State Prescription Monitoring Program (SPMP) Enhancement

Patch PSO*7*451

Installation, Back-Out, and Rollback Guide

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Table of Contents

1. Introduction 4
   1.1. Purpose 4
2. Pre-installation and System Requirements 5
   2.1. System Requirements 5
   2.2. Platform Installation and Preparation 5
   2.3. Download and Extract Files 5
   2.4. Database Creation 5
   2.5. Installation Scripts 5
   2.6. Cron Scripts 5
   2.7. Access Requirements and Skills Needed for the Installation 6
3. Installation Procedure 7
   3.1. Installation from the Patch Description 7
4. Implementation Procedure 8
   4.1. Post-Install Routine (No Action Required) 8
   4.2. New PSO SPMP ADMIN Security Key (Action Required) 8
   4.3. New RENAME FILE AFTER UPLOAD Parameter (May Require Action) 9
   4.4. New Transmission Configuration 10
      4.4.1. Register your Outpatient Pharmacy site with the SPMP (Action Required) 10
      4.4.2. Open Network Traffic between your site and the SPMP (Action Required) 10
      4.4.3. OpenVMS Directory (May Require Action) 11
      4.4.4. SPMP State Parameter Configuration (Action Required) 11
      4.4.5. Create a new SSH Key Pair (Action Required) 14
      4.4.6. Customize the ASAP Definition with state specific data requirements (May Require Action) 16
      4.4.7. Test the Transmission (Action Required) 18
5. Back-Out Procedure 20

5.1. Back-Out Strategy 20
5.2. Back-Out Considerations 20
5.2.1. Load Testing 20
5.2.2. User Acceptance Testing 20
5.3. Back-Out Criteria 20
5.4. Back-Out Risks 20
5.5. Authority for Back-Out 20
5.6. Back-Out Procedure 20
6. Rollback Procedure 24
6.1. Rollback Considerations 24
6.2. Rollback Criteria 24
6.3. Rollback Risks 24
6.4. Authority for Rollback 24
6.5. Rollback Procedure 24
7. Additional Information 25
7.1. Documentation 25
8. Disaster Recovery and Continuity of Operations 26
9. Appendix A 26

1. Introduction

The Installation, Back-Out, Rollback Guide defines the ordered, technical steps required to install the product, and if necessary, to back-out the installation, and to roll back to the previously installed version of the product. It provides installation instructions for PSO*7*451, as managed through the State Prescription Monitoring Program (SPMP) Enhancement project.

During the implementation of PSO*7*408, it was discovered that some states had unique requirements that could not be addressed by current functionality. As a result transmissions to those states were rejected. Patch PSO*7*451 will enhance the SPMP functionality to allow VHA to fulfill specific state requirements and successfully transmit data to those states PDMPs. This patch also enhances the management of Secure SHell (SSH) Keys by streamlining the SSH Key creation and restricting user access to the Private SSH Key content. In addition, a few miscellaneous issues have also been addressed, which are described below.

All the changes introduced by this patch are related to the options under the State Prescription Monitoring Program (SPMP) Menu [PSO SPMP MENU] option which is located under the Supervisor Functions [PSO SUPERVISOR] menu option.

1.1. Purpose

The purpose of this Installation Guide is to provide installation steps for the SPMP Enhancement project patch PSO*7*451. The intended audience for this document is the Information Resources Management Service (IRMS) staff and Pharmacy staff responsible for installing and maintaining the Pharmacy files.

2. Pre-installation and System Requirements

PSO*7*437 is a required patch for PSO*7*451 so must be installed prior to installing PSO*7*451.

2.1. System Requirements

Package	Minimum Version Needed
VA FileMan	22.0
Kernel	8.0
MailMan	8.0
Health Level 7	1.6
Order Entry/Results Reporting	3.0
CMOP	2.0
NDF	4.0
Outpatient Pharmacy	7.0
Pharmacy Data Management	1.0
Controlled Substances	3.0
Toolkit	7.3
Drug Accountability	3.0

2.2. Platform Installation and Preparation

Do not install this patch while Outpatient Pharmacy users are on the system. Installation will take no longer than three (3) minutes. **Also, avoid scheduling this patch to install around 1:00 AM local time.**

2.3. Download and Extract Files

N/A

2.4. Database Creation

N/A

2.5. Installation Scripts

N/A

2.6. Cron Scripts

N/A

2.7. Access Requirements and Skills Needed for the Installation

N/A

3. Installation Procedure

3.1. Installation from the Patch Description

1. Use the INSTALL/CHECK MESSAGE option on the PackMan menu.
2. From the Kernel Installation & Distribution System (KIDS) menu, select the Installation menu.
3. From this menu, you may select to use the following options (when prompted for INSTALL NAME, enter PSO*7.0*451).
   a. Backup a Transport Global - This option will create a backup message of any routines exported with the patch. It will NOT back up any other changes such as DDs or templates.
   b. Compare Transport Global to Current System - This option will allow you to view all changes that will be made when the patch is installed. It compares all components of the patch (routines, DDs, templates, etc.).
   c. Verify Checksums in Transport Global - This option will ensure the integrity of the routines that are in the transport global.
   d. Print Transport Global - This option will allow you to view the components of the KIDS build.
4. Use the Install Package(s) option and select the package PSO*7.0*451.
5. When prompted "Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//" respond NO.
6. When prompted "Want KIDS to INHIBIT LOGONs during the install? NO//" respond NO.
7. When prompted "Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//" respond NO.

4. Implementation Procedure

4.1. Post-Install Routine (No Action Required)

The post-install routine in the patch PSO*7*451 will perform a few updates related to the SPMP functionality:

- The FILE ACCESS setting for the files below will be opened up so users can use FileMan to view and search their content. The files were unintentionally released in PSO*7*408 as restricted.
    - SPMP ASAP RECORD DEFINITION (#58.4)
    - SPMP EXPORT BATCH (#58.42)

- If SPMP parameters have been previously entered for a state, the new field/parameter RENAME FILE AFTER UPLOAD (#17) in the SPMP STATE PARAMETERS file (#58.41) will automatically be set to 1 (YES).

