VistA Imaging Exchange (VIX) Viewer Improvements

 MAG\*3.0\*303

Deployment, Installation, Back-Out, and Rollback Guide



November 2022

Version 6.1

Department of Veterans Affairs

Office of Information and Technology (OIT)

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version | Description | Author |
| 11/17/2022 | 6.1 | Updates for MAG\*3.0\*303 based on review. | VA IT VistA Imaging Technical team |
| 08/17/2022 | 6.0 | Initial Draft for MAG\*3.0\*303. | VA IT VistA Imaging Technical team |
| 06/08/2022 | 5.4 | Updates for MAG\*3.0\*269 installation section. | VA IT VistA Imaging Technical team |
| 06/07/2022 | 5.3 | Updates for MAG\*3.0\*269 release date. | VA IT VistA Imaging Technical team |
| 02/18/2022 | 5.2 | Updates for MAG\*3.0\*269 name. | VA IT VistA Imaging Technical team |
| 11/22/2021 | 5.1 | Added MAG\*3.0\*185 as a patch dependency. | VA IT VistA Imaging Technical team  |
| 10/06/2021 | 5.0 | Initial Draft for MAG\*3.0\*269. | VA IT VistA Imaging Technical team  |
| 08/31/2021 | 4.0 | Updates for Patch MAG\*3.0\*284 (1.0). | REDACTED |
| 04/06/2021 | 3.0 | Updates for Patch MAG\*3.0\*254. | VA IT VistA Imaging Technical team  |
| 05/20/2020 | 2.0 | Technical Review. | VA IT VistA Imaging Technical team  |
| 03/10/2020 | 1.0 | Initial Version. | VA IT VistA Imaging Technical team  |

**Artifact Rationale**

This document describes the Deployment, Installation, Back-out, and Rollback Plan for new products going into the VA Enterprise. The plan includes information about system support, issue tracking, escalation processes, and roles and responsibilities involved in all those activities. Its purpose is to provide clients, stakeholders, and support personnel with a smooth transition to the new product or software, and should be structured appropriately, to reflect particulars of these procedures at a single or at multiple locations.

Per the Veteran-focused Integrated Process (VIP) Guide, the Deployment, Installation, Back-out, and Rollback Plan is required to be completed prior to Critical Decision Point #2 (CD #2), with the expectation that it will be updated throughout the lifecycle of the project for each build, as needed.

**Table of Contents**

[1 Introduction 6](#_Toc119507871)

[1.1 Purpose 6](#_Toc119507872)

[1.2 Dependencies 6](#_Toc119507873)

[1.3 Constraints 6](#_Toc119507874)

[2 Roles and Responsibilities 7](#_Toc119507875)

[3 Deployment 9](#_Toc119507876)

[3.1 Timeline 9](#_Toc119507877)

[3.2 Site Readiness Assessment 9](#_Toc119507878)

[3.2.1 Deployment Topology (Targeted Architecture) 9](#_Toc119507879)

[3.2.2 Site Information (Locations, Deployment Recipients) 9](#_Toc119507880)

[3.2.3 Site Preparation 9](#_Toc119507881)

[3.3 Resources 9](#_Toc119507882)

[3.3.1 Facility Specifics 9](#_Toc119507883)

[3.3.2 Hardware 9](#_Toc119507884)

[3.3.3 Software 10](#_Toc119507885)

[3.3.4 Communications 10](#_Toc119507886)

[3.3.4.1 Deployment/Installation/Back-Out Checklist 10](#_Toc119507887)

[4 Installation 11](#_Toc119507888)

[4.1 Pre-installation and System Requirements 11](#_Toc119507889)

[4.2 Platform Installation and Preparation 11](#_Toc119507890)

[4.3 Download and Extract Files 11](#_Toc119507891)

[4.4 Database Creation 11](#_Toc119507892)

[4.5 Installation Scripts 11](#_Toc119507893)

[4.6 Cron Scripts 12](#_Toc119507894)

[4.7 Access Requirements and Skills Needed for the Installation 12](#_Toc119507895)

[4.8 Installation Procedure 12](#_Toc119507896)

[4.8.1 MAG\*3.0\*303 VistA Install 12](#_Toc119507897)

[4.9 Installation Verification Procedure 13](#_Toc119507898)

[4.10 System Configuration 13](#_Toc119507899)

[4.11 Database Tuning 13](#_Toc119507900)

