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

ePharmacy Build 25

Electronic Claims Management Engine BPS\*1.0\*37   
Outpatient Pharmacy PSO\*7.0\*704   
CMOP PSX\*2.0\*95

Deployment, Installation, Back-out, and Rollback Guide



July 2024

Department of Veterans Affairs

Office of Information and Technology (OIT)

Revision History

| Date | Version | Description | Author |
| --- | --- | --- | --- |
| July 2024 | 1.0 | Initial Version | EDI TAS ePharmacy Development Team |

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.

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# Introduction

This document describes how to deploy and install the multi-build BPS PSO PSX BUNDLE 25.0 (includes BPS\*1.0\*37, PSO\*7.0\*704, and PSX\*2.0\*95) 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 the multi-build BPS PSO PSX BUNDLE 25.0 (includes BPS\*1.0\*37, PSO\*7.0\*704, and PSX\*2.0\*95) 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

BPS\*1\*23, BPS\*1\*28, and BPS\*1\*33 must be installed BEFORE BPS\*1\*37.

PSO\*7\*702 and PSO\*7\*703 must be installed BEFORE PSO\*7\*704.

PSX\*2\*93 must be installed BEFORE PSX\*2\*95.

## 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 | N/A | 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 (SAIC) | 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 the day after national release.

## Site Readiness Assessment

This section discusses the locations that will receive the deployment of the multi-build BPS PSO PSX BUNDLE 25.0 (includes BPS\*1.0\*37, PSO\*7.0\*704, and PSX\*2.0\*95).

### Deployment Topology (Targeted Architecture)

This multi-build BPS PSO PSX BUNDLE 25.0 (includes BPS\*1.0\*37, PSO\*7.0\*704, and PSX\*2.0\*95) is to be nationally released to all VAMCs.

### Site Information (Locations, Deployment Recipients)

The IOC sites are:

* Birmingham VAMC (521 – Birmingham, AL)
* Kansas City VAMC (589 – Kansas City, MO)
* Richmond VA Medical Center (652 – Richmond, VA)

### 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 1 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 Electronic Claims Management Engine package within VistA | N/A | 1.0 | N/A | N/A | N/A |
| Fully patched Outpatient Pharmacy package within VistA | N/A | 7.0 | N/A | N/A | N/A |
| Fully patched CMOP package within VistA | N/A | 2.0 | N/A | N/A | N/A |

Please see the Roles and Responsibilities Table 1 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, developers, and product support personnel.

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

The Release Management team will deploy the multi-build BPS PSO PSX BUNDLE 25.0, 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

Multi-build BPS PSO PSX BUNDLE 25.0 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 BPS\*1.0\*37 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 BPS\*1.0\*37, PSO\*7.0\*704, and PSX\*2.0\*95 documentation on the NPM to find related documentation that can be downloaded. The patch description of each patch will be transmitted as a MailMan message from the NPM. These messages can also be pulled from the NPM. The patches themselves are bundled together into the multi-build BPS PSO PSX BUNDLE 25.0. The host file containing these patches must be downloaded separately. The file name is BPS\_1\_37\_PSO\_PSX.KID and it can be found on the [VistA software download site](https://download.vista.med.va.gov/index.html/SOFTWARE/).

## Database Creation

Multi-build BPS PSO PSX BUNDLE 25.0 modifies the VistA database. All changes can be found on the NPM documentation for this patch.

## Installation Scripts

No installation scripts are needed for multi-build BPS PSO PSX BUNDLE 25.0 installation.

## Cron Scripts

No Cron scripts are needed for multi-build BPS PSO PSX BUNDLE 25.0 installation.

## Access Requirements and Skills Needed for the Installation

Staff performing the installation of this multi-build will need access to FORUM’s NPM to view all patch descriptions. Staff will also need access and ability to download the host file from the VistA software download site. The software is to be installed by each site’s or region’s designated VA OIT IT Operations Service, Enterprise Service Lines, VistA Applications Division[[1]](#footnote-1).

## Installation Procedure

Detailed instructions for installing the multi-build BPS PSO PSX BUNDLE 25.0 (includes BPS\*1.0\*37, PSO\*7.0\*704, and PSX\*2.0\*95) can be found on the patch description for BPS\*1.0\*37, which can be found on the NPM. Installing the multi-build BPS PSO PSX BUNDLE 25.0 will install all component patches (BPS\*1.0\*37, PSO\*7.0\*704, and PSX\*2.0\*95).

## Installation Verification Procedure

Refer to the BPS\*1.0\*37 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

Changes implemented with multi-build BPS PSO PSX BUNDLE 25.0 can be backed out in their entirety or on an enhancement-by-enhancement basis. Either could be accomplished via a new version of multi-build BPS PSO PSX BUNDLE 25.0 if before national release or a new multi-build if after national release.

### 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

Below are the acceptance criteria for each story included in BPS PSO PSX BUNDLE 25.0.