- If SPMP parameters have been previously entered for a state using Appriss AWARxE, the parameter setting workaround will be automatically corrected the following way:

  Before:
  ```
  STATE SFTP SERVER IP ADDRESS: prodpmpsftp 54.175.203.159
  STATE SFTP SERVER USERNAME  : -oUser=username
  ```

  After:
  ```
  STATE SFTP SERVER IP ADDRESS: sftp.pmpclearinghouse.net
  STATE SFTP SERVER USERNAME  : username@prodpmpsftp
  ```

- The mail group PSO SPMP NOTIFICATIONS will be changed to type PUBLIC. This mail group was incorrectly released as PRIVATE by PSO*7*408.

4.2. Existing PSO SPMP NOTIFICATIONS Mailgroup (Action Required)

Subscribers to this mailgroup receive failure notifications regarding scheduled SPMP nightly transmissions to the states. Therefore, it is important that all pharmacy personnel involved with the SPMP transmissions subscribe to this mail group.

	Action: Verify the current subscribers of the PSO SPMP NOTIFICATIONS ADMIN mailgroup and add any pharmacy personnel that should be a member of the mailgroup and are not.

4.3. New PSO SPMP ADMIN Security Key (Action Required)

This new Security Key was created to restrict access to the following SPMP functionalities:

- ASAP Definition Customization updates through the View/Edit ASAP Definitions [PSO SPMP ASAP DEFINITIONS] option. Viewing the current ASAP Definition is not restricted.
- SPMP Parameters value updates through the View/Edit SPMP State Parameters [PSO SPMP STATE PARAMETERS] option. Viewing the current SPMP parameters is not restricted.
- SSH Key generation or replacement through the Manage Secure SHell (SSH) Keys [PSO SPMP SSH KEY MANAGEMENT] option. Viewing the current public key is not restricted.

	Action: The new security key PSO SPMP ADMIN should be assigned to the Outpatient Pharmacy coordinator at your site responsible for managing the State Prescription Monitoring Program (SPMP) functionality.

4.4. New RENAME FILE AFTER UPLOAD Parameter (May Require Action)

	If your site is not currently transmitting SPMP data you can skip this step.

	Action (Optional): If you are currently transmitting and you are aware that the renaming of the file is an issue for the state/vendor that you report to, you should set this parameter to NO. This is a known issue for West Virginia sites, so if your site is located in WV please set this field to NO. Please, see Appendix A for the full list of states that should have this parameter set to NO.

This new parameter was introduced in the View/Edit SPMP State Parameters [PSO SPMP STATE PARAMETERS] option to control whether the data export file should be created and uploaded with a .DAT (or .TXT) extension directly or if the file should be created and uploaded with a .UP extension and once the upload completes the file would be renamed to .DAT (or .TXT). This new parameter is being exported with a default value of YES.

NO - File will be uploaded as .DAT/.TXT directly (no renaming)

YES - File will be uploaded as .UP and then renamed to .DAT/.TXT

4.5. New Transmission Configuration

If your site is currently successfully transmitting data to the SPMP you can skip the subsequent installation steps as no further configuration is necessary. Just make sure the transmissions are not interrupted due to the installation of this patch by making sure the state has successfully received your data transmission in the days following this installation.

If your site has never transmitted data to the SPMP or if it did in the past but is no longer transmitting, or if your transmissions are not being successfully accepted due to issues related to state specific requirements or blocked connection, follow the steps below to successfully configure and perform SPMP data transmission.

4.5.1. Register your Outpatient Pharmacy site with the SPMP (Action Required)

If you haven't yet registered with your SPMP you need to do so prior to transmitting data to them. In summary, you have to gather the Pharmacy information such as Pharmacy Name, Address, Phone #, DEA #, and NPI #, and then fill out a form which is usually available online at their website where you can also find a detailed Implementation Guide. You must specify that you will be reporting data via Secure File Transfer Protocol (sFTP) using Secure SHell (SSH) Encryption keys. Some states refer to such type of registration as "sFTP Uploaders".

Once you successfully register with the SPMP they will provide you with the following information: ASAP Version (e.g., 4.2), your assigned Username, the SPMP Server IP Address and in some cases the Port Number. They may also specify a specific Directory at their server where they want the data to be uploaded to. You will need this information when configuring the transmission in VistA.

Pharmacy Benefits Management (PBM) maintains a SharePoint site that might be a good source of information regarding the registration process.

REDACTED

4.5.2. Open Network Traffic between your site and the SPMP (Action Required)

Before you can start transmitting data to your SPMP your local site needs to work with the appropriate local.VA Regional and National support to request that the SSH traffic between your site and the state server be open for SPMP transmissions. This process consists of submitting a request through the REDACTED. This is a complex request and requires a number of steps to get it accomplished. Please, refer to the following document in the PBM repository for instructions on how to submit a request for your site:

REDACTED
Repository:
REDACTED

4.5.3. OpenVMS Directory (May Require Action)

If your site has fully migrated to Linux you can skip this step.

If your site has not fully migrated to Linux you will need a new OpenVMS directory (e.g. USER$:[SPMP]) to be used by the SPMP transmissions. The proposed naming convention is only a recommendation. A more knowledgeable and experienced System Manager may choose to setup the extract directory using existing drives and definitions. The directory name chosen must have the appropriate READ, WRITE, EXECUTE, and DELETE privileges. You must have administrator privileges when you perform this task in order to assure the directory is set up/created with the necessary permissions.