[5 Back-Out Procedure 14](#_Toc119507901)

[5.1 Back-Out Strategy 14](#_Toc119507902)

[5.2 Back-Out Considerations 14](#_Toc119507903)

[5.2.1 Load Testing 14](#_Toc119507904)

[5.2.2 User Acceptance Testing 14](#_Toc119507905)

[5.3 Back-Out Criteria 14](#_Toc119507906)

[5.4 Back-Out Risks 14](#_Toc119507907)

[5.5 Authority for Back-Out 14](#_Toc119507908)

[5.6 Back-Out Procedure 14](#_Toc119507909)

[5.6.1 MAG\*3.0\*303 KIDS Install 14](#_Toc119507910)

[5.6.2 MAG\*3.0\*303 Client Uninstall 16](#_Toc119507911)

[5.7 Back-out Verification Procedure 16](#_Toc119507912)

[6 Rollback Procedure 17](#_Toc119507913)

[6.1 Rollback Considerations 17](#_Toc119507914)

[6.2 Rollback Criteria 17](#_Toc119507915)

[6.3 Rollback Risks 17](#_Toc119507916)

[6.4 Authority for Rollback 17](#_Toc119507917)

[6.5 Rollback Procedure 17](#_Toc119507918)

[6.6 Rollback Verification Procedure 17](#_Toc119507919)

[7 Acronyms 18](#_Toc119507920)

Table of Figures

[Figure 1: Install/Check Message 15](#_Toc119507921)

# Introduction

This document describes how to deploy and install the VistA Imaging Exchange (VIX) Viewer Improvements MAG\*3.0\*303, and how to back-out the product and rollback to a previous version or data set. This document is a companion to the project charter and management plan for this effort. In cases where a non-developed commercial-off-the-shelf (COTS) product is being installed, the vendor-provided User and Installation Guide may be used. However, the Back-Out Recovery strategy still needs to be included in this document. This patch adds VIX Viewer improvements, installation enchantments, and also includes enhanced encryption support.

## Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the VistA Imaging Exchange (VIX) MAG\*3.0\*303 will be deployed and installed, as well as how it is to be backed out and rolled back, if necessary. The plan also identifies resources, communications plan, and rollout schedule. Additional instructions for installation, back-out, and rollback can be found in the [*MAG3\_0P303\_VIX\_INSTALLATION\_GUIDE.PDF*](https://www.va.gov/vdl/application.asp?appid=105).

## Dependencies

This patch must be installed after MAG\*3.0\*269.

## Constraints

MAG\*3.0\*303 and the associated Kernel Installation and Distribution System (KIDS) build are expected to be installed on existing VistA platforms. The hardware may reside at local or regional data centers. MAG\*3.0\*303 utilizes existing nationally released security controls to control access.

# Roles and Responsibilities

Multiple entities oversee decision making for deployment, installation, back-out, and rollback of MAG\*3.0\*303. The Account Coordinators can approve deployment and installation from an OI&T perspective. If an issue with the software arises, the facility Chief Information Officer (CIO) and other site leadership will meet along with input from the Clinical Services Diagnostics Sub-Product Line team, and regional leadership to initiate a back-out and rollback decision for the software. Table 1 provides MAG\*3.0\*303 information.

Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities

| ID | Team | Phase/Role | Tasks | Project Phase (See Schedule |
| --- | --- | --- | --- | --- |
| 1 | Site personnel in conjunction with information technology (IT) support – which may be local or regional. | Deployment | Plan and schedule deployment (including orchestration with vendors.) | N/A |
| 2 | Site personnel in conjunction with IT support – which may be local or regional. | Deployment | Determine and document the roles and responsibilities of those involved in the deployment. | N/A |
| 3 | Site personnel. | Deployment | Test for operational readiness. | N/A |
| 4 | Site personnel in conjunction with IT support – which may be local or regional. The IT support must include person(s) to install the KIDS build and the personnel to deploy the graphical user interface (GUI). | Deployment | Execute deployment. | N/A |
| 5 | Site personnel in conjunction with IT support – which may be local or regional. The IT support must include person(s) to install the KIDS build and the personnel to deploy the GUI. | Installation | Plan and schedule installation. | N/A |
| 6 | N/A – will work under the VistA authority to operate (ATO) and security protocols. | Installation | Ensure ATO and certificate authority security documentation is in place. | N/A |
| 7 | N/A – no equipment is being added. | Installation | Validate through facility point of contact (POC) to ensure that IT equipment has been accepted using asset inventory processes. | N/A |
| 8 | Site personnel in conjunction with IT support – which may be local or regional. | Installation | N/A An external system is not using VIX MAG\*3.0\*269 functionality at this time. | N/A |
| 9 | Facility CIO and IT support – which may be local or regional. | Back-out | Confirm availability of back-out instructions and back-out strategy (what the criteria are that trigger a back-out.) | N/A |
| 10 | Hardware and System support – no changes. Software support will be the Clinical Services Diagnostics Sub-Product Line team and VistA Imaging Development team. | Post-Deployment | Hardware, Software, and System Support. | N/A |