**EPHAR-90**

* Reject Codes has been added/updated in file BPS NCPDP REJECT CODES to reflect changes.
* When patient type is Veteran new Reject Code can be:
  + received in a claim response and stored in VistA with the claim response.
  + displayed on the ECME User screen.
  + displayed on the LOG Print Claim Log (ECME User Screen and VER).
* When patient type is Veteran new Reject Code can be:
  + transferred automatically or manually by the OPECC
  + displayed in Reject Resolution Required Codes (RRR)
* When patient type is TRICARE or CHAMPVA new Reject Code can be:
  + received in a claim response and stored in VistA with the claim response.
  + displayed on the ECME User screen.
  + displayed on the Pharmacists’ Worklist.
  + displayed on the Pharmacists’ View/Process (VP).
  + displayed on the Reject Notification Screen.
  + displayed on the Reject Information Screen.
  + displayed on the Rejected Claims Report and Closed Claims Report.
  + displayed on the LOG Print Claim Log (ECME User Screen and VER).

**EPHAR-3009**

* The “Sex” field will be renamed to “Birth Sex”.
* The “Self-Identified Gender” field will be added after the “Birth Sex” field and both fields will appear on a new line below the Patient Name and DOB.
* The “Patient Gender Code” field will display below the ECME Pharmacy field.
* If the Patient file Self-Identified Gender field is not populated the label on the Claim Log will appear with no value.
* The Claim Log will display the text description of the Patient Gender Code transmitted on the ePharmacy claim.
* ePharmacy claim transmission will use the Patient file Self-Identified Gender field, if populated. If the Self-Identified Gender field is not populated (Null), ePharmacy will use the Patient file Sex field. (Regression testing)

**EPHAR-3013**

* If the Self-Identified Gender is not populated in the Patient file, the Self-Identified field will appear with a null value in the screens listed above.
* ePharmacy screens listed above display both Birth Sex and Self-Identified Gender fields. (Previously only displayed Sex.)
* The NCPDP Patient Gender Code field (file# 9002313.01, field# 305) should remain as it currently is on the CRI screen. (Regression)
* The value in the Self-Identified field will be spelled out. For example, “Transgender Man”

**EPHAR-3174**

* When a claim rejects as Drug Not Billable and the Pharmacist resolves the root cause of the reject and the OPECC resubmits from ECME User Screen, and the claim is returned as payable, the claim appears on the pharmacist WL and the claim does not include the additional message of “Not ECME Billable: xxxxxx”.
* When a claim rejects as Drug Not Billable and the Pharmacist resolves the root cause of the reject and the OPECC resubmits from ECME User Screen, and the claim is returned as payable the claim appears on ECME User Screen as Payable. (regression)
* When a claim rejects for an eC/eT reject and the OPECC resolves the root cause of the reject and resubmits from the ECME User Screen, and the claim is returned as payable, the claim appears on the pharmacist WL and the claim does not include the additional message of “Not ECME Billable: xxxxxx”.
* When a claim rejects for an eC/eT reject and the OPECC resolves the root cause of the reject and resubmits from the ECME User Screen, and the claim is returned as payable the claim appears on ECME User Screen as Payable. (regression)
* When a claim rejects as Drug Not Billable and the Pharmacist resolves the root cause of the reject and the OPECC resubmits from ECME User Screen, and the claim is returned as payable, the claim appears on the Reject Information Screen as \*\* E PAYABLE \*\* and does not include the additional message of “Not ECME Billable: xxxxxx”.
* When a claim rejects for an eC/eT reject and the OPECC resolves the root cause of the reject and resubmits from the ECME User Screen, and the claim is returned as payable, the claim appears on the Reject Information Screen as \*\* E PAYABLE \*\* and does not include the additional message of “Not ECME Billable: xxxxxx”.
* When a claim rejects as Drug Not Billable and the Pharmacist resolves the root cause of the reject and the OPECC resubmits from ECME User Screen, and the claim is returned as payable, the claim appears on the View/Process Screen and the claim does not include the additional message of “Not ECME Billable: xxxxxx”.
* When a claim rejects for an eC/eT reject and the OPECC resolves the root cause of the reject and resubmits from the ECME User Screen, and the claim is returned as payable, the claim appears on the View/Process Screen and the claim does not include the additional message of “Not ECME Billable: xxxxxx”.

**EPHAR-3346**

* The Patient Gender Code on an ePharmacy claim is the same on a resubmission as it was when the claim was originally submitted, when the value has not been changed using RED action. Regression
* If the user performs the RED action one or more times, any additional resubmissions will use the Patient Gender Code from the most recent RED action.

## Back-out Criteria

It may be decided to back out this patch if the project is canceled, the requested changes implemented by multi-build BPS PSO PSX BUNDLE 25.0 are no longer desired by VA OIT and the ePharmacy eBusiness team, or the patch produces catastrophic problems.

## Back-out Risks

Since the ePharmacy 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.

Multi-build BPS PSO PSX BUNDLE 25.0 contains the following build components:

* Routines
* Data Dictionaries
* Screen 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 Software Product Management (SPM) 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)