Pharmacy Operational Updates (POU)
OneVA VIERS to VDIF (OneVA V2V) Middleware Migration (PSO*7*736)

Deployment, Installation, Back-out, and Rollback Guide

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Revision History

Date	Version	Description	Author
4/24/2024	1.0	Initial Version	Liberty ITS

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1 Introduction

The OneVA Pharmacy application provides the Veterans Health Administration (VHA) with the capability to allow Veterans travelling across the United States to refill/partial fill their active VA prescription at any VA Pharmacy regardless of where the prescription originated. The OneVA Pharmacy application design consists of three (3) main components: VistA Medication Profile screen, Health Data Record Clinical Data Service (HDR/CDS), and OneVA Pharmacy message flow. The VistA Medication Profile screen expands available pharmacy information in VistA to provide pharmacists direct access to query, and refill/partial fill patient's active and refillable prescriptions. The HDR/CDS provides a patient's active and refillable prescriptions. The OneVA Pharmacy message flow enables the secure, bi-directional exchange of electronic health records between local/remote VistA Servers, and between VistA servers and HDR.

The OneVA software currently uses IBM WebSphere as the messaging system. The IBM WebSphere messaging system is being decommissioned. This patch provides the move from using IBM WebSphere to using the Veterans Data Information Exchange (VDIF).

The software changes include the following:

1. Routine PSORRX1 - DNS value modified at REMOTERX+18
2. Routine PSORRX1 - modified argument list and corresponding references to the DRUGMTCH function
3. Routine PSORRX1 - modified to handle HL7 messages with possible overflow nodes at RXPRSE+4
4. Routine PSOHLDS6 - modified to handle HL7 messages with possible overflow nodes at HOST+2
5. Routine PSOORUT1 - modified "PROVIDER HOLD" status abbreviation from "PH" to "HP" at SHOWREM+13
6. Routine PSOORUT1 - added "DISCONTINUED BY PROVIDER", "DISCONTINUED (EDIT)", and "NON-VERIFIED" status abbreviations at SHOWREM+13
7. HL LOGICAL LINK entry - the post-install routine POST^PSO736PO updates the PSORRXSEND entry of the HL LOGICAL LINK (#870) file. The following fields will be updated to reflect VDIF production IP address and port values when installed in the site's production account: DNS DOMAIN, TCP/IP ADDRESS, and TCP/IP PORT

1.1 Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the PSO*7.0*736 patch 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

It is assumed that this patch is being installed into a fully patched Veterans Health Information System and Technology Architecture (VistA) system. The following patches must be installed prior to this patch:

PSO*7.0*441

PSO*7.0*643

1.3 Constraints

There are no constraints beyond the installation into an up-to-date VistA system.

2 Roles and Responsibilities

The following describes the roles and responsibilities associated with the testing and releasing of PSO*7.0*736. This VistA patch will be deployed via the normal PackMan Kernel Installation & Distribution System (KIDS) Build.

Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
1	Project Manager	Deployment	Determine and document the roles and responsibilities of those involved in the deployment	Design
2	Software Quality Assurance (SQA), Test Sites	Deployment	Test for operational readiness	Test
3	Project Manager, Release Manager	Deployment	Execute deployment	Release
4	Individual VistA Sites	Installation	Plan and schedule installation	Release
5	Release Manager	Back-out	Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out)	Release
6	Sustainment Team	Post Deployment	Hardware, Software and System Support	Sustain

3 Deployment

The deployment is planned as a simultaneous (National Release) rollout. Once approval has been given to nationally release, PSO*7.0*736 will be available for installation and deployment at all sites.

Scheduling of test installs, testing, and production deployment will be at the site's discretion. It is anticipated there will be a 30-day compliance period.

3.1 Timeline

The deployment and installation are scheduled to run for 31 days, as depicted in the master deployment schedule for Pharmacy Operational Updates patch PSO*7.0*736.

Task	Start	Finish
National Release	5/15/24	5/15/24
Compliance Period	TBD	TBD

3.2 Site Readiness Assessment

This section discusses the locations that will install patch PSO*7.0*736.

3.2.1 Deployment Topology (Targeted Architecture)

This release is a patch intended for installation at local sites.

3.2.2 Site Information (Locations, Deployment Recipients)

The Initial Operating Capability (IOC) sites are:

- Miami, FL
- Kansas City, MO
- East Orange, NJ

Upon National Release, all Veterans Affairs Medical Centers (VAMCs) are expected to install this patch prior to or on the compliance date. The software will be distributed in FORUM.

3.2.3 Site Preparation

The patch does not require any site preparations other than the prerequisite patch installations as described in the Patch Description.

3.3 Resources

3.3.1 Facility Specifics

No specific facility instructions needed.

