# VistA Imaging Exchange (VIX) Query Retrieve MAG\*3.0\*269

# Deployment, Installation, Back-Out, and Rollback Guide



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### **Revision History**

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### **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.

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# 1 Introduction

This document describes how to deploy and install the VistA Imaging Exchange (VIX) Commercial Picture Archiving and Communications System (PACS) MAG\*3.0\*269, 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 the ability for Commercial PACS and other query retrieve devices at Department of Veterans Affairs (VA) facilities, and NilRead<sup>TM</sup> and other query retrieve devices at Department of Defense (DoD) facilities, to query, retrieve, and display remote images and also includes important security updates.

# 1.1 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\*269 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\_0P269\_VIX\_INSTALLATION\_GUIDE.PDF.

# 1.2 Dependencies

This patch must be installed after MAG\*3.0\*185 and MAG\*3.0\*284.

#### 1.3 Constraints

MAG\*3.0\*269 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\*269 utilizes existing nationally released security controls to control access.

# 2 Roles and Responsibilities

Multiple entities oversee decision making for deployment, installation, back-out, and rollback of MAG\*3.0\*269. 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 Patient Safety, Health Product Support (HPS), and regional leadership to initiate a back-out and rollback decision for the software. Table 1 provides MAG\*3.0\*269 information.

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

| ID | Team  | Phase/Role   | Tasks   | Project<br>Phase<br>(See<br>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 Kernel Installation and Distribution System (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                                  |

| ID | Team  | Phase/Role          | Tasks  | Project<br>Phase<br>(See<br>Schedule |
|----|---|---------------------|--|--------------------------------------|
| 9  | Facility CIO and IT support – which may be local or regional.   | Back-out            | Confirm availability of back-<br>out instructions and back-<br>out strategy (what the<br>criteria are that trigger a<br>back-out.) | N/A                                  |
| 10 | Hardware and System support – no changes. Software support will be the HPS Clinical Sustainment team. | Post-<br>Deployment | Hardware, Software, and<br>System Support.   | N/A                                  |

# 3 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\*269, 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 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.

#### 3.1 Timeline

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

#### 3.2 Site Readiness Assessment

This section discusses the locations that will receive the MAG\*3.0\*269 deployment.

#### 3.2.1 Deployment Topology (Targeted Architecture)

MAG\*3.0\*269 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.

# 3.2.2 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\*269 will be deployed to all VistA systems:

- REDACTED
- REDACTED
- REDACTED
- REDACTED
- REDACTED

# 3.2.3 Site Preparation

Please refer to MAG3\_0P269\_VIX\_INSTALLATION\_GUIDE.PDF sections "Preparing for a New VIX Installation" or "Preparing for a VIX Update" for site preparation.

#### 3.3 Resources

N/A

# 3.3.1 Facility Specifics

N/A

#### 3.3.2 Hardware

N/A

#### 3.3.3 Software

N/A

#### 3.3.4 Communications

MAG\*3.0\*269 will be deployed using the standard method of patch release from the National Patch Module. When patch MAG\*3.0\*269 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.

#### 4 Installation

# 4.1 Pre-installation and System Requirements

All previously released VistA Imaging patches must be installed on the VistA system before installing MAG\*3.0\*269.

# 4.2 Platform Installation and Preparation

MAG\*3.0\*269 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\*269.

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 0P269 VIX INSTALLATION GUIDE.PDF for additional installation preparation steps.

#### 4.3 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_0P269.KID                        | MAG*3.0*269 Kernel Installation and Distribution System (KIDS) build   |
| MAG3_0P269_VIX_SETUP.MSI              | MAG*3.0*269 VIX Setup  |
| MAG3_0P269_PATCH_DESCRIPTION.PDF      | MAG*3.0*269 Patch Description  |
| MAG3_0P269_VIX_INSTALLATION_GUIDE.PDF | MAG*3.0*269 VIX Installation Guide                                     |
| MAG3_0P269_DIBORG.PDF                 | MAG*3.0*269 Deployment, Installation, Back-<br>Out, and Rollback Guide |
| MAG3_0P269_VIX_ADMIN_GUIDE.PDF        | MAG*3.0*269 VIX Administration Guide                                   |
| MAG3_0P269_README.TXT                 | MAG*3.0*269 VIX Readme   |

NOTE: Only the KIDS and VIX client for MAG\*3.0\*269 should be installed at medical centers. As a result, the CVIX Installation Guide

(MAG3\_0P269\_CVIX\_INSTALLATION\_GUIDE.PDF) and CVIX installation file (MAG3\_0P269\_CVIX\_SETUP.MSI) are not provided to sites on the network file shares.

#### 4.4 Database Creation

N/A

# 4.5 Installation Scripts

N/A

# 4.6 Cron Scripts

N/A

# 4.7 Access Requirements and Skills Needed for the Installation

Installation of VistA Imaging MAG\*3.0\*269 requires the following to install:

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

#### 4.8 Installation Procedure

#### 4.8.1 MAG\*3.0\*269 VistA Install

KIDS installation will take 2-5 minutes.

