

**Medical Care Collection Fund (MCCF) Electronic Data  
Interchange (EDI) Transaction Applications Suite  
(TAS) ePharmacy Build 16**

**Electronic Claims Management Engine BPS\*1.0\*28**

**Outpatient Pharmacy PSO\*7.0\*560**

**Integrated Billing IB\*2.0\*647**

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



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**Department of Veterans Affairs**

**Office of Information and Technology (OIT)**

## Revision History

Date	Version	Description	Author
May 2021	1.0	Initial Version	MCCF EDI TAS ePharmacy Development Team

## Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Plan for new products going into Department of Veterans Affairs (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 multi-build BPS PSO IB BUNDLE 16.0 (which includes BPS\*1.0\*28, PSO\*7.0\*560, and IB\*2.0\*647) and 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 multi-build BPS PSO IB BUNDLE 16.0 (which includes BPS\*1.0\*28, PSO\*7.0\*560, and IB\*2.0\*647) 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.

## 1.2 Dependencies

- BPS\*1.0\*26 must be installed BEFORE BPS\*1.0\*28.
- PSO\*7.0\*528 must be installed BEFORE PSO\*7.0\*560.
- IB\*2.0\*636 must be installed BEFORE IB\*2.0\*647.

## 1.3 Constraints

This patch is intended for a fully patched Veterans Health Information Systems and Technology Architecture (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, and Program Management Office (PMO) - Leidos	Deployment	Plan and schedule deployment (including orchestration with vendors).	Planning
2	Local VA Medical Center (VAMC) and Consolidated Patient Account Center (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

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
4	Health product Support and Field Operations	Deployment	Execute deployment.	Deployment
5	Individual VAMC	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 OI&T, VA OI&T Health Product Support, and MCCF EDI TAS Development Team (Halfaker)	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 duration of deployment and installation is 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 deployment of the multi-build BPS PSO IB BUNDLE 16.0 (which includes BPS\*1.0\*28, PSO\*7.0\*560, and IB\*2.0\*647).

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<sup>1</sup> Project schedule (right click and select open hyperlink to access): [MCCFTAS IMS Schedule.zip](#)

### 3.2.1 Deployment Topology (Targeted Architecture)

This multi-build BPS PSO IB BUNDLE 16.0 (which includes BPS\*1.0\*28, PSO\*7.0\*560, and IB\*2.0\*647) is to be nationally released to all VAMCs.

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

The IOC sites are:

- Birmingham
- Butler
- Lexington
- Eastern Kansas

Upon national release all VAMCs are expected to install this patch prior to or on 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

Refer to 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 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

Refer to the Roles and Responsibilities table in Section 2 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 ePharmacy eBusiness team, the developers, and product support personnel.

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

The Release Management team will deploy the multi-build BPS PSO IB BUNDLE 16.0, 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

## 4 Installation

### 4.1 Pre-installation and System Requirements

Multi-build BPS PSO IB BUNDLE 16.0 is installable on a fully patched Massachusetts General Hospital Utility Multi-Programming System (MUMPS) 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.

## **4.2 Platform Installation and Preparation**

Refer to the BPS\*1.0\*28 documentation on the National Patch Module (NPM) in Forum for the detailed installation instructions. These instructions include any pre-installation steps if applicable.

## **4.3 Download and Extract Files**

Refer to the BPS\*1.0\*28, PSO\*7.0\*560, and IB\*2.0\*647 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 are bundled together into the multi-build BPS PSO IB BUNDLE 16.0. The host file containing these patches must be downloaded separately. The file name is BPS\_1\_28\_PSO\_IB.KID and it can be found on the VistA software download site (<https://download.vista.med.va.gov/index.html/SOFTWARE/>).

## **4.4 Database Creation**

Multi-build BPS PSO IB BUNDLE 16.0 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 multi-build BPS PSO IB BUNDLE 16.0 installation.

## **4.6 Cron Scripts**

No Cron scripts are needed for multi-build BPS PSO IB BUNDLE 16.0 installation.

## **4.7 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<sup>2</sup>.

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

## **4.8 Installation Procedure**

Detailed instructions for installing the multi-build BPS PSO IB BUNDLE 16.0 (which includes BPS\*1.0\*28, PSO\*7.0\*560, and IB\*2.0\*647) can be found on the patch description for BPS\*1.0\*28, which can be found on the NPM. Installing the multi-build BPS PSO IB BUNDLE 16.0 will install all component patches (BPS\*1.0\*28, PSO\*7.0\*560, and IB\*2.0\*647).

## **4.9 Installation Verification Procedure**

Refer to the BPS\*1.0\*28 documentation on the NPM for detailed installation instructions. These instructions 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**

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.

### **5.1.1 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.

### **5.1.2 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.

### **5.1.3 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.

## 5.2 Back-out Considerations

Changes implemented with multi-build BPS PSO IB BUNDLE 16.0 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 BUNDLE 16.0 if before national release or a new multi-build if after national release.

### 5.2.1 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.

### 5.2.2 User Acceptance Testing

Below are the acceptance criteria for each story included in BPS PSO IB BUNDLE 16.0:

#### US5009

- Option “DUP” for Duplicate Claims Report is included on CLA menu
- The Duplicate Claims Report include claims with a status of:
  - S = Duplicate of Approved
  - D = Duplicate of Paid
  - Q = Duplicate of Capture
- Filters are available as specified in user story
- Output Format choices include: Screen, Excel Export Print
- DUPLICATE CLAIMS DETAIL REPORT Format follows Functional Design
- DUPLICATE CLAIMS SUMMARY REPORT follows Functional Design

#### US18571

- The Provider Determination Codes have been added to file BPS NCPDP INVALID PROVIDER DATA SOURCE.
- The DUR/DUE Compound Product ID Qualifier Codes have been added to BPS NCPDP COMPOUND PROD ID QUALIFIER.
- The Other Pharmacy ID Qualifier Codes have been added to BPS NCPDP OTHER PHARMACY ID QUALIFIER.
- The Other Prescriber ID Qualifier Codes have been added to BPS NCPDP OTHER Prescriber ID QUALIFIER.
- The code set for DUR/DUE Minimum Daily Dose Unit of Measure (#F09-YI) has been added to the data dictionary of the file BPS RESPONSES, RESPONSES sub-file 9002313.0301.