3.3.2 Hardware

No hardware instructions needed.

3.3.3 Software

No software instructions needed.

3.3.4 Communications

When PSO*7.0*736 is released, the released-patch notification will be sent from the National Patch Module to all personnel who have subscribed to notifications for the Outpatient Pharmacy package.

3.3.4.1 Deployment / Installation / Back-out Checklist

The Release Management team will deploy the patch PSO*7.0*736, 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 as described in the previous section. One can run a report in FORUM to identify when and by whom the patch was installed in the VistA production at each site. A report can also be run to identify which sites have not installed the patch in their VistA production system as of that moment.

Therefore, this information does not need to be manually tracked. Table 2 is included below if manual tracking is desired and because it is part of the Veteran-focused Integration Process (VIP) document template.

Table 2: Deployment / Installation / Back-out Checklist

Activity	Day	Time	Individual who completed task
Deploy	TBD	TBD	TBD
Install	TBD	TBD	TBD
Back-out	TBD	TBD	TBD

4 Installation

4.1 Pre-installation and System Requirements

This product is a VistA patch. The only pre-installation and system requirements for deployment and installation of this patch are to ensure that the prerequisite patches are installed.

4.2 Platform Installation and Preparation

This product is a VistA patch. Sites should install patches into the test/mirror/pre-prod accounts before the production account as is the normal VistA patch installation standard convention. Pre and Post installation checksums are found in the Patch Description in the FORUM NPM.

4.3 Download and Extract Files

Download and extract files that are not applicable for this VistA patch.

4.4 Database Creation

Database creation is not applicable for this VistA patch.

4.5 Installation Scripts

Installation scripts are not applicable for this VistA patch.

4.6 Cron Scripts

Cron scripts are not applicable for this VistA patch.

4.7 Access Requirements and Skills Needed for the Installation

To install this VistA patch, the patch installer must be an active user on the VistA system with access to the VistA menu option "Kernel Installation & Distribution System" [XPD MAIN] and VistA security keys XUPROG and XUPROGMODE. Knowledge on how to install VistA patches using the items on this menu option is also a required skill.

4.8 Installation Procedure

4.8.1 Pre-Installation Instructions

The following instructions are for the HL7 LOGICAL LINK: PSORRXSEND

1. Before installation of the patch, confirm that all messages in the link that need to be delivered have been delivered, otherwise they will be lost. This confirmation can be performed by running the SYSTEMS LINK MONITOR option which is under the HL7 MAIN MENU. If messages are not caught up, then wait to install the patch until the message queues for PSORRXSEND are caught up.
2. Once caught up, the PSORRXSEND link will need to be stopped. To stop the PSORRXSEND link, run the Start/Stop Links option which is attached to the Filer and Link Management Options of the HL7 MAIN MENU.
3. Use the HL RESET COUNTERS (TCP ONLY) option on the link. This resets message counters, ensuring the counter is initialized correctly.

This patch should be installed when Pharmacy applications are not in use, no other pharmacy patches are being installed, and when tasked jobs from Clinical Applications are not running. Installation should also occur when CPRS usage is at a minimum, particularly medication activities.

Installation of this patch should take less than 5 minutes.

4.8.2 Installation Instructions

1. Choose the PackMan message containing this build. Then select the INSTALL/CHECK MESSAGE PackMan option to load the build.
2. From the Kernel Installation and Distribution System menu, select the Installation menu. When prompted for the INSTALL NAME, enter the patch number: PSO*7.0*736. From this menu:
    a. Select the Verify Checksums in Transport Global option to confirm the integrity of the routines that are in the transport global. When prompted for the INSTALL NAME enter PSO*7.0*736.

** THE BEFORE CHECKSUM OF 184863002 FOR PSORRX1 IS INCORRECT **

** DUE TO PSO*7.0*729 HAVING BEEN ENTERED IN ERROR **

** THE CORRECT CHECKSUM FOR PSORRX1 IS 157938249 **

    b. Select the Backup a Transport Global option to create a backup message. You must use this option and specify what to backup, the entire build or just routines.

The Backup message can be used to restore the routines and components of the build to the pre-patch condition.

i. At the Installation option menu, select Backup a Transport Global.

ii. At the Select INSTALL NAME prompt, enter your build PSO*7.0*736.

iii. When prompted for the following, enter "R" for Routines or "B" for Build.

