Medical Care Collection Fund (MCCF)   
Electronic Data Interchange (EDI)   
Transaction Applications Suite (TAS)   
ePayments Release 20

Accounts Receivable PRCA\*4.5\*424

Deployment, Installation, Back-out, and Rollback Guide



April 2024

Department of Veterans Affairs

Office of Information and Technology (OIT)

Revision History

| Date | Version | Description | Author |
| --- | --- | --- | --- |
| April 2024 | 1.0 | Initial Version | MCCF EDI TAS |

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 1](#_Toc163809015)

[1.1 Purpose 1](#_Toc163809016)

[1.2 Dependencies 1](#_Toc163809017)

[1.3 Constraints 1](#_Toc163809018)

[2 Roles and Responsibilities 1](#_Toc163809019)

[3 Deployment 2](#_Toc163809020)

[3.1 Timeline 2](#_Toc163809021)

[3.2 Site Readiness Assessment 2](#_Toc163809022)

[3.2.1 Deployment Topology (Targeted Architecture) 2](#_Toc163809023)

[3.2.2 Site Information (Locations, Deployment Recipients) 2](#_Toc163809024)

[3.2.3 Site Preparation 3](#_Toc163809026)

[3.3 Resources 3](#_Toc163809027)

[3.3.1 Facility Specifics 3](#_Toc163809028)

[3.3.2 Hardware 3](#_Toc163809029)

[3.3.3 Software 3](#_Toc163809030)

[3.3.4 Communications 4](#_Toc163809031)

[3.3.4.1 Deployment / Installation / Back-out Checklist 4](#_Toc163809032)

[4 Installation 4](#_Toc163809033)

[4.1 Pre-installation and System Requirements 4](#_Toc163809034)

[4.2 Platform Installation and Preparation 4](#_Toc163809035)

[4.3 Download and Extract Files 4](#_Toc163809036)

[4.4 Database Creation 5](#_Toc163809037)

[4.5 Installation Scripts 5](#_Toc163809038)

[4.6 Cron Scripts 5](#_Toc163809039)

[4.7 Access Requirements and Skills Needed for the Installation 5](#_Toc163809040)

[4.8 Installation Procedure 5](#_Toc163809041)

[4.9 Installation Verification Procedure 5](#_Toc163809042)

[4.10 System Configuration 5](#_Toc163809043)

[4.11 Database Tuning 5](#_Toc163809044)

[5 Back-out Procedure 5](#_Toc163809045)

[5.1 Back-out Strategy 6](#_Toc163809046)

[5.1.1 Mirror Testing or Site Production Testing 6](#_Toc163809047)

[5.1.2 After National Release but During the Designated Support Period 6](#_Toc163809048)

[5.1.3 After National Release and Warranty Period 6](#_Toc163809049)

[5.2 Back-out Considerations 6](#_Toc163809050)

[5.2.1 Load Testing 6](#_Toc163809051)

[5.2.2 User Acceptance Testing 6](#_Toc163809052)

[5.3 Back-out Criteria 7](#_Toc163809054)

[5.4 Back-out Risks 7](#_Toc163809055)

[5.5 Authority for Back-out 7](#_Toc163809056)

[5.6 Back-out Procedure 8](#_Toc163809057)

[5.7 Back-out Verification Procedure 8](#_Toc163809058)

[6 Rollback Procedure 8](#_Toc163809059)

[6.1 Rollback Considerations 8](#_Toc163809060)

[6.2 Rollback Criteria 8](#_Toc163809061)

[6.3 Rollback Risks 9](#_Toc163809062)

[6.4 Authority for Rollback 9](#_Toc163809063)

[6.5 Rollback Procedure 9](#_Toc163809064)

[6.6 Rollback Verification Procedure 9](#_Toc163809065)

List of Tables

[Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities 1](#_Toc163809066)

[Table 2: Site Preparation 3](#_Toc163809067)

[Table 3: Facility-Specific Features 3](#_Toc163809068)

[Table 4: Hardware Specifications 3](#_Toc163809069)

[Table 5: Software Specifications 3](#_Toc163809070)

[Table 6: Deployment / Installation / Back-out Checklist 4](#_Toc163809071)

# Introduction

This document describes how to deploy and install the PRCA\*4.5\*424 patch, and how to back-out the product and rollback to a previous version or data set.

## Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom PRCA\*4.5\*424 will be deployed and installed, as well as how it is to be backed out and rolled back, if necessary. The plan identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

## Dependencies

PRCA\*4.5\*371 and PRCA\*4.5\*409 must be installed BEFORE PRCA\*4.5\*424.