The following is an example for you to follow to create the file transmission directory.

```
$ CREATE/DIRECTORY USER$:[SPMP] /own=CACHEMGR
/PROTECTION=(S:RWED,O:RWED,G:RWED,W:RWED)/LOG
```

NOTE:
- The owner of the directory should be CACHEMGR.
- Where USER$=the disk of your choice (e.g. USER$, PQ$, etc. - SYS$ is not recommended).
- Confirm that the extract directory has similar protections and permissions.

```
$DIR/PROT/OWNER SPMP.DIR
Directory USER$:[000000]

SPMP.DIR;1 [CACHEMGR] (RWED,RWED,RWED,RWED)
```

Action: Once the directory has been created, please pass this directory name (e.g., "USER$:[SPMP]") to the ADPAC/Pharmacy Chief/Pharmacy Informaticist. This will be used in the SPMP Site parameters "Outlined Below".

4.5.4. SPMP State Parameter Configuration (Action Required)

Next, you will need to work with the pharmacy ADPAC to correctly enter the SPMP parameters through the View/Edit SPMP State Parameters [PSO SPMP STATE PARAMETERS] option, which are explained below individually:

The View/Edit SPMP State Parameters [PSO SPMP STATE PARAMETERS] option requires the PSO SPMP ADMIN Security Key for editing the parameters (see step 4.2).

STATE
Select the state that you want to enter, view or edit the SPMP parameters. There should be an entry for all states in which there is a physical Outpatient Pharmacy facility that either dispenses outpatient prescriptions or orders Consolidated Mail Outpatient Pharmacy (CMOP) prescriptions to be dispensed.

ASAP VERSION
This is the American Society for Automation in Pharmacy (ASAP) version required for the SPMP data transmission which was obtained during Step 4.4.1. It should be one of the following versions: 1995, 3.0, 4.0, 4.1 or 4.2.

INCLUDE NON-VETERAN PATIENTS
This field indicates whether controlled substances prescriptions dispensed to non-veteran patients should be included in the export file transmitted to a state. Due to VHA Regulations in place at the time of the release of this patch this field should be set to "**NO**".

REPORTING FREQUENCY IN DAYS
This is the frequency at which a state requires pharmacies to report data. The value must be entered in days and cannot be greater than 30. Example: 1 (daily), 7 (weekly), 3 (every 3 days), etc. This field should be set to 1 (one).

OPEN VMS LOCAL DIRECTORY
If your site has fully migrated to Linux you can leave this field blank. Otherwise, you will need to fill this parameter with the local OpenVMS directory created on step 4.4.3 above.

UNIX/LINUX LOCAL DIRECTORY
This is the name of the local Unix/Linux local directory where the SPMP export file will be created before it can be transmitted to the state (e.g., /srv/vista/okl/user/sftp/spmp/). When running this option for the first time there will be default directory (e.g., /srv/vista/okl/user/sftp/spmp/) and the option may prompt you for the following after pressing <RET> through it:

```
The directory above could not be found.

   Would you like to create it now? N//
```

Answer YES.

FILE NAME PREFIX
This is the prefix that will be appended to the name of the export file transmitted to the state. If the state has no specific requirement, the recommendation is that you use 'SPMP_<Site #>_' format (e.g.,'SPMP_500_').

FILE EXTENSION
The SPMP Implementation Guide for each specific state usually specifies which extension you should choose. If you're unable to determine this information choose .DAT which is the most commonly used.

RENAME FILE AFTER UPLOAD
This parameter controls whether the data export file should be created and uploaded with a .DAT (or .TXT) directly or if the file should be created and uploaded with a .UP extension and once the upload completes the file would be renamed to .DAT (or .TXT). This new

parameter is being exported with a default value of YES. If you are not sure how to answer this parameter, leave it set to "YES".

STATE SFTP SERVER IP ADDRESS
This is the state sFTP IP address of the SPMP server to which the export file will be transmitted. This information should have been provided to you when you registered with the SPMP (Step 4.4.1).

STATE SFTP SERVER USERNAME
This is the state sFTP username of the SPMP server to which the export file will be transmitted. This information should have been provided to you when you registered with the SPMP (Step 4.4.1).

STATE SFTP SERVER PORT #
This is the Port # used by the state sFTP server to receive data. Usually states use the default sFTP port #22 and in this case it does not need to be entered. This information should have been provided to you when you registered with the SPMP (Step 4.4.1) or it can be found in the SPMP Implementation Guide.

STATE FTP SERVER DIRECTORY
This is the name of the remote state directory of the SPMP server to which the export file will be saved. Usually states do not require the file to be placed in a specific directory and in this case this field should be left blank. If required, this information can usually be found in the SPMP Implementation Guide.

SFTP TRANSMISSION MODE
This field indicates whether the sFTP transmissions will happen automatically by a scheduled background job using SSH encryption keys or if it will be performed manually by a user. Please, choose "A" for Automatic Transmissions.

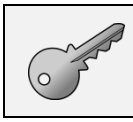
Example: View/Edit SPMP State Parameters **[**PSO SPMP STATE PARAMETERS]

```
Select State Prescription Monitoring Program (SPMP) Menu Option: SP
View/Edit SPMP State Parameters

Select STATE: NEBRASKA// NEBRASKA

ASAP VERSION: 4.2// 4.2  ASAP 4.2
INCLUDE NON-VETERAN PATIENTS: NO// NO
REPORTING FREQUENCY IN DAYS: 1// 1
OPEN VMS LOCAL DIRECTORY: USER$:[SPMP]
UNIX/LINUX LOCAL DIRECTORY: /srv/vista/neb/user/sftp/spmp/
  Replace

The directory above could not be found.

Would you like to create it now? N// YES

FILE NAME PREFIX: SPMP_
```

```
RENAME FILE AFTER UPLOAD: NO// YES
FILE EXTENSION: .DAT// .DAT
STATE SFTP SERVER IP ADDRESS: 999.99.9.99
STATE SFTP SERVER USERNAME: VAUSERNAME
STATE SFTP SERVER PORT #:
STATE SFTP SERVER DIRECTORY:
SFTP TRANSMISSION MODE: A// AUTOMATIC [RSA KEYS]
```

4.5.5. Create a new SSH Key Pair (Action Required)

Once the SPMP State parameters have been entered the next step is to create a pair of SSH encryption keys that will be used for authenticating the sFTP connection to the state automatically bypassing the need for the user to type in an sFTP password. This will enable the transmissions to be scheduled to run overnight through TaskMan. Use the Manage Secure SHell (SSH) Keys [PSO SPMP SSH KEY MANAGEMENT] option and follow the steps below:



The Manage Secure SHell (SSH) Keys [PSO SPMP SSH KEY MANAGEMENT] option requires the PSO SPMP ADMIN Security Key for creating or deleting SSH Key pairs (see step 4.2).