Select one of the following:

B Build

R Routines

Enter response: Build

iv. When prompted "Do you wish to secure your build? NO//", press <Enter> and take the default response of "NO".

v. When prompted with, "Send mail to: Last name, First Name", press <enter> to take default recipient. Add any additional recipients.

vi. When prompted with "Select basket to send to: IN//", press <enter> and take the default IN mailbox or select a different mailbox.

c. You may also elect to use the following options:

i. Print Transport Global - This option will allow you to view the components of the KIDS build.

ii. Compare Transport Global to Current System - This option will allow you to view all changes that will be made when this patch is installed. It compares all of the components of this patch.

d. Select the Install Package(s) option and choose the patch to install.

i. When prompted 'Want KIDS to INHIBIT LOGINs during the install? NO//', answer NO.

ii. When prompted 'Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//, answer NO.

4.8.3 Post-Installation Instructions

1. Start the PSORXXSEND link, which can be performed with the Start/Stop Links option under the Filer and Link Management Options of the HL7 MAIN MENU.
2. Once post install is completed on production systems, perform a ping test. This can be done with the PI Ping (TCP Only) option under the Filer and Link Management Options of the HL7 MAIN MENU and verify connection to the VDIF server as is shown in the example below.

```
Select Filer and Link Management Options <TEST ACCOUNT> Option: PI  Ping (TCP Only)
What HL Logical Link do you want to test?
Select a TCP link: PSORRXSEND
Do you want to PING the port used by HLO or the one used by HL7 1.6?
```

```
     Select one of the following:

          1         HLO     --> Port #5001
          2         HL7 1.6 --> Port #6230

Enter response: 1// 2  HL7 1.6 --> Port #6230
Trying to connect...
Connected!
Sending PING ...
PING sent!
Reading acknowledgment....
Acknowledgment received!
```

3. Successful installation can be verified by reviewing the first 2 lines of the routines contained in the patch. The second line will contain the patch number in the [PATCH LIST] section.

```
 ;;7.0;OUTPATIENT PHARMACY;**[PATCH LIST]**;DEC 1997;[BUILD #]
```

The option Calculate and Show Checksum Values [XTSUMBLD-CHECK] can be run to compare the routine checksums to what is documented in the Patch Description.

4.9 Installation Verification Procedure

Validate that the routine checksums now match the 'after checksums' listed in the Patch Description.

4.10 System Configuration

System configuration is not applicable for this VistA patch.

4.11 Database Tuning

Database tuning is not applicable for this VistA patch.

5 Back-out Procedure

5.1 Back-out Strategy

The development team recommends that sites log a ticket if it is a nationally released patch; otherwise, the site should contact the development team directly for specific solutions to their unique problems.

5.2 Back-out Considerations

It is necessary to determine if a back-out of the patch PSO*7.0*736 is needed, or if issues may be adequately addressed via a new version of the patch (if prior to national release) or through a subsequent patch (if after national release).

5.2.1 Load Testing

Load Testing is not applicable for this VistA patch.

5.2.2 User Acceptance Testing

For User Acceptance Testing results, please log a ticket if the patch is nationally released; otherwise, contact the development team.

5.3 Back-out Criteria

The decision to back-out this VistA patch will be made by Health Product Support, the development team, and site personnel. Criteria to be determined based on separate and unique factors and will be evaluated upon post-patch installation use of the product.

5.4 Back-out Risks

Back-out risks are not applicable for this VistA patch.

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, HPS Support, the project development team.

5.6 Back-out Procedure

Prior to installing a patch, the site/region should have saved a backup of the routines in a mail message using the Backup a Transport Global [XPD BACKUP] menu option (this is done at time of install). The message containing the backed up routines can be loaded with the "Xtract KIDS" function at the Message Action prompt. The PackMan function INSTALL/CHECK MESSAGE" is then used to install the backed up routines onto the VistA System.

Before installing the back-out patch, the following instructions should be performed first:

1. Confirm that all messages in the link that need to be delivered have been delivered. Otherwise, they will be lost. This confirmation can be performed by running the SYSTEMS LINK MONITOR option which is under the HL MAIN MENU. If messages are not caught up, then wait to install the patch until the message queues for PSORRXSEND are caught up.
2. Once caught up the PSORRXSEND link will need to be stopped. If this link is not stopped, the new values for the URL and PORT that get installed for the PSORRXSEND entry in the HL LOGICAL LINK file (#870) will be lost and will have to be entered manually.
3. To stop the PSORRXSEND link, run the Start/Stop Links option which is attached to the Filer and Link Management Options of the HLMAIN MENU.
4. Use the HL RESET COUNTERS (TCP ONLY) option on the link. This resets message counters, ensuring the counter is initialized correctly.

Installing the backed-up build on the VistA system will restore the PSOORUT1, PSORRX1, and PSOHLDS6 routines as well as restore the pre-existing values in the PSORRXSEND entry of the HL LOGICAL LINK (#870) file.

5.7 Back-out Verification Procedure

Successful back-out is confirmed by verification that the back-out patch was successfully implemented, including verification that components were removed and modified, as described in section 5.6.

6 Rollback Procedure

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.