NSR 20120407 (PSS*1.0*234)
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
06/03/2019	1.0	Release version	<mark>REDACTED</mark>

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.

Table of Contents

1 Introduction

This document describes how to deploy and install the Pharmacy Data Management v1.0 patch PSS*1.0*234 as well as how to back-out the product and rollback to a previous version or data set. This document is a companion to the project charter and management plan for this effort.

1.1 Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the Pharmacy Data Management v1.0 patch PSS*1.0*234 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 Pharmacy Data Management v1.0 patch PSS*1.0*234 requires a fully patched VistA system. Additionally, the following patches must be installed:

- PSS*1*199
- PSS*1*225

1.3 Constraints

Pharmacy Data Management v1.0 patch PSS*1.0*234 is expected to be installed on existing VistA platforms. The hardware may reside at local or regional data centers. It utilizes existing, nationally released security controls to control access.

2 Roles and Responsibilities

Pharmacy Data Management v1.0 patch PSS*1.0*234 is a VistA patch that will make the PHARMACY ORDERABLE ITEM file (#50.7) available for selection when performing Health Summary Ad Hoc reports and for using in objects.

The VistA applications support team from IT Operations and Services (ITOPS) will handle the implementation/deployment of this patch as part of their normal patching process.

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

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
	Development Team	Deployment	Plan and schedule deployment (including orchestration with vendors)	

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
	Development Team	Deployment	Determine and document the roles and responsibilities of those involved in the deployment.	
		Deployment	Test for operational readiness	
		Deployment	Execute deployment	
		Installation	Plan and schedule installation	
		Installation	Ensure authority to operate and that certificate authority security documentation is in place	
		Installation	Validate through facility POC to ensure that IT equipment has been accepted using asset inventory processes	
		Installations	Coordinate training	
		Back-out	Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out)	
		Post Deployment	Hardware, Software and System Support	

3 Deployment

The deployment is planned as a typical VistA patch installation.

3.1 Timeline

The deployment and installation is scheduled to run as a typical maintenance type patch. There will be a 30-day compliance for all sites to install the patch.

Table 2 Pharmacy Data Management patch PSS*1.0*234 Deployment Timeline

Phase	Activity	Start	Finish
General Release	IOC Testing	3/11/2019	5/24/2019
	National Implementation	6/4/2019	7/5/2019
	Warranty Period	7/5/2019	10/5/2019
(Dates shown are subject to change due to unforeseen circumstances.)			

3.2 Site Readiness Assessment

3.2.1 Deployment Topology (Targeted Architecture)

Pharmacy Data Management v1.0 patch PSS*1.0*234 will be deployed to each VistA instance. That will include local sites as well as regional data processing centers. The first set of sites to install will be the test sites.

3.2.2 Test Site Information (Locations, Deployment Recipients)

The following test sites are participating in the testing of the National Drug File v4.0 patch PSN *1.0*234 software:

Table 3 Test Sites

Site
REDACTED
REDACTED
REDACTED

3.2.3 Site Preparation

The following table describes preparation required by the site prior to deployment.

Table 4 Site Preparation

Site/Other	Problem/Change Needed	Features to Adapt/Modify to New Product	Actions/Steps	Owner
VistA Instance	N/A	N/A	N/A	N/A

3.3 Resources

3.3.1 Facility Specifics

N/A

3.3.2   Hardware

N/A

3.3.3   Software

The following table describes software specifications required at each site prior to deployment.

Associated patches that must be installed before PSS*1.0*234:

- PSS*1*199
- PSS*1*225

Documentation describing the new functionality and/or a host file containing a build may be included in this release.

- The preferred method is to retrieve the files from download.vista.med.va.gov. This transmits the files from the first available server. Sites may also elect to retrieve the files directly from a specific server.