Verify that you don't have an SSH Key pair in place for the state you are trying to set up transmissions. You can use the Action 'V' (View Public SSH Key) for this purpose, as seen in the example below:

```
Select STATE: NEBRASKA//

     Select one of the following:

          V         View Public SSH Key
          N         Create New SSH Key Pair
          D         Delete SSH Key Pair
          H         Help with SSH Keys

Action: V// v  View Public SSH Key

[No SSH Key Pair found for NEBRASKA]

Press Return to continue:
```

The message [No SSH Key Pair found for NEBRASKA] displayed above indicates that there are no SSH keys for the state of Nebraska meaning that it is okay to proceed with the creation of a new SSH Key Pair.

If you are not sure how to create and share the Public SSH Key invoke the Action 'H' for detailed information to help you successfully create and share the key with the state.

```
Action: V// Help with SSH Keys
```

```
Secure SHell (SSH) Encryption Keys are used to automate the data
transmission to the State Prescription Monitoring Programs (SPMPs).
Follow the steps below to successfully setup SPMP transmissions from
VistA to the state/vendor server:

Step 1: Select the 'N' (Create New SSH Key Pair) Action and follow the
        Prompts to create a new pair of SSH keys. If you already have
        an existing SSH Key Pair you can skip this step.
        You can check whether you already have an existing SSH Key Pair
        through the 'V' (View Public SSH Key) Action.

        Encryption Type: DSA or RSA?
        ----------------------------
        Digital Signature Algorithm (DSA) and Rivest, Shamir & Adleman
        (RSA) are two of the most common encryption algorithms used by
        the IT industry for securely sharing data. The majority of SPMP
        servers can handle either type; however there are vendors that
        accept only one specific type. You will need to contact the
        SPMP vendor support to determine which type to select.

Step 2: Share the Public SSH Key content with the state/vendor. In
        order to successfully establish SPMP transmissions the
        state/vendor will have to install/configure the new SSH Key
        created in step 1 for the user id they assigned to your site.
        Use the 'V' (View Public SSH Key) Action to retrieve the
        content of the Public SSH key. The Public SSH Key should not
        contain line-feed characters, therefore after you copy & paste
        it from the terminal emulator into an email or text editor make
        sure it contains only one line of text (no wrapping).
```

Once you have read the Help text above proceed to creating the SSH Key Pair by selecting the Action 'N' (Create New SSH Key Pair)

```
Action: V// n  Create New SSH Key Pair

Enter your Current Signature Code:    SIGNATURE VERIFIED

     Select one of the following:

          DSA       Digital Signature Algorithm (DSA)
          RSA       Rivest, Shamir & Adleman (RSA)

SSH Key Encryption Type: DSA// ?

        Digital Signature Algorithm (DSA) and Rivest, Shamir & Adleman
        (RSA) are two of the most common encryption algorithms used by
        the IT industry for securely sharing data. The majority of SPMP
        servers can handle either type; however there are vendors that
        accept only one specific type. You will need to contact the
        SPMP vendor support to determine which type to select.

     Select one of the following:

          DSA       Digital Signature Algorithm (DSA)
```

```
          RSA       Rivest, Shamir & Adleman (RSA)

SSH Key Encryption Type: DSA//   Digital Signature Algorithm (DSA)

Confirm Creation of SSH Keys for NEBRASKA? NO// YES

Creating New SSH Keys, please wait...Done.
```

Once you have created the new SSH Key Pair use the Action 'V' (View Public SSH Key) one more time to retrieve the content of the Public SSH Key so that you can share with the state.

```
Action: V// View Public SSH Key

NEBRASKA's Public SSH Key (DSA) content (does not include dash lines):
------------------------------------------------------------------------
ssh-dss NzaC1kc3MAAACBAOVOrS3sCHlFheWjM8wT0JHEtCx37c+0IRD0IJLjQIs0WLXvj
2qW/67OxYWymNqNVBWrUf1qoVbOkXtSAlnXp1ZtbMdZbkzeRIvUCG5PYx8RHHqI/BOZ604S
JVJXdXAB2Z1JzOs/9Yhh9XCcwv1gJG5SMYtHvAAAAFQCWQqn1nhbsdePmMq+v543zDx0Scw
sOqMj1HjVNjzjylpjbGBjh5QY+MhXxc0CtMZodvNV4aNukIU3MJ4w8hq9NnBA4U7dIrIgWo
UlFRjK7yCwb3POCe/jxaefLJfqzZ7pUXIuSG1Vpn+adas7cASAUPlgJ/fwWBOUrB2aDhQJy
fXhPLf1a0S0AAACAb+gJQb/Cx9Rl5vNdBbgbZ7myjpMoTTsSRJ9kUhxjJwuxDURA/9E17Oh
kWgPZ3lFFGamsLniUDJIDGJTMod+XsfG04+leMR0PQbhHRnxhOL0VSQDSQuoENlt4WAeJpw
ri74CZMBsJIKpn6vy3y37zil4OA=
------------------------------------------------------------------------
```

Action: You will need to share the text content above (between the dash lines)with the state/vendor so they can install it on their server. The Public SSH Key sent to the vendor should not contain line-feed characters. After you copy & paste it from the terminal emulator into an email or text editor, make sure it contains only one line of text (no wrapping).