- 1. On the VistA system, access the Kernel Installation and Distribution System Menu [XPD MAIN].
- 2. Run the Installation option [XPD INSTALLATION MENU].
- 3. Load the KIDS file by performing the following steps:
  - a. Run the Load a Distribution option [XPD LOAD DISTRIBUTION] to load the KIDS distribution.
  - b. When prompted, enter the full path and file name MAG3\_0P269.KID of the MAG\*3.0\*269 KIDS file.
  - c. When prompted to continue with the load, enter **YES**. A **Distribution OK!** message will be displayed when the load is complete.
- 4. After loading the KIDS file, use the following options to verify the contents of the patch and to back up any affected routines.
  - a. Verify Checksums in Transport Global [XPD PRINT CHECKSUM] Run this option to ensure the integrity of the routines in the patch.
  - b. Compare Transport Global to Current System [XPD COMPARE TO SYSTEM] Run this option to view all changes that will be made when the patch is installed. All components (routines, options, and so on) in the patch will be compared.
  - c. Backup a Transport Global [XPD BACKUP] Run this option to create a backup message for any routines exported with the patch. It will NOT back up any of the other changes.
- 5. After performing the load and any optional verification steps, install the KIDS file by performing the following steps:
  - a. Run the Install Package(s) [XPD INSTALL BUILD] option.
  - b. When prompted for the install name, enter MAG\*3.0\*269.
  - c. Answer **NO** to the following prompts if they appear:
    - Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//
    - Want KIDS to INHIBIT LOGONs during the install? NO//

- Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//
- d. Answer **0** to the following prompt if it appears:
  - Delay Install (Minutes): (0-60): 0//

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

**NOTE:** In support of the enhancement to allow commercial PACS, NilRead<sup>™</sup>, and other query retrieve devices to retrieve remote images, the post-install routine adds the following Remote Procedure Calls (RPCs) to the MAG WINDOWS RPC Context:

- XHD GET SITE INFO
- ORWCIRN FACLIST
- ORRCQLPT PTDEMOS
- ORWU USERINFO
- DSIC DPT GET ICN
- MAG STUDY UID QUERY

For installing or updating the VIX, refer to MAG3 0P269 VIX INSTALLATION GUIDE.PDF.

#### 4.9 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  |
|----------|-----------------|----------------|-------------|
| MAGIP269 | N/A             | 6938390        | ***269***   |
| MAGNU003 | 39650764        | 41930074       | **185,269** |

2. [Client] Please refer to MAG3\_0P269\_VIX\_INSTALLATION\_GUIDE.PDF for post installation and verification process.

# 4.10 System Configuration

N/A

# 4.11 Database Tuning

N/A

#### 5 Back-Out Procedure

# 5.1 Back-Out Strategy

The only reason to consider a back-out for MAG\*3.0\*269 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 NTL SUP CLIN3 team to notify them there has been a catastrophic failure with MAG\*3.0\*269.

#### 5.2 Back-Out Considerations

#### 5.2.1 Load Testing

N/A

#### 5.2.2 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\*269. 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.

#### 5.3 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.

# 5.4 Back-Out Risks

Backing out MAG\*3.0\*269 would result in the reinstatement of the issues addressed and enhancements added in MAG\*3.0\*269. 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.

# 5.5 Authority for Back-Out

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

# 5.6 Back-Out Procedure

#### 5.6.1 MAG\*3.0\*269 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 4c; 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\*269 install on <mm dd, yyyy> <user name>
- 2. Select the Xtract PackMan option.
- 3. Select the Install/Check Message option.
- 4. Enter **Yes** at the prompt.
- 5. 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:
     ROUTTNE LOAD
    GLOBAL LOAD
3
    PACKAGE LOAD
    SUMMARIZE MESSAGE
    PRINT MESSAGE
    INSTALL/CHECK MESSAGE
    INSTALL SELECTED ROUTINE(S)
    TEXT PRINT/DISPLAY
    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>
```

#### 5.6.2 MAG\*3.0\*269 Client Uninstall

For uninstalling the VIX and instructions on reinstalling the previous patch, please see MAG3 0P269 VIX INSTALLATION GUIDE.PDF.

# 5.7 Back-out Verification Procedure

Refer to MAG3\_0P269\_VIX\_INSTALLATION\_GUIDE.PDF for verification of successful VIX client backout procedure.

# 6 Rollback Procedure

#### 6.1 Rollback Considerations

N/A

6.2 Rollback Criteria

N/A

6.3 Rollback Risks

N/A

6.4 Authority for Rollback

N/A

### 6.5 Rollback Procedure

If it is necessary to uninstall the MAG\*3.0\*269 VIX, go to the Control Panel, choose Add/Remove Programs, and remove the MAG\*3.0\*269 VIX Service Installation Wizard. To backout the VIX and replace it with the prior version which was included in MAG\*3.0\*284, please see the MAG3 0P269 VIX INSTALLATION GUIDE.PDF for more detail.

#### 6.6 Rollback Verification Procedure

To verify the rollback to MAG\*3.0\*284, please see the *MAG3 0P269 VIX INSTALLATION GUIDE.PDF* for more detail.