

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

## **Patient Statement Enhancements (PSE) Phase 2**

**PRCA\*4.5\*355**



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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 of these activities. Its purpose is to provide clients, stakeholders, and support personnel a smooth transition to the new product or software. This document should be structured to reflect the application of these procedures to either a single site or to multiple sites.

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 PRCA\*4.5\*355 patch and how to back-out the product and rollback to a previous version or data set.

## 1.1 Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom PRCA\*4.5\*355 will be deployed and installed, as well as how the patches are to be backed out and rolled back, if necessary. The plan also identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

## 1.2 Dependencies

The following patches must be installed **before** PRCA\*4.5\*355: N/A

## 1.3 Constraints

This patch is intended for a fully patched VistA system.

# 2 Roles and Responsibilities

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

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
1	VA OIT, VA OIT Health Product Support & PMO	Deployment	Plan and schedule deployment (including orchestration with vendors)	Planning
2	Local VAMC and CPAC processes	Deployment	Determine and document the roles and responsibilities of those involved in the deployment.	Planning
3	Field Testing (Initial Operating Capability (IOC)), Health Product Support Testing & VIP Release Agent Approval	Deployment	Test for operational readiness	Testing
4	Health Product Support and Field Operations	Deployment	Execute deployment	Deployment

5	Individual Veterans Affairs Medical Centers (VAMCs)	Installation	Plan and schedule installation	Deployment
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<b>ID</b>	<b>Team</b>	<b>Phase / Role</b>	<b>Tasks</b>	<b>Project Phase (See Schedule)</b>
6	VIP Release Agent	Installation	Ensure authority to operate and that certificate authority security documentation is in place	Deployment
7	N/A for this patch as we are using only the existing VistA system	Installation	Validate through facility POC to ensure that IT equipment has been accepted using asset inventory processes	N/A
8	VA's Patient Statement Enhancement team	Installation	Coordinate training	Deployment
9	VIP release Agent, Health Product Support & the development team	Back-out	Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out)	Deployment
10	No changes to current process – we are using the existing VistA system	Post Deployment	Hardware, Software and System Support	Warranty

### 3 Deployment

The deployment is planned as a national rollout.

This section provides the schedule and milestones for the deployment.

#### 3.1 Timeline

The deployment and installation is scheduled to run for 30 days, as depicted in the master deployment schedule<sup>1</sup>.

#### 3.2 Site Readiness Assessment

This section discusses the locations that will receive the PRCA\*4.5\*355 deployment.

##### 3.2.1 Deployment Topology (Targeted Architecture)

This patch PRCA\*4.5\*355 is to be nationally released to all VAMCs.

<sup>1</sup> Project schedule (right click and select open hyperlink to access)  
[Refer to the “PSE PRCA 355” schedule located at this link](#)



### 3.2.2 Site Information (Locations, Deployment Recipients)

The test sites for IOC testing are:

- Erie, PA
- Richmond, VA
- Fayetteville, NC

Upon national release all VAMCs are expected to install this patch within the compliance dates.

### 3.2.3 Site Preparation

The following table describes preparation required by the site prior to deployment.

**Table 2: Site Preparation**

Site/Other	Problem/Change Needed	Features to Adapt/Modify to New Product	Actions/Steps	Owner
N/A	N/A	N/A	N/A	N/A

## 3.3 Resources

### 3.3.1 Facility Specifics

The following table lists facility-specific features required for deployment.

**Table 3: Facility-Specific Features**

Site	Space/Room	Features Needed	Other
N/A	N/A	N/A	N/A

### 3.3.2 Hardware

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

**Table 4: Hardware Specifications**

Required Hardware	Model	Version	Configuration	Manufacturer	Other
Existing Vista system	N/A	N/A	N/A	N/A	N/A

Please see the Roles and Responsibilities table in [Section 2](#) for details about who is responsible for preparing the site to meet these hardware specifications.

### 3.3.3 Software

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

**Table 5: Software Specifications**

Required Software	Make	Version	Configuration	Manufacturer	Other
Fully patched Accounts Receivable package within VistA	N/A	4.5	N/A	N/A	N/A

Please see the Roles and Responsibilities table in [Section 2](#) above for details about who is responsible for preparing the site to meet these software specifications.

### 3.3.4 Communications

The sites that are participating in field testing (IOC) will use the “Patch Tracking” message in Outlook to communicate with the Patient Statement Enhancements team, the developers, and product support personnel.

