

**Medical Care Collection Fund (MCCF) Electronic Data  
Interchange (EDI) Transaction Applications Suite  
(TAS) ePayments Build 1**

**ePayments PRCA\*4.5\*318**

**Version 3.0**

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



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**Department of Veterans Affairs  
Office of Information and Technology (OI&T)**

## Revision History

Date	Version	Description	Author
May 2017	1.0	Initial Version	REDACTED
May 22, 2017	2.0	Incorporated Feedback from eBusiness. Section 5.2.2 updated US30 acceptance criteria.	REDACTED
September 2017	3.0	Updating document for IOC exit which will occur in October 2017.	REDACTED

## 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\*318 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\*318 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\*318:

- PRCA\*4.5\*301
- PRCA\*4.5\*303
- PRCA\*4.5\*304
- PRCA\*4.5\*317

## 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**

<b>ID</b>	<b>Team</b>	<b>Phase / Role</b>	<b>Tasks</b>	<b>Project Phase (See Schedule)</b>
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
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
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<b>ID</b>	<b>Team</b>	<b>Phase / Role</b>	<b>Tasks</b>	<b>Project Phase (See Schedule)</b>
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 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\*318 deployment.

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

This patch PRCA\*4.5\*318 is to be nationally released to all VAMCs.

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<sup>1</sup> Project schedule (right click and select open hyperlink to access) REDACTED



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

The test sites for IOC testing are:

- Maryland HCS (#512) (aka Baltimore)
- Washington D.C. (#688)
- Pittsburgh HCS (#646)
- Togus, ME (#402)

- These sites will not be defined here until the sites have signed the Memorandum of Understanding (MOUs) and testing has completed as sometimes a site has to stop testing prior to the end of IOC.

Upon national release all VAMCs are expected to install this patch within 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*304	N/A	Nationally released version	N/A	N/A	N/A
PRCA*4.5*303	N/A	Nationally released version	N/A	N/A	N/A
PRCA*4.5*304	N/A	Nationally released version	N/A	N/A	N/A
PRCA*4.5*317	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\*318, which is tracked in the 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**

<b>Activity</b>	<b>Day</b>	<b>Time</b>	<b>Individual who completed task</b>
Deploy	N/A	N/A	N/A
Install	N/A	N/A	N/A

## **4 Installation**

### **4.1 Pre-installation and System Requirements**

PRCA\*4.5\*318, 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 which 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\*318 documentation on the National Patch Module (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 PRCA\*4.5\*318 documentation on the NPM to find the location of related documentation that can be downloaded. PRCA\*4.5\*318 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**

PRCA\*4.5\*318 modifies the VistA database. All changes can be found on the NPM documentation for this patch.

### **4.5 Installation Scripts**

No installation scripts are needed for PRCA\*4.5\*318 installation.

### **4.6 Cron Scripts**

No Cron scripts are needed for PRCA\*4.5\*318 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\*318 patch or to Forum's NPM for downloading the nationally released PRCA\*4.5\*318 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 Division<sup>2</sup>.

## **4.8 Installation Procedure**

Refer to PRCA\*4.5\*318 documentation on the NPM for the detailed installation instructions.

## **4.9 Installation Verification Procedure**

Refer to PRCA\*4.5\*318 documentation 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. A decision to back out could be made during site Mirror Testing, Site Production Testing or after National Release to the field (VAMCs). The best strategy decision is dependent on the stage of testing 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 will be resubmitted to the site for testing. If the patch produces catastrophic problems, a new version of the patch can be used to restore the build components to their pre-patch condition.