4.5.6. Customize the ASAP Definition with state specific data requirements (May Require Action)

If your state is not listed in the Appendix A at the end of this document you can skip this step.

Before you execute this step, go to the Appendix A in this document and verify if the state you are setting up transmissions for is listed. If so, take note of the specific customizations your state requires and use the View/Edit ASAP Definitions [PSO SPMP ASAP DEFINITIONS] option to perform the required adjustments so that your state will accept the data from your site.

The View/Edit ASAP Definitions [PSO SPMP ASAP DEFINITIONS] option requires the PSO SPMP ADMIN Security Key for customizing the ASAP Definition

	Segments and Data Elements (see step 4.2).

	The specific customizations listed in the Appendix A have been identified as of February 2016. Therefore, please check with the SPMP of your state to make sure no additional specific requirements have been made since then.

Example 1: Customizing the AIR Segment (Additional Information Reporting) from NOT USED to REQUIRED through the View/Edit ASAP Definitions [PSO SPMP ASAP DEFINITIONS] option.

```
ASAP Standard Version 4.2     Feb 25, 2016@11:35:59          Page:    1 of    1
Element Delimiter: *   Segment Terminator: ~   End Of Line ESC: $C(13,10)

_____________________________________________________________________________
MAIN HEADER
TH - Transaction Header
    IS - Information Source
        PHARMACY HEADER
        PHA - Pharmacy Header
            PATIENT DETAIL
            PAT - Patient Information
                PRESCRIPTION DETAIL
                DSP - Dispensing Record
                    PRE - Prescriber Information
                    CDI - Compound Drug Ingredient Detail (Not Used)
                    AIR - Additional Information Reporting (Not Used)
        PHARMACY TRAILER
        TP - Pharmacy Trailer
MAIN TRAILER
TT - Transaction Trailer

+         Enter ?? for more actions|* Custom Segment/Element
CV  Copy ASAP Version     CE  Customize Element     ED  Edit Delimiters
CS  Customize Segment     DC  Delete Customization  SH  Show/Hide Details
Select Item(s): Quit// CS   Customize Segment

SEGMENT ID: AIR   Additional Information Reporting

REQUIREMENT: N// ?

Indicate if the segment is required, optional or not used by the ASAP
version.
Choose from:
R        REQUIRED
O        OPTIONAL
N        NOT USED

REQUIREMENT: N// REQUIRED

Save Custom Segment? YES// YES       Saving...OK
```

Example 2: Customizing the PAT17 Data Element (Patient's Phone Number), which was requested by Massachusetts to be reported as "9999999999" when no phone number can be

found for the patient. The current standard/default value for this field will be Pharmacy phone number if no valid phone number can be found for the patient.

```
+         Enter ?? for more actions|* Custom Segment/Element
CV  Copy ASAP Version     CE  Customize Element     ED  Edit Delimiters
CS  Customize Segment     DC  Delete Customization  SH  Show/Hide Details
Select Item(s): Quit// CE   Customize Element

DATA ELEMENT ID: PAT17   Phone Number

MAXIMUM LENGTH: 10// 10
REQUIREMENT: O// OPTIONAL
M SET EXPRESSION:  $$PAT17^PSOASAP()//
$S($$PAT17^PSOASAP()=$$PHA10^PSOASAP():"9999999999",1:$$PAT17^PSOASAP())

Save Custom Data Element? YES//         Saving...OK
```

4.5.7. Test the Transmission (Action Required)

Once the state/vendor confirms installation of the SSH Key it is recommended that the site test the connection through a test transmission of a single prescription fill to make sure it is working properly. Search for a recently released Controlled Substance prescription and use the View/Export Single Prescription [PSO SPMP SINGLE RX VIEW/EXPORT] option to perform this step as shown below:

```
PRESCRIPTION: 999999       OXYCODONE HCL 5MG TABLET

     Select one of the following:

          0         Original  (6/25/15)  WINDOW

 Fill: 0//   Original  (6/25/15)  WINDOW

View/Export Prescription      Feb 25, 2016@09:08:46        Page:    1 of    6
Rx: 999999 - OXYCODONE HCL 5MG TABLET   (Fill: Original)
Patient: TESTPATNAM,OUTPATIENT1          ASAP Version: 4.2

TH Transaction Header
TH*4.2*635-0*01**20160225*090846*T**~~
4.2                                  TH01 Version / Release Number
635-0                                TH02 Transaction Control Number
01                                   TH03 Transaction Type
*                                    TH04 Response ID
20160225                             TH05 Creation Date
090846                               TH06 Creation Time
T                                    TH07 File Type
*                                    TH08 Routing Number
~                                    TH09 Data Segment Terminator Character
IS Information Source
IS*VA635*OKLAHOMA CITY VA MEDICAL CENTER*~
VA635                                IS01 Unique Information Source ID
OKLAHOMA CITY VA MEDICAL CENTER      IS02 Information Source Entity Name
*                                    IS03 Message
```

```
+         Enter ?? for more actions|* Custom Segment/Element
VW  View Rx                              AS  View ASAP Definition
MP  Medication Profile                   EXP Export Rx Fill
Select Item(s): Next Screen// EXP   Export Rx Fill

Enter the type of record to be sent for this prescription fill:

  N     NEW
  R     REVISE

Record Type: NEW//

The Prescription Fill will be transmitted to the State

Confirm? N// y  YES

Creating Batch #999 for NEBRASKA...Done.

Exporting Batch #999:

Writing to file /srv/vista/neb/user/sftp/spmp/SPMP_201602250909.UP...Done.

Transmitting file to the State (999.99.9.99)...

sFTP Server 6.4.0 Build 11.18.2011.31

File Successfully Transmitted.

Press Return to continue:
```

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

See Section 5.6.