# Deployment

The deployment is planned as a standard VistA National Patch Module patch rollout. Once approval has been given to nationally release MAG\*3.0\*303, the patch will be released from the National Patch Module. At this point, the patch will be available for installation and deployment at all sites from OI Field Offices using a web browser to download from the following URL:REDACTED. This release is provided using a Host file.

This section provides the schedule and milestones for the deployment. Scheduling of test/mirror installs, testing, and deployment to production will be at the site’s discretion. It is anticipated that there will be a 30-day compliance period.

## Timeline

There is no timeline specifically for deployment. This is considered a maintenance release and installation will be at the site’s discretion, within the constraints of the compliance period for the release.

## Site Readiness Assessment

This section discusses the locations that will receive the MAG\*3.0\*303 deployment.

## Deployment Topology (Targeted Architecture)

MAG\*3.0\*303 will be deployed to each VistA instance, which will include local sites as well as regional data processing centers. The executables will also be deployed to local sites on the VIX servers.

## Site Information (Locations, Deployment Recipients)

The first deployment will be to initial operating capability (IOC) sites for verification of functionality. Once that testing is completed and approval is given for national release, MAG\*3.0\*303 will be deployed to all VistA systems:

* REDACTED
* REDACTED
* REDACTED

### Site Preparation

Please refer to [*MAG3\_0P303\_VIX\_INSTALLATION\_GUIDE.PDF*](https://www.va.gov/vdl/application.asp?appid=105) sections “Preparing for a New VIX Installation” or “Preparing for a VIX Update” for site preparation.

## Resources

N/A

### Facility Specifics

N/A

### Hardware

N/A

### Software

N/A

### Communications

MAG\*3.0\*303 will be deployed using the standard method of patch release from the National Patch Module. When patch MAG\*3.0\*303 is released, the National Patch Module will send a notification to all the personnel who have subscribed to those notifications.

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

The deployment and installation will be performed by site support personnel once it is nationally released.

# Installation

## Pre-installation and System Requirements

All previously released VistA Imaging patches must be installed on the VistA system before installing MAG\*3.0\*303.

## Platform Installation and Preparation

MAG\*3.0\*303 must be installed on the VistA System and on-site VIX servers. This patch must be installed on both VistA and site VIX servers by the compliance date. All released VistA Imaging patches must be installed on the VistA system before installing MAG\*3.0\*303.

This patch may be installed with users on the system although it is recommended that it be installed during non-peak hours to minimize potential disruption to users. Refer to [*MAG3\_0P303\_VIX\_INSTALLATION\_GUIDE.PDF*](https://www.va.gov/vdl/application.asp?appid=105) for additional installation preparation steps.

## Download and Extract Files

Sites may retrieve the software and documentation directly using a web browser to download from the following URL: REDACTED (Table 2). Sites may alternatively retrieve the software and documentation at location: REDACTED.

Documentation can be found on the VA Software Documentation Library at: https://www.va.gov/vdl/application.asp?appid=105

Table 2: Files to be Downloaded

| File Name | Description |
| --- | --- |
| MAG3\_0P303.KID | MAG\*3.0\*303 Kernel Installation and Distribution System (KIDS) build |
| MAG3\_0P303\_VIX\_SETUP.MSI | MAG\*3.0\*303 VIX Setup |
| MAG3\_0P303\_PATCH\_DESCRIPTION.PDF | MAG\*3.0\*303 Patch Description |
| MAG3\_0P303\_VIX\_INSTALLATION\_GUIDE.PDF | MAG\*3.0\*303 VIX Installation Guide |
| MAG3\_0P303\_DIBORG.PDF | MAG\*3.0\*303 Deployment, Installation, Back-Out, and Rollback Guide |
| MAG3\_0P303\_VIX\_ADMIN\_GUIDE.PDF | MAG\*3.0\*303 VIX Administration Guide |

NOTE: Only the KIDS and VIX client for MAG\*3.0\*303 should be installed at medical centers. As a result, the Central VistA Imaging Exchange (CVIX) Installation Guide (MAG3\_0P303\_CVIX\_INSTALLATION\_GUIDE.PDF) and CVIX installation file (MAG3\_0P303\_CVIX\_SETUP.MSI) are not provided to sites on the network file shares.