## Constraints

This patch is intended for a fully patched VistA system.

# Roles and Responsibilities

Table : 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, and PMO (Leidos) | 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, and VIP Release Agent Approval | Deployment | Test for operational readiness | Testing |
| 4 | Health Product Support and Field Operations | Deployment | Execute deployment | Deployment |
| 5 | Individual Veterans Administration Medical Centers (VAMCs) | Installation | Plan and schedule installation | Deployment |
| 6 | VIP Release Agent | Installation | Ensure authority to operate and that certificate authority security documentation is in place | Deployment |
| 7 |  | Installation | Validate through facility POC to ensure that IT equipment has been accepted using asset inventory processes | N/A; only existing VistA system will be used |
| 8 | VA’s eBusiness team | Installations | Coordinate training | Deployment |
| 9 | VIP Release Agent, Health Product Support, and 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 | VA OIT, VA OIT Health Product Support, and MCCF EDI TAS Development Team (Halfaker) | Post Deployment | Hardware, Software and System Support | Warranty |

# Deployment

The deployment is planned as a national rollout.

This section provides the schedule and milestones for the deployment.

## Timeline

The deployment and installation are scheduled to run for 30 days starting with national release.

## Site Readiness Assessment

This section discusses the locations that will receive the deployment of patch PRCA\*4.5\*424.

### Deployment Topology (Targeted Architecture)

Patch PRCA\*4.5\*424 is to be nationally released to all VAMCs.

### Site Information (Locations, Deployment Recipients)

The IOC sites are:

* Fayetteville VAMC (Fayetteville, NC) - Station 565
* South Texas HCS (San Antonio, TX) - Station 671
* Wilkes-Barre VAMC (Luzerne County, PN) - Station 693
* North Florida / South Georgia VAMC (Gainesville, FL) - Station 573

### Site Preparation

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

Table : 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 |

## Resources

### Facility Specifics

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

Table : Facility-Specific Features

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

### Hardware

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

Table : 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.

### Software

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

Table : 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 |
| Fully patched Integrated Billing package within VistA | N/A | 2.0 | 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.

### Communications

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

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

The Release Management team will deploy the path PRCA\*4.5\*424, which is tracked nationally for all VAMCs in the National Patch Module (NPM) in Forum. 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 into the VistA production at each site. A report can also be run to identify which sites have not currently installed the patch into their VistA production system. Therefore, this information does not need to be manually tracked in the chart below.

Table : 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 |

# Installation

## Pre-installation and System Requirements

Patch PRCA\*4.5\*424 is installable on a fully patched M(UMPS) VistA system and operates on the top of the VistA environment provided by the VistA infrastructure packages. The latter provides utilities that communicate with the underlying operating system and hardware, thereby providing each VistA package independence from variations in hardware and operating system.

## Platform Installation and Preparation

Refer to the PRCA\*4.5\*424 documentation on the NPM in Forum for the detailed installation instructions. These instructions include any pre-installation steps if applicable.

## Download and Extract Files

Refer to the PRCA\*4.5\*424 documentation on the NPM to find the location of related documentation that can be downloaded. PRCA\*4.5\*424 will be transmitted via a PackMan message and can be pulled from the NPM*.* It is not a host file, and therefore does not need to be downloaded separately.

## Database Creation

Patch PRCA\*4.5\*424 modifies the VistA database. All changes can be found on the NPM documentation for this patch.

## Installation Scripts

No installation scripts are needed for patch PRCA\*4.5\*424 installation.

## Cron Scripts

No Cron scripts are needed for patch PRCA\*4.5\*424 installation.

## Access Requirements and Skills Needed for the Installation

The following staff will need access to the PackMan message containing the PRCA\*4.5\*424 patch or to Forum’s NPM for downloading the nationally released PRCA\*4.5\*424 patch. The software is to be installed by the site’s or region’s designated: VA OI&T IT OPERATIONS SERVICE, Enterprise Service Lines, VistA ApplicationsDivision[[1]](#footnote-1).

## Installation Procedure

Refer to PRCA\*4.5\*424 on the NPM for the detailed installation instructions.

## Installation Verification Procedure

Refer to the PRCA\*4.5\*424 documentation on the NPM for detailed installation instructions. These instructions include any post installation steps if applicable.

## System Configuration

No system configuration changes are required for this patch.

## Database Tuning

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

# Back-out Procedure

Back-out pertains to a return to the last known good operational state of the software and appropriate platform settings.

