

**Medical Care Collection Fund (MCCF)
Electronic Data Interchange (EDI)
Transaction Applications Suite (TAS)**

ePayments Enhancement Patch

ePayments PRCA*4.5*371

Version 1.0

**Deployment, Installation, Back-out, and Rollback
Guide**



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Revision History

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January 2023	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.

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1 Introduction

This document describes how to deploy and install the PRCA*4.5*371 patch, as well as 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 the PRCA*4.5*371 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. 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*371:

- PRCA*4.5*238
- PRCA*4.5*241
- PRCA*4.5*302
- PRCA*4.5*367
- PRCA*4.5*375
- PRCA*4.5*380
- PRCA*4.5*381

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 OI&T, VA OI&T Health Product Support, & 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

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
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 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	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 eBusiness team	Installations	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 are scheduled to run for 30 days, as depicted in the master deployment schedule¹.

¹ Project schedule (right click and select open hyperlink to access) [MCCF TAS IMS Schedule.zip](#).

3.2 Site Readiness Assessment

This section discusses the locations that will receive the deployment of patch PRCA*4.5*371.

3.2.1 Deployment Topology (Targeted Architecture)

This patch PRCA*4.5*371 is to be nationally released to all VAMCs.

3.2.2 Site Information (Locations, Deployment Recipients)

The test sites for IOC testing are:

- Wilkes-Barre VAMC (Wilkes-Barre, PA)
- Boston HCS VAMC (Boston, MA)
- Wilmington VAMC (Wilmington, DE)

Upon national release, all VAMCs are expected to install this patch by the compliance date.

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
PRCA*4.5*238	N/A	Nationally released version	N/A	N/A	N/A
PRCA*4.5*241	N/A	Nationally released version	N/A	N/A	N/A
PRCA*4.5*302	N/A	Nationally released version	N/A	N/A	N/A
PRCA*4.5*367	N/A	Nationally released version	N/A	N/A	N/A
PRCA*4.5*375	N/A	Nationally released version	N/A	N/A	N/A
PRCA*4.5*377	N/A	Nationally released version	N/A	N/A	N/A
PRCA*4.5*380	N/A	Nationally released version	N/A	N/A	N/A
PRCA*4.5*381	N/A	Nationally released version	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 ePayments eBusiness 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*371, 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 the patch was installed in the VistA production at each site, and by whom. A report can also be run to identify which sites have not installed the patch in their VistA production system as of that moment in time.

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*371, a patch to the existing VistA Accounts Receivable 4.5 package, 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 Accounts Receivable independence from variations in hardware and operating system.

4.2 Platform Installation and Preparation

Refer to PRCA*4.5*371 documentation on the NPM on Forum for the detailed installation instructions. These instructions would include any pre-installation steps if applicable.

4.3 Download and Extract Files

Refer to the PRCA*4.5*371 documentation on the NPM to find the location of related documentation that can be downloaded. PRCA*4.5*371 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.

4.4 Database Creation

This patch does NOT introduce a new database. It uses the existing VistA database.

4.5 Installation Scripts

No installation scripts are needed for patch PRCA*4.5*371 installation.

4.6 Cron Scripts

No Cron scripts are needed for patch PRCA*4.5*371 installation.

4.7 Access Requirements and Skills Needed for the Installation

The following staff will need access to the PackMan message containing the PRCA*4.5*371 patch or to Forum's NPM for downloading the nationally released PRCA*4.5*371 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 Applications Division².

4.8 Installation Procedure

Refer to PRCA*4.5*371 on the NPM for the detailed installation instructions.

4.9 Installation Verification Procedure

Refer to PRCA*4.5*371 on the NPM for the detailed installation instructions. These instructions would include any post installation steps if applicable.

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 good operational state of the software and appropriate 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

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

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 NPM on Forum and go through all the necessary milestone reviews etc., as a patch for a patch. It is up to VA Office of Information and Technology (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*371 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*371, 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 would be 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. An option has been added to the Unapplied EFT Deposits Report [RCDPE UNAPPLIED EFT DEP REPORT] to allow a user to choose "Grand Totals" only. This will print the total amount of unapplied deposits in their VistA system (known as the 8NZZ account).
2. To allow quick access to recently changed electronic remittance advice (ERA) and electronic funds transfer (EFT) data, several date/time fields, indexes, and cross references were added to Vista to facilitate reporting in future releases.

New date/time fields were added to the top-level ELECTRONIC REMITTANCE ADVICE file (#344.4, 9) and EDI THIRD PARTY EFT DETAIL file (#344.31, 9). Whole file cross references ('MCCF') were created for each file. To allow Vista access to only changed detail lines within an ERA, a date/time field was added to the ERA DETAIL sub-file (#344.41, 9.02), along with an associated sub-file cross reference ('MCCF'). Updates to the #344.41 sub-file will in-turn update the whole file 'MCCF' cross references. A date/time field was also added to the AR BATCH PAYMENT file (#344, 9) to track receipt data changes.