5.2. Back-Out Considerations

None

5.2.1. Load Testing

None

5.2.2. User Acceptance Testing

User Acceptance Testing in progress.

5.3. Back-Out Criteria

The project is canceled and the implemented features are no longer wanted by the stakeholders.

5.4. Back-Out Risks

The following New Service Requests (NSRs), Remedy Ticket and Patient Safety will not be addressed:

- **NSR 20150701:** State Prescription Monitoring Program Enhancement

5.5. Authority for Back-Out

The authority would come from the IPT and the project manager Scott Soldan.

5.6. Back-Out Procedure

Restore Pre-Patch Routines (MailMan)

1. Go to the **Backup of Patch PSO*7*451** message in Mailman.
2. At the Enter message action prompt, enter "X" to "Xtract PackMan"
3. At the Select PackMan Function prompt, enter the number 6 to "Install/Check Message"
4. At the end of this process the pre-patch routines are restored.

Note: See header "Install the Patch Backup" for detail

Install the Patch Backup

```
BACKUP PATCH BASKET, 144 MESSAGES (1-144), 117 NEW

*=NEW/!=PRIORITY.....SUBJECT.....................................FROM...
        141.  BACKUP OF PATCH PSO*7*451 INSTALL ON MAR 01, 2016   ADPAC,ONE

IN BASKET MESSAGE: 1// 141

SUBJ: BACKUP OF XXXXX INSTALL ON MAR 01, 2016 [#000000] 03/01/16@11:14
2016 LINES
FROM: ADPAC,ONE IN 'IN' BASKET.   PAGE 1
---------------------------------------------------------------------
$TXT PACKMAN BACKUP CREATED ON THURSDAY, 03/1/16 AT 11:14:50 BY ADPAC,ONE

ENTER MESSAGE ACTION (IN IN BASKET): IGNORE// XTRACT PACKMAN
SELECT PACKMAN FUNCTION: 6  INSTALL/CHECK MESSAGE

WARNING:  INSTALLING THIS MESSAGE WILL CAUSE A PERMANENT UPDATE OF GLOBALS
AND ROUTINES.
DO YOU REALLY WANT TO DO THIS? NO// YES

ROUTINES ARE THE ONLY PARTS THAT ARE BACKED UP.  NO OTHER PARTS
ARE BACKED UP, NOT EVEN GLOBALS.  YOU MAY USE THE 'SUMMARIZE MESSAGE'
OPTION OF PACKMAN TO SEE WHAT PARTS THE MESSAGE CONTAINS.
THOSE PARTS THAT ARE NOT ROUTINES SHOULD BE BACKED UP SEPARATELY
IF THEY NEED TO BE PRESERVED.


SHALL I PRESERVE THE ROUTINES ON DISK IN A SEPARATE BACK-UP MESSAGE? YES// NO
NO BACKUP MESSAGE BUILT.

LINE 123  MESSAGE #000000  UNLOADING ROUTINE ROUTINE_NAME1 (PACKMAN_BACKUP)
LINE 345  MESSAGE #000000  UNLOADING ROUTINE ROUTINE_NAME2 (PACKMAN_BACKUP)
LINE 567  MESSAGE #000000  UNLOADING ROUTINE ROUTINE_NAME3 (PACKMAN_BACKUP)
LINE 789  MESSAGE #000000  UNLOADING ROUTINE ROUTINE_NAME4 (PACKMAN_BACKUP)
=====================================================================
```

New Routine(s)

The new routines below distributed by the patch PSO*7*451 can be deleted/removed by using the following option: **Delete Routines [XTRDEL]**

```
PSOASAP
PSOSPMA3
PSOSPMB3
PSOSPMKY
PSOSPMU0
PSOSPMU2
PSOSPMU3
```

This option can be found under the **Routine Tools** menu.

```
SELECT OPTION NAME:     XUPROG      PROGRAMMER OPTIONS
```

```
   KIDS    KERNEL INSTALLATION & DISTRIBUTION SYSTEM ...
   NTEG    BUILD AN 'NTEG' ROUTINE FOR A PACKAGE
   PG      PROGRAMMER MODE
           CALCULATE AND SHOW CHECKSUM VALUES
           DELETE UNREFERENCED OPTIONS
           ERROR PROCESSING ...
           GLOBAL BLOCK COUNT
           LIST GLOBAL
           MAP POINTER RELATIONS
           NUMBER BASE CHANGER
           ROUTINE TOOLS ...
           TEST AN OPTION NOT IN YOUR MENU
           VERIFIER TOOLS MENU ...

SELECT PROGRAMMER OPTIONS <TEST ACCOUNT> OPTION: ROUTINE TOOLS

           %INDEX OF ROUTINES
           CHECK ROUTINES ON OTHER CPUS
           COMPARE LOCAL/NATIONAL CHECKSUMS REPORT
           COMPARE ROUTINES ON TAPE TO DISK
           COMPARE TWO ROUTINES
           DELETE ROUTINES
           FIRST LINE ROUTINE PRINT
           FLOW CHART ENTIRE ROUTINE
           FLOW CHART FROM ENTRY POINT
           GROUP ROUTINE EDIT
           INPUT ROUTINES
           LIST ROUTINES
           LOAD/REFRESH CHECKSUM VALUES INTO ROUTINE FILE
           OUTPUT ROUTINES
           ROUTINE EDIT
           ROUTINES BY PATCH NUMBER
           VARIABLE CHANGER
           VERSION NUMBER UPDATE

SELECT ROUTINE TOOLS OPTION: DELETE ROUTINES
ROUTINE DELETE
ALL ROUTINES? NO => NO
ROUTINE: ROUT999
ROUTINE:
1 ROUTINE
1 ROUTINES TO DELETE, OK: NO// YES
ROUT999
DONE.
```

Other Components

New data dictionaries, options, protocols and security keys modifications must be removed using a follow-up backout patch.