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

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 OI&T 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\*318 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 patch PRCA\*4.5\*318, 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

#### US30 – ERAs and EFT must balance, in order to auto-post (USPY-7)

- The ERA/EFT must not auto-post if the ERA total amount does not equal the sum of all the EEOBs listed on the ERA.
- The ERA/EFT must not auto-post if the ERA amount does not equal the EFT amount.
- The EFT MATCH STATUS on the worklist must display either “UNMATCHED – UNBALANCED” or “MATCHED - UNBALANCED” (which is truncated slightly) for each ERA entry that does not equal the sum of all the EEOBs listed on the ERA.
- The ‘NOT MATCHED’ or ‘BOTH’ ERA-EFT STATUS filter option must display all ERAs that are UNMATCHED whether or not they are UNBALANCED.
- The nightly process must reject from the auto-post queue and put the ERA on the worklist if the ERA line items do not balance and the ERA and EFT do not match.

#### US55 - Auto-Posted Receipt Report (USPY-29)

- The report must contain all of the following filters:
  - Division
  - Auto Post Date or ERA Date
  - Insurance Company (Payer)
  - ERAs to be displayed:
    - Posted Receipts/Complete

- Missing Receipts
  - Both
- The report must contain the following sort if user selected “both” to the ERA to display prompt:
  - Date
  - Missing Receipts
- The report must display the following data elements:
  - Payer
  - Date Received
  - Auto Post Date
  - Receipt
  - User
  - Trace Number
  - Amount of Posted Payment
- The report must display the following totals:
  - ERA Total
  - Receipt Total
- The report must be exportable to Excel.
- The report must be viewable in ListMan format.
- Report name and option must be listed as AUTO-POSTED RECEIPT REPORT.
- The report option must be listed under the ePayments EDI Lockbox Report Menu.
- The report synonym (shortcut) must be APR.
- The report must appear on the Agent Cashier Menu.

US56 - Clerk needs auto-decrease report to reflect all CARCs associated with the decrease (USPY-30)

- The auto-decrease report must reflect all claim and claim line level CARCs associated with each decrease where the CARC meet the following criteria:
  - The CARC is on the site parameter list and
  - The CARC is an amount that is greater than zero and
  - The CARC is active as of the date the claim was auto posted, and it doesn't exceed max adjustment code
- The CARC REASON column on the report will only display 30 characters, if the REASON code description is longer than 30 characters then display only 27 characters followed by “...” to indicate the Reason Code contains more characters (up to 190).
- The Auto-decrease report must show the sort selections in the header of the report (Claim, Payer or Patient Name AND First to Last or Last to First).
- The report must only show claims that have at least one CARC used for auto decrease.
- The report must be viewable in ListMan format and displays the CARC detail.
- The report must be exportable to excel and contain the CARC detail.

US171 – List Manager Revamp for Separation of Duties

- The system must allow all authorized users access to the following actions on the ERA Worklist:
  - Select ERA
  - Sort List



- View/Print ERA
- Change View
- Manual Match
- The system must allow only those users who hold the Payment Posting Key (RCDPEPP) to select the ‘Mark for Auto Post’ action on the ERA Worklist.
- The system must allow all authorized users access to the following actions on the ERA Worklist Scratch Pad:
  - Split/Edit A Line
  - Distribute Adj Amts
  - Research Menu
  - Review Line
  - Change View
  - View/Print ERA
- The system must allow only those users who hold the Payment Posting Key (RCDPEPP) access to the following actions on the ERA Worklist Scratch Pad:
  - Refresh Scratchpad
  - Look At Receipt
  - Verify
  - Mark for Auto Post
  - Receipt Processing
- The system must allow all authorized users of the system access to the following actions on the ERA Worklist Scratch Pad Research Menu:
  - Full Acct Prof
  - TPJI
  - Bill Comment Log
  - View/Print EEOB
  - Review Line
  - Scratch Pad Menu/Exit
- The system must allow only those users who hold the Accounts Receivable Key (RCDPEAR) access to the following actions on the ERA Worklist Scratch Pad Research:
  - Admin Cost Adj
  - Re-establish Bill
- The system must allow all authorized users access to the following actions on the APAR Scratch Pad:
  - Claim Comment
  - View/Print EEOB
  - View/Print ERA
  - Research Menu
  - Review Line
- The system must allow only those users who hold the Payment Posting Key (RCDPEPP) access to the following actions on the APAR Scratch Pad:
  - Split/Edit a Line
  - Mark for Auto Post
  - Refresh Scratch Pad
  - Verify