- Sites may retrieve the software and/or documentation directly using Secure File Transfer Protocol (SFTP) from the ANONYMOUS.SOFTWARE directory at the following OI Field Offices:

- REDACTED

- (Files will be in an anonymous.software directory)

OIT FIELD OFFICE	FTP ADDRESS	DIRECTORY
REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED

Documentation can also be found on the VA Software Documentation Library at:
https://www.va.gov/vdl/

Documentation Title	File Name	FTP Mode
API Manual – Pharmacy Reengineering (PRE)	phar_1_api_r0619	Binary

3.3.4   Communications

This patch is required for the installation of GMTS*2.7*125. In some facilities that may mean two different installers will be involved and will need to coordinate.

3.3.4.1   Deployment/Installation/Back-Out Checklist

N/A

4 Installation

4.1 Pre-installation and System Requirements

The expectation is that this patch will be installed in a fully patched VistA system, running on the standard Department of Veterans Affairs configuration.

4.2 Platform Installation and Preparation

PSS*1.0*234 requires two patches:

- PSS*1.0*199
- PSS*1.0*225

It is imperative that you back up the data dictionary for the PHARMACY ORDERABLE ITEM file (#50.7) BEFORE you install PSS*1.0*234.

This is in addition to the backup that should be performed during the KIDS installation process.

In order to back up the data dictionary, you will be creating a KIDS build and then sending it to the same recipients that would receive backup messages when you backup builds before installation.

To create the KIDS build data dictionary, perform the following:

---

1. Select the Kernel Installation & Distribution System menu:

```
SELECT OPTION NAME: XPD MAIN        KERNEL INSTALLATION & DISTRIBUTION SYSTEM


        EDITS AND DISTRIBUTION ...
        UTILITIES ...
        INSTALLATION ...
        PATCH MONITOR MAIN MENU ...


YOU HAVE PENDING ALERTS
        ENTER  "VA TO JUMP TO VIEW ALERTS OPTION
```

2. Choose option: Edits and Distribution

```
SELECT KERNEL INSTALLATION & DISTRIBUTION SYSTEM <TEST ACCOUNT> OPTION: EDITS AND
DISTRIBUTION

        CREATE A BUILD USING NAMESPACE
        COPY BUILD TO BUILD
        EDIT A BUILD
        TRANSPORT A DISTRIBUTION
        OLD CHECKSUM UPDATE FROM BUILD
        OLD CHECKSUM EDIT
        ROUTINE SUMMARY LIST
        VERSION NUMBER UPDATE
```