## Database Creation

N/A

## Installation Scripts

N/A

## Cron Scripts

N/A

## Access Requirements and Skills Needed for the Installation

Installation of VistA Imaging MAG\*3.0\*303 requires the following to install:

* Programmer access to VistA instance and ability to install KIDS build.
* VIX installs – Administrator access to the VIX servers.

## Installation Procedure

### MAG\*3.0\*303 VistA Install

KIDS installation will take 2-5 minutes.

1. This release is provided using a Host file, use the Load a Distribution option contained on the Kernel Installation and Distribution System Menu to load the Host file.

When prompted to “Enter a Host File:” enter

/srv/vista/patches/SOFTWARE/MAG3\_0P303.KID

1. From the Kernel Installation and Distribution System Menu, select the Installation Menu. From this menu,
2. Select the Verify Checksums in Transport Global option to confirm the integrity of the routines that are in the transport global. When prompted for the INSTALL NAME enter the patch name MAG\*3.0\*303.

NOTE: Using <spacebar><enter> does not bring up a Multi-Package build even if it was loaded immediately before this step. It will only bring up the last patch in the build.

1. Select the Backup a Transport Global option to create a backup message of any routines exported with this patch. It does not backup any other changes such as DDs or templates.
2. You may also elect to use the following options:
3. Print Transport Global – This option allows you to view the components of the KIDS build.
4. Compare Transport Global to Current System - This option allows you to view all changes made when this patch is installed. It compares all of the components of this patch, such as routines, DDs, templates, etc.
5. Select the Install Package(s) option and choose the patch to install.
6. If prompted 'Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//', answer <NO>
7. When prompted 'Want KIDS to INHIBIT LOGONs during the install? NO//', answer <NO>.
8. When prompted 'Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//', answer <NO>

When the installation is finished, an Install Complete message will be displayed.

For installing or updating the VIX, refer to [*MAG3\_0P303\_VIX\_INSTALLATION\_GUIDE.PDF*](https://www.va.gov/vdl/application.asp?appid=105).

## Installation Verification Procedure

1. [VISTA] Verify the checksum of the added/updated routine in (Table 3) below.

Table 3: KIDS Build Modified Routines

| Routine | Checksum Before | Checksum After | Patch List |
| --- | --- | --- | --- |
| MAGIP303 |  N/A | 4110371 | \*\*\*303\*\*\* |

1. [Client] Please refer to [*MAG3\_0P303\_VIX\_INSTALLATION\_GUIDE.PDF*](https://www.va.gov/vdl/application.asp?appid=105) for post installation and verification process.

## System Configuration

N/A

## Database Tuning

N/A

# Back-Out Procedure

## Back-Out Strategy

The only reason to consider a back-out for MAG\*3.0\*303 is in the event of a catastrophic failure. Some VIX Clients are dependent on VistA changes and each other. In the case of a backout of the VIX Client, the VistA Patch might also need to rollback.

Submit a Service Now ticket (REDACTED) to request back-out assistance. Contact the Health, Clinical Services Diagnostics Team (previously known as Clin 3, the group name is SPM.Health.ClinSvs.Diag) team to notify them there has been a catastrophic failure with MAG\*3.0\*303.

## Back-Out Considerations

### Load Testing

N/A

### User Acceptance Testing

User acceptance testing (UAT) was conducted by the test sites listed in section 3.2. The sites followed the provided test plan/concurrence form and executed the test cases according to the plan for the first build of MAG\*3.0\*303. The sites either passed or failed all items based on testing. The tests were performed by IT analysts at each site who are familiar with using the application. Any items that failed were then re-developed, sent back to the sites, and tested for the next build following the same process. No subsequent builds were created as the test cases passed and sites signed off on concurrence for release.