- The system must allow all authorized users of the system access to the following actions on the APAR Scratch Pad Research Menu:
  - Full Acct Prof
  - TPJI
  - Bill Comment Log
  - View/Print EEOB
  - Review Line
  - Scratch Pad Menu/Exit
- The system must allow only those users who hold the Accounts Receivable Key (RCDPEAR) access to the following actions on the APAR Scratch Pad Research submenu:
  - Admin Cost Adj
  - Re-establish Bill

US172 - Enhance Daily Activity Report to show CR and TR numbers

- The EFT Daily Activity report must display the associated CR for each EFT.
- The EFT Daily Activity report must display all TRs associated with each EFT.
- The ListMan view must contain the CR and TR data.

US181 - Remove VistA Supervisor Key from Diagnostic Measure and Trend Reports

- The system must allow Revenue Management staff access to the EDI Diagnostic Measures Reports menu **without** the use of the PRCFA SUPERVISOR security key.
- The use of the PRCFA SUPERVISOR security key will be required for access to the following options:
  - Manually Start DM Extract [RCDPE NR MANUAL START]
  - Manually Transmit DM Extract [RCDPE NR MANUAL TRANSMIT]
  - Disable-Enable DM Background Job/Reports [RCDPE NR EXTRACT MENU]
- The following options must be accessible to Revenue Management staff **without** the use of the PRCFA SUPERVISOR security key:
  - EDI VOLUME STATISTICS Report [RCDPE EDI VOLUME STATISTICS]
  - EFT/ERA TRENDING Report [RCDPE EFT-ERA TRENDING REPORT]
  - EDI Diagnostic Measures Extracts Menu [RCDPE NR EXTRACT MENU]
  - View/Print Extracted Reports [RCDPE NR VIEW/PRINT EXTRACTS]

US189 - Expand payer name to 60 characters on EFT reports

- The EFT Daily Activity report must have the capability to display up to 60 characters for the payer name.
- The EFT Unmatched Aging report must have the capability to display up to 60 characters for the payer name.
- The Unapplied EFT Deposits report must have the capability to display up to 60 characters for the payer name.

US 190 – APAR to Suspense Errors

- The Scratchpad must accept the word “Suspense” independent of capitalization when entered by a clerk.

- The APAR must accept the word “Suspense” independent of capitalization when entered by a clerk.

#### US267 - Change auto-post site parameter to eliminate crashing when attempting to send a mailman message to a mail group for notification of change

- System must not ‘crash’ and ‘boot’ the user from VistA when the supervisor changes the auto-post site parameter and the auto-notification email is sent.

### **5.3 Back-Out Criteria**

The project is canceled or the requested changes implemented by PRCA\*4.5\*318 are no longer desired by VA OI&T and the ePayments eBusiness team, or 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**

The order would come jointly from: release coordinator (product support), portfolio director and health product support. This should be done in consultation with the development team and external trading partners such as FSC, the HCCH, VA 3<sup>rd</sup> 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 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. If not, the site should contact the Enterprise Program Management Office (EPMO) team directly for specific solutions to their unique problems.

The PRCA\*4.5\*318 patch contains the following build components.

- Routines
- Data Dictionary Changes
- Options
- Protocols
- Security Keys

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, 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 and/or restored. 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.

## **5.7 Back-out Verification Procedure**

Successful back-out is confirmed by verification that the back-out patch was successfully installed.

## **6 Rollback Procedure**

Rollback pertains to data. Patch PRCA\*4.5\*318 does impact the data in the Accounts Receivable package. Therefore, to roll back the patch 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.