- The code set for DUR/DUE Maximum Daily Dose Unit of Measure (#F07-YL) has been added to the data dictionary of the file BPS RESPONSES, RESPONSES sub-file 9002313.0301.
- New Provider Determination Codes can be:
  - Received in a claim response and stored in VistA with the claim response (CRI).
  - Displayed on the Claim Log.
  - Displayed on Additional Reject Info (ARI) – accessed from WL & VP.
- New DUR/DUE Compound Product ID Qualifier Codes can be:
  - Received in a claim response and stored in VistA with the claim response (CRI).
  - Displayed on the Claim Log.
  - Displayed on Additional Reject Info (ARI) – accessed from WL & VP.
- New Other Pharmacy ID Qualifier Codes can be:
  - Received in a claim response and stored in VistA with the claim response (CRI).
  - Displayed on the Claim Log.
  - Displayed on Additional Reject Info (ARI) – accessed from WL & VP.
- New Other Prescriber ID Qualifier Codes can be:
  - Received in a claim response and stored in VistA with the claim response (CRI).
  - Displayed on the Claim Log.
  - Displayed on Additional Reject Info (ARI) – accessed from WL & VP.
- New DUR/DUE Minimum Daily Dose Unit of Measure can be:
  - Received in a claim response and stored in VistA with the claim response (CRI).
  - Displayed on the Claim Log.
  - Displayed on Additional Reject Info (ARI) – accessed from WL & VP.
- New DUR/DUE Maximum Daily Dose Unit of Measure can be:
  - Received in a claim response and stored in VistA with the claim response (CRI).
  - Displayed on the Claim Log.
  - Displayed on Additional Reject Info (ARI) – accessed from WL & VP.

## **US18580**

- The code set for Compound Level Of Complexity has been updated in the data dictionary of the file BPS CLAIMS, TRANSACTIONS sub-file 9002313.0201.
- The new Reject Code has been updated in file BPS NCPDP REJECT CODES to reflect the code has been added.

- New Reject Code can be:
  - Received in a claim response and stored in VistA with the claim response
  - Displayed on the Electronic Claims Management Engine (ECME) User screen
  - Displayed on the Pharmacists' Worklist
  - 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)

### **US18588**

- New fields are in VistA file BPS NCPDP FIELD DEFS #9002313.91.
- Updated fields have the correct name in VistA file BPS NCPDP FIELD DEFS #9002313.91.
- New fields are in the data dictionary of the BPS RESPONSES, RESPONSES sub-file.
- New incoming claim response fields are stored in VistA and can be viewed via CRI.
- The Claim Log displays the new fields.
- The Additional Reject Info (ARI) Screen displays the new fields.

### **US24094**

- Claims with an original fill prescription will send the NCPDP 460-ET Quantity Prescribed field as described above in the user story.
- Claims with a refill prescription will send the NCPDP 460-ET Quantity Prescribed field as described above in the user story.

### **US27821**

- New prompt is displayed and the Date of Service (DOS) is populated when the criteria are met.
- New prompt is not displayed when the criteria are not met.
- Help text is displayed when ? is entered at the prompt.
- Help text is displayed when an invalid character is entered at the prompt.
- When Y is entered at the prompt, processing continues, and user is prompted to submit claim with a Current Signature Code.
- When the criteria are not met the user is not prompted to enter a Current Signature Code.
- When N is entered at the prompt, processing ends.
- The Billing Event Log (Finish section) captures the Active Duty indicator as described in the user story.
- The Billing Event Log (Finish section) Status field is populated with "ECME Billable".

- When the override claim is resubmitted using any action from the reject information screen, the claim uses the same Active Duty Override flag from when the previous claim with the same date of service was submitted, and the claim transmits.
- When the override claim is resubmitted using any action from the ECME User Screen, the claim uses the same Active Duty Override flag from when the previous claim with the same date of service was submitted, and the claim transmits
- Verify resubmitted claim rejects do not have the RNB entered into Claim Tracking.
- Verify dual-eligible claims cannot be submitted from Claims Tracking.

## **US29831**

- Email related to Patient charge not Released Subject line should display: PATIENT CHRG NOT RELEASED.
- Email related to cancelling of a claim Subject line should display: ERROR ENCOUNTERED.
- Email related to cancelling of a TRICARE claim Subject line should display: ERROR ENCOUNTERED.
- Email related to Means test hold charge bulletin Subject line should display: PATIENT CHRG W/INS- Division Name.

## **5.3 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 BUNDLE 16.0 are no longer desired by VA Office of Information and Technology (OIT) and the ePharmacy eBusiness team, or the patch produces catastrophic problems.

## **5.4 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.

## **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 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.

## **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 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 BUNDLE 16.0 contains the following build components:
- Routines
- Data Dictionaries
- Files
- Menu Options
- Regional Processing Centers (RPC)s

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 OIT Enterprise Program Management Office (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 acts as expected, as defined together with the team the site contacted in section 5.5.

## **6 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.

### **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.