Additionally, MUMPS record type cross references were created to update the MCCF date/time fields in the #344.4, #344.41, #344.31, and #344 files if any of the report data fields within these files change.

3. Widened the Selection Number column of the Identify Payers [RCDPE PAYER IDENTIFY] menu option of the EDI Lockbox (ePayments) [RCDPE EDI LOCBOX MENU] so it can accurately show selection numbers for payers when the total number of payers is in the thousands.
4. The EFT Transaction Audit Report [RCDPE EFT TRANSACTION AUD REP] (ETA) on the Audit Reports [RCDPE EDI LOCKBOX AUDIT RPRTS] sub-menu of the EDI Lockbox (ePayments) Reports menu [RCDPE EDI LOCKBOX REPORTS MENU] was modified. This report can be run in either summary or detail mode. When run in detail mode, the user can choose an EFT to display by either Deposit Number, Deposit Date, Receipt Number, or Trace Number. Prior to this enhancement the report was exited after the EFT was displayed. Now the user will be returned to the Deposit Number, Deposit Date, Receipt Number, or Trace Number prompt so that they can select another EFT.
5. The ERA Unmatched Aging Report [RCDPE ERA AGING REPORT] (ERA) was modified to remove all Electronic Explanation of Benefits (EEOB) detail lines from being displayed so that unmatched Electronic Remittance Advice (ERAs) can be researched more easily.
6. Modified the Remove ERA from Active Worklist Audit Report [RCDPE REMOVED ERA AUDIT] (REMR) to include a column for Trace number.
7. Modified Receipt Processing [RCDP RECEIPT PROCESSING] (RP) to prevent blank spaces in a receipt number when either creating a new receipt or using the Edit Receipt action when editing an existing receipt.
8. Fixed an issue that resulted in one Electronic Fund Transfer (EFT) being matched to multiple receipts. The issued occurred when the user enters the Receipt Processing [RCDP RECEIPT PROCESSING] (RP) menu option to edit an open receipt with a payment type of EDI LOCKBOX and performs the following steps:
 - a. The user selects the Edit Receipt action and switches the EFT attached to the receipt.
 - b. The user selects a different receipt to edit without exiting all the way back to the menu option prompt.
 - c. When the second receipt, having no deposit number, is processed, the following occurs:
 - The EFT from the first receipt is associated with the second receipt.
 - The EFT that was associated with the second receipt is unmatched.
9. Fixed an issue that caused the system to erroneously prompt the user for a deposit number when a receipt with a payment type of EDI LOCKBOX was processed in Receipt Processing [RCDP RECEIPT PROCESSING] (RP) using the Process Receipt action.
10. Fixed an issue for CHAMPVA receipts that was preventing users from entering a receipt total that was greater than 99999.99 dollars.

5.3 Back-out Criteria

Back-out Criteria (any of the following):

- The project is canceled
- The requested changes implemented by PRCA*4.5*371 are no longer desired by VA OIT and the eBusiness eInsurance sub-team
- The patch produces catastrophic problems

5.4 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), the Health Care Clearing House (HCCH), the VA 3rd Party Lockbox bank, and the Financial Management System (FMS) 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 Services Portfolio (HSP) Application Coordinator, developers (both project and HSP Tier 3 Sustainment Admin Team), and if appropriate, external trading partners such as the VA Financial Service Center (FSC), the Health Care Clearing House (HCCH), VA 3rd Party Lockbox bank, and the FMS to determine the appropriate course of action. ePayments is tightly integrated with these external partners and a back-out of the patch should not be a standalone decision.

5.6 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 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 the situation via a new software version. If the site is unsure who to contact they may log a ticket of contact Health Product Line Community Care IB AR Team. Please contact the EPMO development team for assistance since this installed patch contains components in addition to routines.

The PRCA*4.5*371 patch contains the following build components.

- Data Dictionary Changes
- Routines

- Modifications to the following files:
 - AR BATCH PAYMENT File [#344]
 - ELECTRONIC REMITTANCE ADVICE File [#344.4]
 - EDI THIRD PARTY EFT DETAL (#344.31)
 - EDI LOCKBOX EOB WORKLIST (#344.49)
 - RCDPE AUTO-PAY EXCLUSION (#344.6)
 - AR FMS DOCUMENTS (#347)
 - ACCOUNTS RECEIVABLE (#430)
 - AR TRANSACTION (#433)

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 complexity of this patch, it is not recommended for back-out, and a restore from a backup of the Transport Global should not be attempted. 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 contains components in addition to routines.

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. Patch PRCA*4.5*371 does impact the data in the Accounts Receivable package. Therefore, to roll back the patches, one will need to install a new patch to roll back the database changes and restore the system back to its prior state. In the case where a rollback is needed, refer to the Back-out procedures detailed elsewhere within 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.