FILE NAME (#)	FIELD NAME (#)	NEW/MODIFIED/DELETED
SPMP ASAP RECORD DEFINITION (#58.4)		
VERSION SUB-FILE (#58.4001)		
	DATA ELEMENT DELIMITER CHAR (#.02)	NEW

SEGMENT TERMINATOR CHAR (#.03)	NEW
END OF LINE ESCAPE CHAR(S) (#.04)	NEW
SEGMENT SUB-FILE (#58.40011)	
LEVEL (#.06)	NEW
DATA ELEMENT SUB-FILE (#58.400111)	
ELEMENT VALUE (M EXPRESSION) (#.08)	NEW
SPMP STATE PARAMETERS (#58.41)	
RENAME FILE AFTER UPLOAD (#17)	NEW
SFTP SSH KEY FORMAT (#18)	NEW
SFTP SSH KEY ENCRYPTION (#19)	NEW

OPTION NAME	NEW/MODIFIED/DELETED
PSO SPMP ASAP DEFINITIONS	NEW
PSO SPMP SSH KEY MANAGEMENT	NEW

PROTOCOLS	NEW/MODIFIED/DELETED
PSO SPMP3 COPY VERSION	NEW
PSO SPMP3 CUSTOMIZE DATA ELEMENT	NEW
PSO SPMP3 CUSTOMIZE SEGMENT	NEW
PSO SPMP3 DELETE CUSTOMIZATION	NEW
PSO SPMP3 EDIT DELIMETERS	NEW

SECURITY KEY	NEW/MODIFIED/DELETED
PSO SPMP ADMIN	NEW

6. Rollback Procedure

6.1. Rollback Considerations

A follow-up rollback patch would be needed to remove new data entries established by the data dictionary.

Note: These new data entries are the result of a fields added to the data dictionary or the modification of an existing field in the data dictionary.

6.2. Rollback Criteria

The back-out of the SPMP patch PSO*7*451 that modified existing fields, and established new fields would be justification for rollback.

6.3. Rollback Risks

None

6.4. Authority for Rollback

The authority for rollback would come from the project IPT and the VA project manager, Scott Soldan.

6.5. Rollback Procedure

In the situation where a rollback would be necessary, the development team will be contacted and a rollback patch will be provided to the site to install. The rollback patch will roll back changes that cannot be affected by the installation back out routines outlined in section 5.6.

7. Additional Information

If you have any questions concerning the implementation of this application, contact the VA Service Desk at 1-855-673-4357 directly or log a ticket via CA Service Desk Manager (SDM) application using the Incident Area: **NTL.APP.VistA.Outpatient Pharmacy 7_0**

7.1. Documentation

Updated documentation describing the new functionality introduced by this patch is available. The preferred method is to use Secure File Transfer Protocol (sFTP) to retrieve the files from REDACTED

This transmits the files from the first available sFTP server. Sites may also elect to retrieve software directly from a specific server as follows:

REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED

The documentation will be in the form of Adobe Acrobat files.

File Description	File Name	FTP Mode
Outpatient Pharmacy V. 7.0 Manager's User Manual	PSO_7_MAN_UM_R0816.PDF	Binary
Outpatient Pharmacy V. 7.0 Technical Manual/Security Guide	PSO_7_TM_R0816.PDF	Binary
SPMP Enhancement Installation Guide	PSO_7_P451_IG.PDF	Binary
SPMP Enhancement Release Notes	PSO_7_P451_RN.PDF	Binary

Documentation can also be retrieved from the VA Software Documentation Library (VDL) on the Internet at the following address:
http://www4.va.gov/vdl

8. Disaster Recovery and Continuity of Operations

Each VistA facility as well as regional data center is responsible for its own Disaster Recovery (DR) and Continuity of Operations (COOP). Please refer to the VistA Disaster Recovery and Continuity of Operations Plans at the specific facility. Most of these documents are considered confidential, as they contain information that could disrupt any of these facilities' DR or COOP and cause catastrophic data loss. Therefore, the following links are to be considered as examples and not definitive plans for every facility:

- REDACTED
- REDACTED

9. Appendix A

State/Vendor Specific (unique) requirements.

	The specific customizations listed here have been identified as of July 2016. Therefore, please check with the SPMP of your state to make sure no additional specific requirements have been made since then.

California (ASAP 4.1)

PHA11 – Contact Name

Customize this data element to transmit the Pharmacy DEA# concatenated with the letter "B" (e.g, "AV123456**B**"). See Example 2 under Section 4.4.6 above.

```
M SET EXPRESSION: $$PAT17^PSOASAP()//$$PHA03^PSOASAP() "B"
```

Segment Terminator

In the Example 1 in Section 4.4.2 above, instead of selecting CE (Customize Element) select ED (Edit Delimiters) and delete the SEGMENT TERMINATOR CHAR for ASAP version 4.1, as shown below:

```
Select Item(s): Quit// ED   Edit Delimiters

ASAP Version 4.1 delimiters:

DATA ELEMENT DELIMITER CHAR: *// *
SEGMENT TERMINATOR CHAR: ~// @                      Deleted.
SEGMENT TERMINATOR CHAR:
END OF LINE ESCAPE CHAR(S): $C(13,10)// $C(13,10)

Save Changes? YES// Y
```

Rename File After Upload Parameter

Use the View/Edit SPMP State Parameters [PSO SPMP STATE PARAMETERS] option and set parameter RENAME AFTER UPLOAD to "NO".

Pharmacy DEA# List

Atlantic Associates Inc., the vendor for the California PMP, requires that you send a list of DEA #'s for all pharmacies from your site that are dispensing controlled substance prescription in California so that they can configure them before you start transmitting data to the California PMP.