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

The Release Management team will deploy the patch PRCA\*4.5\*355, which is tracked in the National Patch Module (NPM) in Forum, nationally to all VAMCs. Forum automatically tracks the patches as they are installed in the different VAMC production systems. One can run a report in Forum to identify when and by whom the patch was installed in the 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 systems. Therefore, this information does not need to be manually tracked in the chart below.

**Table 6: 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**

PRCA\*4.5\*355, a patch to the existing VistA Accounts Receivable 4.5 package, is installable on a fully patched M(UMPS) VistA system and operates on top of the VistA environment provided by the VistA infrastructure packages. The latter provides utilities which communicate with the

underlying operating system and hardware, providing Accounts Receivable independence from variations in hardware and operating system.

## **4.2 Platform Installation and Preparation**

Refer to the PRCA\*4.5\*355 documentation on the NPM on Forum for the detailed installation instructions. These instructions will include any pre-installation steps if applicable.

## **4.3 Download and Extract Files**

Refer to the PRCA\*4.5\*355 documentation on the NPM to find the location of related documentation that can be downloaded. PRCA\*4.5\*355 will be transmitted via a PackMan message and can be pulled from the NPM. It is not a host file; therefore, does not need to be downloaded separately.

## **4.4 Database Creation**

PRCA\*4.5\*355 does not modify the VistA database.

## **4.5 Installation Scripts**

No installation scripts are needed for PRCA\*4.5\*355 installation.

## **4.6 Cron Scripts**

No Cron scripts are needed for PRCA\*4.5\*355 installation.

## **4.7 Access Requirements and Skills Needed for the Installation**

The following staff need access to the PackMan message containing the PRCA\*4.5\*355 patch or Forum's NPM in order to download the nationally released PRCA\*4.5\*355 patch. The software is to be installed by the sites or regions designated: VA OIT IT OPERATIONS SERVICE, Enterprise Service Lines, and/or VistA Applications Division<sup>2</sup>.

## **4.8 Installation Procedure**

Refer to the PRCA\*4.5\*355 documentation on the NPM for the detailed installation instructions.

## **4.9 Installation Verification Procedure**

Refer to the PRCA\*4.5\*355 documentation on the NPM for detailed installation instructions. These instructions include any post installation steps if applicable.

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<sup>2</sup> "Enterprise service lines, VAD" for short. Formerly known as the IRM (Information Resources Management) or IT support.

## 4.10 System Configuration

No system configuration changes are required for this patch.

## 4.11 Database Tuning

No reconfiguration of the VistA database, memory allocations or other resources is necessary.

# 5 Back-Out Procedure

Back-Out pertains to a return to the last known valid instance of operational software and platform settings.

## 5.1 Back-Out Strategy

Although it is unlikely, due to care in collecting, elaborating, and designing approved user stories, followed by multiple testing stages (Developer Unit Testing, Component Integration Testing, SQA Testing, and User Acceptance Testing), a back-out decision due to major issues with this patch could occur during site Mirror Testing, Site Production Testing or after National Release to the field (VAMCs). The best strategy is dependent on the stage during which the decision is made.

If during Mirror testing or Site Production Testing, a new version of a defect correcting test patch is produced, retested, and successfully passes development team testing, it would be resubmitted to the site for testing. If the patch produced catastrophic problems, a new version of the patch can be used to restore the build components to their pre-patch condition.

If the defect(s) were not discovered until after national release but during the designated support period, a new patch will be entered into the National Patch Module on Forum and go through all the necessary milestone reviews etc., as a patch for a patch. It is up to VA OIT and product support whether this new patch would be defined as an emergency patch or not. This new patch could be used to address specific issues pertaining to the original patch or could be used to restore the build components to their original pre-patch condition.

After the support period, the VistA Maintenance Program would produce the new patch, either to correct the defective components or to back-out the patch.

## 5.2 Back-Out Considerations

It is necessary to determine if a wholesale back-out of the patch PRCA\*4.5\*355 is needed or if a better course of action is to correct through a new version of the patch (if prior to national release) or through a subsequent patch aimed at specific areas modified or affected by the original patch (after national release). A wholesale back-out of the patch will still require a new version (if prior to national release) or a subsequent patch (after national release). If the back-out is post-release of this patch PRCA\*4.5\*355, this patch should be assigned status of “Entered in Error” in Forum’s NPM.