## Back-out Strategy

A decision to back out could be made during Site Mirror Testing, during Site Production Testing, or after National Release to the field (VAMCs). The best strategy decision is dependent on the stage during which the decision is made.

### Mirror Testing or Site Production Testing

If a decision to back out is made during Mirror Testing or Site Production Testing, a new version of the patch can be used to restore the build components to their pre-patch condition.

### After National Release but During the Designated Support Period

If a decision to back out is made after national release and within the designated support period, a new patch will be entered into the NPM in Forum and will go through all the necessary milestone reviews, etc. as a patch for a patch. This patch could be defined as an emergency patch, and it could be used to address specific issues pertaining to the original patch or it could be used to restore the build components to their original pre-patch condition.

### After National Release and Warranty Period

After the 90-day warranty period, the VistA Maintenance Program will produce the new patch, either to correct the defective components or restore the build components to their original pre-patch condition.

## Back-out Considerations

It is necessary to determine if a wholesale back-out of the patch PRCA\*4.5\*424 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\*424, this patch should be assigned status of “Entered in Error” in Forum’s NPM.

### Load Testing

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

### User Acceptance Testing

1. Auto-Posting of ERAs has been enhanced to allow for the auto-posting of ERAs where the total amount paid is 0 (zero). This includes the following enhancements:
   1. An additional site Parameter was added to the EDI Lockbox Parameters [RCDPE EDI LOCKBOX PARAMETERS] to allow for the enabling / disabling of Zero Pay ERAs.
   2. The EDI Lockbox Parameters Report [RCDPE SITE PARAMETER REPORT] was modified to show the value of the newly added parameter.
   3. The EDI Lockbox Parameters Audit Report [RCDPE PARAMETER AUDIT REPORT] was modified to include the audit trail for the newly added parameter.
   4. The auto-posting process was modified to auto-post zero pay ERAs if the newly added site parameter is set to 'YES'.
   5. When auto-posting of zero pay ERAs is enabled, a background job with be initiated. This background job will auto-post eligible historical zero payment ERAs.
2. Enhancements were made to the EFT Transaction Audit Report [RCDPE EFT TRANSACTION AUD REP] as follows:
   1. The ability to search by FMS document number was added to the detail report.
   2. For Debit EFTs, the total on amount of the EFT will now show as negative.
3. When looking at data exceptions in the EDI Lockbox 3rd Party Exceptions [RCDPE EXCEPTION PROCESSING] option, the date of service has been added to the display.
4. A bug was fixed, whereby matching of the ECME Number to a pharmacy claim would fail if the transaction contained no service line data.
5. The ERA Worklist [RCDPE EDI LOCKBOX WORKLIST] will now allow filtering of the list for auto-posted, zero payment ERAs.
6. Reversed a change from a previous patch that prevented processing of check type receipts with no deposit ticket.

## Back-out Criteria

It may be decided to back out this patch if the project is canceled, the requested changes implemented by patch PRCA\*4.5\*424 are no longer desired by VA OIT and the ePayments eBusiness team, or the patch produces catastrophic problems.

## Back-out Risks

Since the ePayments 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 Financial Services Center (FSC) and the Health Care Clearing House (HCCH) to determine risk.

## 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 Services Portfolio (HSP) Application Coordinator, developers (both project and Tier 3 HSP), and if appropriate, external trading partners such as the VA FSC or Change Healthcare.

## Back-out Procedure

The back-out plan for VistA applications is complex and not a “one size fits all” solution. The general strategy for a VistA back-out 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.

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 whom to contact, they may log a ticket or contact Health Services Portfolio.

Patch PRCA\*4.5\*424 contains the following build components:

* Routines
* Data Dictionaries
* List Manager Templates

While the VistA KIDS installation procedure allows the installer to back up the modified routines using the ‘Backup a Transport Global’ action, the back-out procedure for global, data dictionary, and other VistA components is more complex and requires issuance of a follow-up patch to ensure all components are properly removed, restored, or both. All software components (routines and other items) must be restored to their previous state at the same time and in conjunction with the restoration of the data.

Please contact the EPMO team for assistance since this installed patch contains components in addition to routines.

## 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 acts as expected, as defined together with the team the site contacted in section 5.5.

# Rollback Procedure

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

## Rollback Considerations

Not applicable.

## Rollback Criteria

Not applicable.

## Rollback Risks

Not applicable.

## Authority for Rollback

Not applicable.

## Rollback Procedure

Not applicable.

## Rollback Verification Procedure

Not applicable.

1. “Enterprise service lines, VAD” for short. Formerly known as the Information Resources Management (IRM) or IT support. [↑](#footnote-ref-1)