Illinois (ASAP 4.1)

Segment Terminator

In the Example 1 in Section 4.4.2 above, instead of selecting CE (Customize Element) select ED (Edit Delimiters) and delete the SEGMENT TERMINATOR CHAR for ASAP version 4.1, as shown below:

```
Select Item(s): Quit// ED   Edit Delimiters

ASAP Version 4.1 delimiters:

DATA ELEMENT DELIMITER CHAR: *// *
SEGMENT TERMINATOR CHAR: ~// @                    Deleted.
SEGMENT TERMINATOR CHAR:
END OF LINE ESCAPE CHAR(S): $C(13,10)// $C(13,10)

Save Changes? YES// Y
```

Rename File After Upload Parameter

Use the View/Edit SPMP State Parameters [PSO SPMP STATE PARAMETERS] option and set parameter RENAME AFTER UPLOAD to "NO".

Pharmacy DEA# List

Atlantic Associates Inc., the vendor for the Illinois PMP, requires that you send a list of DEA #'s for all pharmacies from your site that are dispensing controlled substance prescription in Illinois so that they can configure them before you start transmitting data to the Illinois PMP.

Massachusetts (ASAP 4.2)

AIR - Additional Information Reporting (Segment)

The REQUIREMENT field for the AIR segment should be changed from NOT USED to REQUIRED, as shown by Example 1 in Section 4.4.6 above.

AIR05 - ID of Person Dropping Off or Picking Up Rx

Customize this data element to always send "VADELIVERY" (No space between "VA" and "DELIVERY")

```
M SET EXPRESSION: $$AIR05^PSOASAP()//"VADELIVERY "
```

PAT02 – ID Qualifier

Customize this data element to send "99" (Other) instead of "07" (Social Security Number).

```
M SET EXPRESSION: $$PAT02^PSOASAP()//"99 "
```

PAT03 – ID of Patient

Customize this data element to send the patient's Integration Control Number (ICN) instead of the Social Security Number (SSN).

```
M SET EXPRESSION: $$PAT03^PSOASAP()//+$$GETICN^MPIF001(PATIEN)
```

PAT08 – First Name

Customize this data element to the patient's last name if the patient's first name is blank. The patient's last name will be reported twice, in the PAT07 and PAT08 fields.

```
M SET EXPRESSION: $$PAT08^PSOASAP()//
$S($$PAT08^PSOASAP()="":$$PAT07^PSOASAP(),1:$$PAT08^PSOASAP())
```

PAT17 – Phone number

Customize this data element to send "9999999999" in case a valid phone number cannot be found for the patient. See Example 2 under Section 4.4.6 above.

```
M SET EXPRESSION: $$PAT17^PSOASAP()//
$S($$PAT17^PSOASAP()=$$PHA10^PSOASAP():"9999999999",1:$$PAT17^PSOASAP())
```

Rename File After Upload Parameter

Use the View/Edit SPMP State Parameters [PSO SPMP STATE PARAMETERS] option and set parameter RENAME AFTER UPLOAD to "NO".

Montana (ASAP 4.1)

IS01 Unique Information Source ID

Customize this data element to send the Registration # that Montana SPMP assigned to the VA Pharmacy during the registration Process (e.g., 53871184 was the number assigned to the Ft. Harrison VAMC):

```
M SET EXPRESSION: $$IS01^PSOASAP()//
$S($$GET1^DIQ(5,STATEIEN,1)="MT":"53871184",1:$$IS01^PSOASAP())
```

Michigan (ASAP 4.2)

PAT02 – ID Qualifier

Customize this data element to send "99" (Other) instead of "07" (Social Security Number).

```
M SET EXPRESSION: $$PAT02^PSOASAP()//"99 "
```

PAT03 – Patient ID

Customize this data element to always send "000000000" instead of the Social Security Number (SSN) because the SSN is not the board-required form of ID for the state of Michigan.

```
M SET EXPRESSION: $$PAT03^PSOASAP()//
$S($$GET1^DIQ(5,STATEIEN,1)="MI":"000000000",1:$$PAT03^PSOASAP())
```

Rename File After Upload Parameter

Use the View/Edit SPMP State Parameters [PSO SPMP STATE PARAMETERS] option and set parameter RENAME AFTER UPLOAD to "NO".

New York (ASAP 4.2)

DSP17 - Date Sold

The standard ASAP definition was released with this field set to NOT USED, however the New York SPMP requires it.

```
REQUIREMENT: N// REQUIRED
```

West Virginia (ASAP 4.2)

Rename File After Upload Parameter

Use the View/Edit SPMP State Parameters [PSO SPMP STATE PARAMETERS] option and set parameter RENAME AFTER UPLOAD to "NO".

Wyoming (ASAP 4.1)

Segment Terminator

In the Example 1 in Section 4.4.2 above, instead of selecting CE (Customize Element), select ED (Edit Delimiters) and delete the SEGMENT TERMINATOR CHAR for ASAP version 4.1, as shown below:

```
Select Item(s): Quit// ED   Edit Delimiters

ASAP Version 4.1 delimiters:

DATA ELEMENT DELIMITER CHAR: *// *
SEGMENT TERMINATOR CHAR: ~// @                    Deleted.
SEGMENT TERMINATOR CHAR:
END OF LINE ESCAPE CHAR(S): $C(13,10)// $C(13,10)

Save Changes? YES// Y
```

Rename File After Upload Parameter

Use the View/Edit SPMP State Parameters [PSO SPMP STATE PARAMETERS] option and set parameter RENAME AFTER UPLOAD to "NO".

Pharmacy DEA# List

Atlantic Associates Inc., the vendor for the Wyoming PMP, requires that you send a list of DEA #'s for all pharmacies from your site that are dispensing controlled substance prescription in Wyoming so that they can configure them before you start transmitting data to the Wyoming PMP.