## 5.2.1 Load Testing

N/A. The back-out process if necessary is executed at normal, rather than raised job priority, and is expected to have no significant effect on total system performance. Subsequent to the reversion, the performance demands on the system would be unchanged.

## 5.2.2 User Acceptance Testing

1. This patch updates the STATEMENT DAY field (#340,.03) that points to entries in the PATIENT file (#2). It also updates the SITE STATEMENT DAY field (#342,.11). The existing values for those fields are being modified to be a different day of the month for sixteen (16) Veterans Administration sites.
2. The following sites will have their STATEMENT DAY changed from 21 to 26:
  - a. SIOUX FALLS VA HCS
  - b. ALBUQUERQUE, NEW MEXICO HCS
  - c. AMARILLO HCS
  - d. COATESVILLE VAMC
  - e. ERIE VAMC
  - f. FORT MEADE, BLACK HILLS HCS
  - g. PRESCOTT, NORTHERN ARIZONA HCS
  - h. SAINT CLOUD VA HCS
  - i. WASHINGTON
  - j. EL PASO VA HCS
3. The following sites will have their STATEMENT DAY changed from 22 to 28:
  - a. SAN DIEGO HCS
  - b. FAYETTEVILLE NC VAMC
  - c. SALEM VAMC
  - d. SAN ANTONIO, SOUTH TEXAS HCS
  - e. TEXAS VALLEY COASTAL BEND HCS
  - f. MOUNTAIN HOME VAMC
4. Other sites will have no change made to their STATEMENT DAY, since they are not on the list of the 16 sites.

## 5.3 Back-Out Criteria

The project is canceled or the requested changes implemented by PRCA\*4.5\*355 are no longer desired by VA OIT and the Patient Statement Enhancements team, or the patch produces catastrophic problems.

## 5.4 Back-Out Risks

Since the PSE software is tightly integrated with external systems, any attempt at a back-out should include close consultation with the external trading partners such as the VA Austin Information Technology Center (AITC) to determine risk.

## 5.5 Authority for Back-Out

Any back-out decision should be a joint decision of the Business Owner (or their representative) and the Program Manager with input from the Health Product Support (HPS) Application Coordinator, developers (both project and Tier 3 HPS), and if appropriate, external trading partners such as the VA AITC.

Accounts Receivable is tightly integrated with their external partners and a back-out of the patch should not be a standalone decision.

## 5.6 Back-Out Procedure

The rollback plan for VistA applications is complex and not a “one size fits all” solution. The general strategy for a VistA rollback is to repair the code with a follow-up patch. The development team recommends that sites log a ticket if it is a nationally released patch.

Back-Out Procedure prior to National Release. If it is prior to national release, the site will be already working directly with the development team daily and should contact that team. The development team members will have been identified in the Initial Operating Capability (IOC) Memorandum of Understanding (MOU). As discussed in [Section 5.2](#), it is likely that development team can quickly address via a new software version. If the site is unsure who to contact they may log a ticket of contact Health Product Support - Management Systems Team.

The PRCA\*4.5\*355 patch contains the following build components:

- Routines
- Enhancements

While the VistA installation procedure of the KIDS build allows the installer to back up the modified routines using the ‘Backup a Transport Global’ action, due to the fact that this patch does not modify any existing routines, it is not possible to run the option and a restore from a backup of the Transport Global. In the event that a site decides to back out this patch, the site should contact the Enterprise Service Desk (ESD) to submit a help desk ticket. The development team will need to issue a follow-on patch in order to comprehensively back-out this patch and/or to clean up corrupted data/remove data dictionary changes, if needed and restore the system to a functioning state.

Please contact the EPMO team for assistance since this installed patch only modifies values in existing fields and will have to be addressed in a manner other than ‘Backup a Transport Global’.

## 5.7 Back-out Verification Procedure

Successful back-out is confirmed by verification that the back-out patch was successfully implemented. This includes successful installation and testing that the back-out acted as expected, as defined together with the team the site contacted in [Section 5.5](#).

## 6 Rollback Procedure

Rollback pertains to data. The only data changes in this patch are specific to the operational software and platform settings and they are covered in the Back-out procedures detailed elsewhere in this document.

## **6.1 Rollback Considerations**

Not applicable.

## **6.2 Rollback Criteria**

Not applicable.

## **6.3 Rollback Risks**

Not applicable.

## **6.4 Authority for Rollback**

Not applicable.

## **6.5 Rollback Procedure**

Not applicable.

## **6.6 Rollback Verification Procedure**

Not applicable.