Pharmacy Product System (PPS)-N Version 3.0.4 PPS-N Java

Deployment, Installation, Back-Out, and Rollback Guide



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Revision History

| Date | Version | Description | Author |
|------------------|---------|---|----------------------------------|
| December 2018 | 1.0 | Updated version number, date and Installation instructions for the PPS-N v3.0.4 Sustainment Release (PREN*3.0*5). | Anitha Alluri HPS Sustainment |

Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Plan for the PPS-N Java portion of the PPS-N v3.0.4 Release. This is a subdocument of the main *Pharmacy Product System (PPS)-N Deployment, Installation, Back-Out, and Rollback Guide.* It is separate since many of the details of PPS-N Java application deployment involve a different set of personnel coordinating at just a few critical collaboration points with the VistA/MUMPS portion. Those collaboration points will be highlighted and cross-referenced in the main document as well as in this document.

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1 Introduction

This document describes how to deploy and install the PPS-N Java Application, including the WebLogic, Oracle, and SSOi configurations for the Pharmacy Product System (PPS) PPS-N v3.0.4.

1.1 Purpose

The purpose of this document is to describe how to deploy and install the PPS-N Java Application, including the WebLogic, Oracle, and SSOi configurations.

1.2 Dependencies

The following pre-existing PPS-N v3.0 interfacing systems must be available during the deployment.

- SSOi
- ISAAC
- STS/VETS

1.3 Constraints

There are no constraints for the PPS-N v3.0.4 release.

2 Roles and Responsibilities

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

| ID | Team | Phase / Role | Tasks | Project Phase (See Schedule) |
|----|---------------------------|-----------------|---|---------------------------------------|
| | AITC | Deployment | Plan and schedule deployment (including orchestration with vendors) | |
| | AITC | Deployment | Determine and document the roles and responsibilities of those involved in the deployment. | |
| | AITC | Deployment | Test for operational readiness | |
| | AITC | Deployment | Execute deployment | |
| | PPS-N Sustainment Team | Back-out | Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out) | |

| ID | Team | Phase / Role | Tasks | Project Phase (See Schedule) |
|----|-----------------|--------------------|---------------------------------------|---------------------------------------|
| | Product Support | Post Deployment | Hardware, Software and System Support | |

3 Deployment

This section provides the schedule and milestones for the deployment.

3.1 Timeline

The PPS-N v3.0.4 Java Application will be nationally deployed at AITC after IOC testing and National Release approval.

3.2 Site Readiness Assessment

The PPS-N Java Application is a single, nationally deployed web application deployed in the AITC.

3.2.1 Deployment Topology (Targeted Architecture)

The PPS-N Java Application and Database will be installed on the existing PPS-N v3.0 production platform.

3.2.2 Site Information (Locations, Deployment Recipients)

Section 3.2 describes the PPS-N Java Application, and it is a nationally deployed web application deployed in the AITC.

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 |
|------------|--|---|--|-------|
| AITC | Ensure Firewall access between PPS-N and ISAAC | | If connectivity is not open between the PPS-N web application server and the ISAAC server, request that the firewall be opened for this connection | |

| Site/Other | Problem/Change Needed | Features to Adapt/Modify to New Product | Actions/Steps | Owner |
|------------|--|---|---|-------|
| AITC | Ensure Firewall access between PPS-N and STS/VETS | | If connectivity is not open between the PPS-N web application server and the STS/VETS server, request that the firewall be opened for this connection | |

3.3 Resources

The pre-existing PPS-N v3.0 environment resources will be used.

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 | | | |

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 |
|----------------------|-------|---------|---------------|--------------|-------|
| N/A | | | | | |

Please see the Roles and Responsibilities table in Section 2 for details about who is responsible for preparing the site to meet these hardware specifications.

3.3.3 Software

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

Table 5: Software Specifications

| Required Software | Version | Configuration |
|---------------------------------------|------------|---------------|
| Oracle WebLogic | 12.1.3 | Pre-existing |
| Oracle 11g Enterprise Edition Release | 11.2.0.2.0 | Pre-existing |

| Required Software | Version | Configuration |
|------------------------------------|----------------------|---------------|
| Apache httpd | Apache/2.2.15 (Unix) | Pre-existing |
| Red Hat Enterprise Linux Server | 6.9 (Santiago) | Pre-existing |
| Java SDK | 1.8_162 or higher | Pre-existing |

Please see the Roles and Responsibilities table in Section 2 above for details about who is responsible for preparing the site to meet these software specifications.

