Medical Care Collection Fund (MCCF)   
Electronic Data Interchange (EDI)   
Transaction Applications Suite (TAS)   
ePharmacy Build 18

Electronic Claims Management Engine BPS\*1.0\*30  
Outpatient Pharmacy PSO\*7.0\*562  
Integrated Billing IB\*2.0\*649  
CMOP PSX\*2.0\*92  
Pharmacy Data Management PSS\*1.0\*252

Deployment, Installation, Back-out, and Rollback Guide



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Revision History

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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 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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# Introduction

This document describes how to deploy and install the multi-build BPS PSO IB PSX PSS BUNDLE 18.0 (which includes BPS\*1.0\*30, PSO\*7.0\*562, IB\*2.0\*649, PSX\*2.0\*92, and PSS\*1.0\*252) 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 IB PSX PSS BUNDLE 18.0 (which includes BPS\*1.0\*30, PSO\*7.0\*562, IB\*2.0\*649, PSX\*2.0\*92, and PSS\*1.0\*252) 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\*24 must be installed BEFORE BPS\*1\*30.

PSO\*7\*457, PSO\*7\*488, PSO\*7\*514, PSO\*7\*532, PSO\*7\*544, PSO\*7\*549, PSO\*7\*551, PSO\*7\*561, PSO\*7\*570, PSO\*7\*574, PSO\*7\*604, PSO\*7\*624, PSO\*7\*627, and PSO\*7\*630 must be installed BEFORE PSO\*7\*562.

IB\*2\*516 and IB\*2\*648 must be installed BEFORE BPS\*2\*649.

PSX\*2\*92 must be installed BEFORE PSX\*2\*92.

## 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 & 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 & 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 the multi-build BPS PSO IB PSX PSS BUNDLE 18.0 (which includes BPS\*1.0\*30, PSO\*7.0\*562, IB\*2.0\*649, PSX\*2.0\*92, and PSS\*1.0\*252).

### Deployment Topology (Targeted Architecture)

This multi-build BPS PSO IB PSX PSS BUNDLE 18.0 (which includes BPS\*1.0\*30, PSO\*7.0\*562, IB\*2.0\*649, PSX\*2.0\*92, and PSS\*1.0\*252) is to be nationally released to all VAMCs.

### Site Information (Locations, Deployment Recipients)

The IOC sites are:

* Birmingham
* Eastern Kansas
* Lexington
* Madison
* Richmond

### 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 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 Integrated Billing package within VistA | N/A | 2.0 | N/A | N/A | N/A |
| Fully patched CMOP package within VistA | N/A | 2.0 | N/A | N/A | N/A |
| Fully patched Pharmacy Data Management package within VistA | N/A | 1.0 | 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 multi-build BPS PSO IB PSX PSS BUNDLE 18.0, 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 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 |

# Installation

## Pre-installation and System Requirements

Multi-build BPS PSO IB PSX PSS BUNDLE 18.0 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 which 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\*30 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\*30, PSO\*7.0\*562, IB\*2.0\*649, PSX\*2.0\*92, and PSS\*1.0\*252 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 IB PSX PSS BUNDLE 18.0. The host file containing these patches must be downloaded separately. The file name is BPS\_1\_29\_PSO\_IB\_PSX\_PSS.KID and it can be found on the VistA software download site.

## Database Creation

Multi-build BPS PSO IB PSX PSS BUNDLE 18.0 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 IB PSX PSS BUNDLE 18.0 installation.

## Cron Scripts

No Cron scripts are needed for multi-build BPS PSO IB PSX PSS BUNDLE 18.0 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 IB PSX PSS BUNDLE 18.0 (which includes BPS\*1.0\*30, PSO\*7.0\*562, IB\*2.0\*649, PSX\*2.0\*92, and PSS\*1.0\*252) can be found on the patch description for BPS\*1.0\*30, which can be found on the NPM. Installing the multi-build BPS PSO IB PSX PSS BUNDLE 18.0 will install all component patches (BPS\*1.0\*30, PSO\*7.0\*562, IB\*2.0\*649, PSX\*2.0\*92, and PSS\*1.0\*252).

## Installation Verification Procedure

Refer to the BPS\*1.0\*30 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 IB PSX PSS BUNDLE 18.0 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 IB PSX PSS BUNDLE 18.0 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 IB PSX PSS BUNDLE 18.0.

**US3404**

* New fields as described above are present on the Drug Enter/Edit option.
* If the LAST LOCAL NDC or LAST CMOP NDC entered is not one of the Drug File fields described above for the facility entered, the following message and list of NDC’s stored on the Drug File is displayed: NDC is not valid. Select from one of the following valid NDC(s) or enter ^ to exit:
* If a null/blank value is entered for the LAST LOCAL NDC or LAST CMOP NDC, the software will use the default algorithm to select a NDC automatically.
* If a current value is deleted for the LAST LOCAL NDC or LAST CMOP NDC, the software will use the default algorithm to select a NDC automatically.
* The date and time of the manual edit of the LAST LOCAL NDC field and the LAST CMOP NDC field, the field value before and after the change, and the user that made the change are captured and stored in the NDC BY OUTPATIENT SITE subfile and are viewable in Fileman.
* If a ? is entered at the Select OUTPATIENT SITE prompt , a list of Outpatient Sites is displayed.
* NDC used for local fill is the value contained in the LAST LOCAL NDC field (regression testing)
* NDC used for CMOP fill is the value contained in the LAST CMOP NDC field (regression testing)