## Back-Out Criteria

Back-out would only be considered if there was a catastrophic failure that causes loss of function for the application and a significant patient impact issue.

## Back-Out Risks

Backing out MAG\*3.0\*303 would result in the reinstatement of the issues addressed and enhancements added in MAG\*3.0\*303. In addition, there is a risk that the process, which would be performed only in an emergency, would significantly impact patient care due to the interruption.

## Authority for Back-Out

The facility CIO has the final authority to require the rollback and accept the associated risks.

## Back-Out Procedure

### MAG\*3.0\*303 KIDS Install

Administrators must use the PackMan function INSTALL/CHECK MESSAGE. Check MailMan messages for the backup message sent by the **Backup a Transport Global** function executed before the patch install. (See section 4.8.1, [Step 2b](#_bookmark27); this must be done before the patch is installed.)

1. In VistA MailMan, select the message (Figure 1) shown below:
* Backup of MAG\*3.0\*303 install on ***mm dd, yyyy*** ***user name***
1. Select the Xtract PackMan option.
2. Select the Install/Check Message option.
3. Enter **Yes** at the prompt.
4. Enter **No** at the backup prompt. There is no need to back up the backup.

Figure 1: Install/Check Message

Enter message action (in IN basket): Ignore// **Xtract** PackMan Select PackMan function: ?

Answer with PackMan function NUMBER, or NAME Choose from:

1. ROUTINE LOAD
2. GLOBAL LOAD
3. PACKAGE LOAD
4. SUMMARIZE MESSAGE
5. PRINT MESSAGE
6. INSTALL/CHECK MESSAGE
7. INSTALL SELECTED ROUTINE(S)
8. TEXT PRINT/DISPLAY
9. COMPARE MESSAGE

Select PackMan function: Select PackMan function: 6 INSTALL/CHECK MESSAGE

Warning: Installing this message will cause a permanent update of globals and routines.

Do you really want to do this? NO// YES<Enter>

Routines are the only parts that are backed up. NO other parts are backed up, not even globals. You may use the 'Summarize Message' option of PackMan to see what parts the message contains.

Those parts that are not routines should be backed up separately if they need to be preserved.

Shall I preserve the routines on disk in a separate back-up message? YES// NO No backup message built.

Line 2 Message #42925 Unloading Routine MAGT7MA (PACKMAN\_BACKUP) Select PackMan function:<Enter>

### MAG\*3.0\*303 Client Uninstall

For uninstalling the VIX and instructions on reinstalling the previous patch, please see [*MAG3\_0P303\_VIX\_INSTALLATION\_GUIDE.PDF*](https://www.va.gov/vdl/application.asp?appid=105).

## Back-out Verification Procedure

Refer to [*MAG3\_0P303\_VIX\_INSTALLATION\_GUIDE.PDF*](https://www.va.gov/vdl/application.asp?appid=105) for verification of successful VIX client backout procedure.

# Rollback Procedure

## Rollback Considerations

N/A

## Rollback Criteria

N/A

## Rollback Risks

N/A

## Authority for Rollback

N/A

## Rollback Procedure

If it is necessary to uninstall the MAG\*3.0\*303 VIX, go to the Control Panel, choose Add/Remove Programs, and remove the MAG\*3.0\*303 VIX Service Installation Wizard. To backout the VIX and replace it with the prior version which was included in MAG\*3.0\*269, please see the [*MAG3\_0P303\_VIX\_INSTALLATION\_GUIDE.PDF*](https://www.va.gov/vdl/application.asp?appid=105) for more detail.

## Rollback Verification Procedure

To verify the rollback to MAG\*3.0\*269, please see the [*MAG3\_0P303\_VIX\_INSTALLATION\_GUIDE.PDF*](https://www.va.gov/vdl/application.asp?appid=105) for more detail.

# Acronyms

|  |  |
| --- | --- |
| Term | Definition |
| ATO | Authority To Operate |
| CIO | Chief Information Officer |
| COTS | Commercial-Off-The-Shelf |
| CVIX | Centralized VistA Imaging Exchange |
| GUI | Graphic User Interface |
| HPS | Health Product Support |
| IOC | Initial Operating Capability |
| IT | Information Technology |
| KIDS | Kernel Installation and Distribution System |
| POC | Point of Contact |
| UAT | User Acceptance Testing |
| VIP | Veteran-Focused Integration Process |
| VIX | VistA Imaging Exchange |