3. Choose option: Edit a Build and select the BUILD NAME of ZPSS*1.0*234. Using the screen shots that follow as a guide, complete the build definition.

```
SELECT EDITS AND DISTRIBUTION <TEST ACCOUNT> OPTION: EDIT A BUILD
SELECT BUILD NAME: ZPSS*1.0*234
  ARE YOU ADDING 'ZPSS*1.0*234' AS A NEW BUILD (THE 10681ST)? NO// Y  (YES)
    BUILD PACKAGE FILE LINK:
    BUILD TYPE: SINGLE PACKAGE//   SINGLE PACKAGE
    BUILD TRACK PACKAGE NATIONALLY: YES//    YES
                            EDIT A BUILD                         PAGE 1 OF 5
NAME: ZPSS*1.0*234                        TYPE: SINGLE PACKAGE
-----------------------------------------------------------------------------

                    NAME: ZPSS*1.0*234


        DATE DISTRIBUTED:

              DESCRIPTION:                        DELETE ROUTINE
                                                  AFTER INSTALL
 ENVIRONMENT CHECK ROUTINE:                         Y/N:

     PRE-INSTALL ROUTINE:                           Y/N:

     POST-INSTALL ROUTINE:                          Y/N:

PRE-TRANSPORTATION ROUTINE:
_____


COMMAND:N                               PRESS <PF1>H FOR HELP   INSERT


                            EDIT A BUILD                         PAGE 2 OF 5
NAME: ZPSS*1.0*234                        TYPE: SINGLE PACKAGE
-----------------------------------------------------------------------------
                    FILE LIST  (NAME OR NUMBER)

    50.7









_____


COMMAND:                                PRESS <PF1>H FOR HELP   INSERT

                            EDIT A BUILD                         PAGE 2 OF 5
NAME: ZPSS*1.0*234                        TYPE: SINGLE PACKAGE
-----------------------------------------------------------------------------
                    FILE LIST  (NAME OR NUMBER)
R,,,,,,,,,,,,,,,,,,,,,,,, DD EXPORT OPTIONS ,,,,,,,,,,,,,,,,,,,,,,,,,,,,T
.                                                                       .
.                    FILE: PHARMACY ORDERABLE ITEM                      .
```

```
.    SEND FULL OR PARTIAL DD...: FULL                          |
.                                                              .
.UPDATE THE DATA DICTIONARY: YES         SEND SECURITY CODE: YES    .
.SCREEN TO DETERMINE DD UPDATE                                 .
.    DATA COMES WITH FILE...: NO                               .
F,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,



COMMAND: CLOSE                              PRESS <PF1>H FOR HELP  INSERT



                         EDIT A BUILD                    PAGE 2 OF 5
NAME: ZPSS*1.0*234                        TYPE: SINGLE PACKAGE
--------------------------------------------------------------------------
                         FILE LIST  (NAME OR NUMBER)

       PHARMACY ORDERABLE ITEM










_____




COMMAND: EXIT                              PRESS <PF1>H FOR HELP  INSERT


         CREATE A BUILD USING NAMESPACE
         COPY BUILD TO BUILD
         EDIT A BUILD
         TRANSPORT A DISTRIBUTION
         OLD CHECKSUM UPDATE FROM BUILD
         OLD CHECKSUM EDIT
         ROUTINE SUMMARY LIST
         VERSION NUMBER UPDATE


SELECT EDITS AND DISTRIBUTION <TEST ACCOUNT> OPTION: TRANSPORT A DISTRIBUTION

ENTER THE PACKAGE NAMES TO BE TRANSPORTED. THE ORDER IN WHICH
THEY ARE ENTERED WILL BE THE ORDER IN WHICH THEY ARE INSTALLED.


FIRST PACKAGE NAME: ZPSS*1.0*234
ANOTHER PACKAGE NAME:
```

```
ORDER    PACKAGE
  1    ZPSS*1.0*234




OK TO CONTINUE? YES//
TRANSPORT THROUGH (HF)HOST FILE OR (PM)PACKMAN: PM   PACKMAN


     ZPSS*1.0*234...
NO PACKAGE FILE LINK
SUBJECT: ZPSS*1.0*234
PLEASE ENTER DESCRIPTION OF PACKMAN MESSAGE


==[ WRAP ]==[INSERT ]================<  >=======[PRESS <PF1>H FOR HELP]====








<======T=======T=======T======T=======T======T=======T=======T=======T>======




 CREATED BY PSSUSER,ONE AT YOUR.SITE.MED.VA.GOV  (KIDS) ON FRIDAY, 03/01/
19 AT 11:35
DO YOU WISH TO SECURE THIS MESSAGE? NO//
SEND MAIL TO: PSSUSER,ONE//   PSSUSER,ONE
SELECT BASKET TO SEND TO: IN//
AND SEND TO:


          CREATE A BUILD USING NAMESPACE
          COPY BUILD TO BUILD
          EDIT A BUILD
          TRANSPORT A DISTRIBUTION
          OLD CHECKSUM UPDATE FROM BUILD
          OLD CHECKSUM EDIT
          ROUTINE SUMMARY LIST
          VERSION NUMBER UPDATE
```

4.3 Download and Extract Files

N/A

4.4 Database Creation

N/A

4.5 Installation Scripts

N/A

4.6 Cron Scripts

N/A

4.7 Access Requirements and Skills Needed for the Installation

Installing this patch requires a person with programmer access to VistA and the ability to install VistA patches using the KIDS menus.

4.8 Installation Procedure

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. 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 the patch or build name: `PSS*1.0*234`

   NOTE: Using <spacebar><enter> will not bring up a Multi-Package build even if it was loaded immediately before this step. It will only bring up the last patch in the build.

   B. Select the Backup a Transport Global option to create a backup message of any routines exported with this patch. It will not backup any other changes such as DDs or templates.

   It is imperative this backup be performed.

   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 the components of this patch, such as routines, DDs, templates, etc.

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

      i. If prompted 'Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//', answer NO.