3.3.4 Communications

- Notify business owner of production deployment
- The Release Manager will schedule activities and identify the required personnel for each activity.
- Meetings will be scheduled for deployment personnel to work through the deployment steps.

3.3.4.1 Deployment/Installation/Back-Out Checklist

Table 6: Deployment/Installation/Back-Out Checklist

| Activity | Day | Time | Individual who completed task |
|----------|-----|------|-------------------------------|
| Deploy | | | |
| Install | | | |
| Back-Out | | | |

4 Installation

4.1 Pre-installation and System Requirements

The PPS-N Java Application and Database will be installed on the existing PPS-N v3.0 production platform.

4.2 Platform Installation and Preparation

The pre-existing PPS-N v3.0 platform will be used.

4.3 Download and Extract Files

See Section 4.5, specific filenames will be detailed in the RFC.

4.4 Database Creation

The pre-existing PPS-N v3.0 database will be used.

4.5 Installation Scripts

All scripts and files are in the following location.

\\vaauspecdbs801.aac.dva.va.gov\AITC\PPS\PPS-N v3.0.4

The installer should follow the instructions in the appropriate RFC documents for the target environment.

4.6 Cron Scripts

No Cron job changes are required for this deployment.

4.7 Access Requirements and Skills Needed for the Installation

Linux System Administrator will need:

- Access to the Linux console of the server where PPS-N's WebLogic is running
- Access to the WebLogic web-based Console
- Access to the location indicated in section 4.5 Installation Scripts

Database Administrator will need:

- Access to the Linux console of the server where PPS-N's Oracle Database is running
- Access to the location indicated in section 4.5 Installation Scripts

4.8 Installation Procedure

This section is a high-level overview of the installation procedure steps. Detailed steps are in the RFCs for the Database and Application deployment, and they will be published at the locations in Section 4.5.

- 1. Stop the Managed Server
- 2. Un-deploy the two EAR files for PPS-N v3.0 Application
- 3. Deploy the two new EAR files for PPS-N v3.0.4 Application
- 4. Start the PPS-N Application
- 5. Perform Smoke Test on PPS-N

4.9 Installation Verification Procedure

After deployment is updated, PPS-N will be smoke tested.

The system administrator will check application logs for the absence of errors.

4.10 System Configuration

4.10.1 Properties Files

No property files changes are required for this deployment. The pre-existing PPS-N v3.0.3 property files will be used.

4.10.2 Import VA Certificates

No certificate changes are required for this deployment. The pre-existing PPS-N v3.0.3 VA certificates will be used.

4.11 Database Tuning

After installation, the AITC DBA should monitor Oracle Enterprise Manager/Cloud Control to note any performance problems.

5 Back-Out Procedure

5.1 Back-Out Strategy

The back-out strategy for the PPS-N Java application is to restore the previous PPS-N v3.0.3 EAR file.

5.2 Back-Out Considerations

5.2.1 Load Testing

N/A

5.2.2 User Acceptance Testing

User Acceptance Testing is performed at test sites during IOC Testing.

5.3 Back-Out Criteria

A back-out should only be considered if it is determined that the PPS-N v3.0.4 application is the cause of a patient safety issue or catastrophic system failure.

5.4 Back-Out Risks

Risks of backing out include not reconfiguring the application in the same manner it was before the start of the implementation. This can be remediated by taking backups of the appropriate file systems and database before the start of the deployment.

5.5 Authority for Back-Out

The PPS-N Sustainment PM has the authority to determine if a back-out of PPS-N v3.0.4 is required.

5.6 Back-Out Procedure

Deploy the previous PPS-N 3.0.3 application EAR file in WebLogic.

5.7 Back-out Verification Procedure

A smoke test will be performed to determine that the application is working properly.

6 Rollback Procedure

See Section 5 for rollback procedures.

Template Revision History

| Date | Version | Description | Author |
|------------------|---------|--|--|
| March 2016 | 2.2 | Changed the title from Installation, Back- Out, and Rollback Guide to Deployment and Installation Guide, with the understanding that Back-Out and Rollback belong with Installation. | VIP Team |
| February 2016 | 2.1 | Changed title from Installation, Back-Out, and Rollback Plan to Installation, Back-Out, and Rollback Guide as recommended by OI&T Documentation Standards Committee | OI&T Documentation Standards Committee |
| December 2015 | 2.0 | The OI&T Documentation Standards Committee merged the existing "Installation, Back-Out, Rollback Plan" template with the content requirements in the OI&T End-user Documentation Standards for a more comprehensive Installation Plan. | OI&T Documentation Standards Committee |
| February 2015 | 1.0 | Initial Draft | Lifecycle and Release Management |