**US19289**

* Reject Code 943 displays on both the Worklist and View/Process as DUR: Reason Code
* Reject Code 943 displays on the Reject Information Screen as 943: Description from Reject File
* Reject Code 943 appears in the first section of both the Worklist and View/Process.
* Reject Code 943 does not display in the Reject Resolution Required section of both the Worklist and View/Process.
* Reject Code 943 is removed from list of RRRs under site parameters.
* If a prescription has an open Reject Code 943, OPECCs are not able to edit the submission clarification code using the RED Resubmit w/Edits ECME User Screen hidden action.
* If a prescription has an open Reject Code 943, OPECCs are not able to close the reject on the ECME User Screen.
* Reject Code 943 will be included with the RTS, DUR rejects in the ePharmacy – OPEN/UNRESOLVED REJECTS LIST email.
* Worklist and View Process functionality to hide and show TRI/C VA rejects is working as it currently does. (Regression)
* The system does not allow the user to add reject code 943 to the list of Transfer Rejects or RRR Rejects when editing ePharmacy site parameters.
* On View Prescription (for pharmacist) and on VER (for OPECC), 943 rejects appear as “DUR” under the ECME REJECT log.
* Reject code 943 appears as “DUR REJECT” on the Reject Notification Screen.
* On the Medication Profile Screen, prescriptions with a 943 reject appear in the top section, under the heading “REFILL TOO SOON/DUR REJECTS (Third Party)”.
* The user cannot print a label for a prescription if there is an open 943 reject.
* During CMOP batch processing, if a prescription on the CMOP queue has an open 943 reject, the system does not resubmit the claim.

**US33325**

* In the file BPS CLAIMS and corresponding subfiles, field name inconsistencies are corrected to reflect what is in file BPS NCPDP FIELD DEFS. Refer to Functional Design
* In the file BPS RESPONSES and corresponding subfiles, field name inconsistencies are corrected to reflect what is in file BPS NCPDP FIELD DEFS. Refer to Functional Design
* In the file BPS PAYER RESPONSE OVERRIDES, field name inconsistencies are corrected to reflect what is in file BPS NCPDP FIELD DEFS. Refer to Functional Design

**US41406**

* User enters a Submission Clarification Code using actions CLA or SMA, the Reject Information Screen displays the correct Submission Clarification Code.
* Resubmitted claim (CLA, RED, SMA) sent to the third party has the correct Submission Clarification Code. (Regression)

**US44957**

* In ECME the list of CLAIMS TRACKING NON-BILLABLE REASONS does not include Inactive RNBs when closing the claim (CV02,RX08,RX14,RX15) when the ECME Flag is set to YES.
* When an inactive RNB is entered at the Select CLAIMS TRACKING NON-BILLABLE REASONS NAME prompt when closing a claim, a ?? is displayed.

**US46447**

* When TRICARE ePharmacy claims are payable and released by pharmacy, the K bill number auto-decrease uses the Processed Date for the TranDate and the TransDate so that the same date is consistent in all three fields.
* If a TRICARE pharmacy claim is resubmitted and results in a payable claim with a K bill number, the auto-decrease TranDate is the same as the Processed Date on the Bill Transactions Display.
* If a TRICARE pharmacy claim is resubmitted and results in a payable claim with a K bill number, the auto-decrease TransDate are the same as the Processed Date on the Transaction Profile Display.
* For an order where insurance has been reinstated or added a day or more later the PRO action is performed, and Automatic Decrease Adjustment is applied to the K bill number, the TranDate is the same as the Processed Date on the Bill Transactions Display.
* For an order where insurance has been reinstated or added a day or more later the PRO action is performed, and an Automatic Decrease Adjustment occurs, the TransDate is the same as the Processed Date on the Transaction Profile Display.
* For an order that is released a day or longer after the Payable Response from the Payer is received, and an Automatic Decrease Adjustment occurs, the TranDate is the same as the Processed Date on the Bill Transactions Display.
* For an order that is released a day or longer after the Payable Response from the Payer is received, and an Automatic Decrease Adjustment occurs the TransDate is the same as the Processed Date on the Transaction Profile Display.

**US49294**

* Claims with an Ingredient Cost of $0.01 or less should transmit a Basis of Cost Determination of 15 to the PBM/Payer.
* Resubmission of claims with an Ingredient Cost of $0.01 and a Basis of Cost Determination of 05 should transmit a Basis of Cost Determination of 15 to the PBM/Payer.

## 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 IB PSX PSS BUNDLE 18.0 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 Product Support (HPS) Application Coordinator, developers (both project and Tier 3 HPS), and if appropriate, external trading partners such as the VA Financial Service Center (FSC), Change Healthcare, or Transunion.

## 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 Product Support - Management Systems Team.

Multi-build BPS PSO IB PSX PSS BUNDLE 18.0 contains the following build components:

* Routines
* Data Dictionaries
* Files
* Input 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 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.

## 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 IRM (Information Resources Management) or IT support. [↑](#footnote-ref-1)