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

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

a. When prompted, 'Enter options you wish to mark as 'Out Of Order': select the following option(s):

Option Name   Menu Text
N/A
Press the Enter key when you are done selecting options.

b. When prompted, 'Enter protocols you wish to mark as 'Out Of Order': select the following protocol<s>:

Protocol Name   Menu Text
N/A
Press the Enter key when you are done selecting protocols.

c. When prompted, 'Delay Install (Minutes): (0 - 60): 0//': answer 0.

4.9 Installation Verification Procedure

1. Verify the checksum for the PSS50P7 routine matches the checksum in the patch description.

2. Once GMTS*2.7*125 is also installed, perform the following at the programmer mode prompt to confirm the APPLICATION GROUP is properly updated:

```
ZW ^DIC("AC","GMTS")
^DIC("AC","GMTS",50.605,1)=""
^DIC("AC","GMTS",50.7,1)="" **THIS CONFIRMS INSTALLATION**
^DIC("AC","GMTS",60,2)=""
^DIC("AC","GMTS",71,2)=""
^DIC("AC","GMTS",81,2)=""
^DIC("AC","GMTS",120.51,1)=""
^DIC("AC","GMTS",601.71,1)=""
^DIC("AC","GMTS",811.9,1)=""
^DIC("AC","GMTS",853.8,1)=""
^DIC("AC","GMTS",853.85,1)=""
^DIC("AC","GMTS",853.875,1)=""
^DIC("AC","GMTS",8925.1,2)=""
^DIC("AC","GMTS",9999999.64,1)=""
```

4.10 System Configuration

N/A

4.11 Database Tuning

N/A

5 Back-Out Procedure

5.1 Back-Out Strategy

If, within a 14-day period of being installed, catastrophic issues arise, the facility area manager, working with product support as well as the development team, may make the decision to back out this patch.

5.2 Back-Out Considerations

The facility area manager has the ultimate responsibility for making the decision to back out this patch.

5.2.1   Load Testing

N/A

5.2.2   User Acceptance Testing

Testing was performed at three test sites: Boston, MA; Tuscaloosa, AL; and San Diego, CA.

5.3 Back-Out Criteria

A catastrophic failure of the system or significant patient safety risk would suggest the need to evaluate the possibility of backing out PSS*1.0*234.

5.4 Back-Out Risks

Other than the loss of the ability to run Health Summary objects, using the PHARMACY ORDERABLE ITEM file (#50.7) as a selection item, there are no significant risks to backing out the patch.

5.5 Authority for Back-Out

The facility area manager has the final authority to order the back out of PSS*1.0*234.

5.6 Back-Out Procedure

1. Install the back-out KIDS build (ZPSS*1.0*234) created in section 4.2.
2. Install the back-up message created during the KIDS installation of PSS*1.0*234.

5.7 Back-out Verification Procedure

1. Verify the checksum for the routine PSS50P7 matches the pre-patch checksum value in the patch description.
2. Verify the 'AC' cross-reference after backing out GMTS*2.7*125:

```
ZW ^DIC("AC","GMTS")
^DIC("AC","GMTS",60,2)=""
^DIC("AC","GMTS",71,2)=""
```

```
ˆDIC("AC","GMTS",81,2)=""
ˆDIC("AC","GMTS",120.51,1)=""
ˆDIC("AC","GMTS",601.71,1)=""
ˆDIC("AC","GMTS",811.9,1)=""
ˆDIC("AC","GMTS",853.8,1)=""
ˆDIC("AC","GMTS",853.85,1)=""
ˆDIC("AC","GMTS",853.875,1)=""
ˆDIC("AC","GMTS",8925.1,2)=""
ˆDIC("AC","GMTS",9999999.64,1)=""
```

Note that 50.7 is no longer listed.

6 Rollback Procedure

6.1 Rollback Considerations

No data was modified with the installation of this patch, so no rollback is required.

6.2 Rollback Criteria

N/A

6.3 Rollback Risks

N/A

6.4 Authority for Rollback

N/A

6.5 Rollback Procedure

N/A

6.6 Rollback Verification Procedure

N/A