification is required.

## 5.2 System Configuration

The individual Microservice configuration is available in the Department of Veterans Affairs Github repository for VAS (code).

#### 5.3 **Data Tuning**

Database Tuning does not apply.

## 6 Back-out Procedure

Within context of this document, the term back-out pertains to a return to the last known good operational state of the software and appropriate platform settings. This does not apply for VAS 2.1 as the application resides in the Cloud.

## 7 Rollback Procedure

This section does not apply to VAS 2.1 as the application is in the Cloud.

## Appendix A: Acronyms

**Table 4: Acronym Listing** 

Acronym	Definition
AITC	Austin Information Technology Center
AWS	Amazon Web Services
CRUD	Create, Read/Inquire, Update, and Delete
DG	Registration package
DIBRG	Deployment, Installation, Back-Out, and Rollback Guide
ePAS	Electronic Permission Access System
EPMO	Enterprise Program Management Office
GUI	Graphic User Interface
HCS	Healthcare System
HIG	Health Information Governance
HIPAA	Health Insurance Portability and Accountability Act
IG	Inspector General
IOC	Initial Operating Capability
ISSO	Information System Security Officer
MUMPS	Massachusetts General Hospital Utility Multi-Programming System
N/A	Not Applicable
NPM	National Patch Module
ОІТ	Office of Information & Technology
PHI	Protected Health Information
PII	Personal Identifiable Information
PITC	Philadelphia Information Technology Center
PIV	Personal Identity Verification
PMO	Project Management Office
PO	Privacy Officer
SNOW	ServiceNow

Acronym	Definition
SSH	Secure Shell
UI	User Interface
VA	Department of Veterans Affairs
VAEC	Veterans Affairs Enterprise Cloud
VAMC	Veterans Administration Medical Center
VAS	VistA Audit Solution
VistA	Veterans Health Information Systems Technology Architecture