

Pharmacy Product System – National (PPS-N)

PPS-N Java version 3.1.9

PREN*3.1*9

Deployment, Installation, Back-Out, and Rollback Guide (DIBR)



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Revision History

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03/25/2022	1.0	PREN*3.1*9: <ul style="list-style-type: none"> • TRM software compliance updates for log4j from 2.13 to 2.17.1 • Defect fix for failed to sort search results in proper date order • Defect fix for failed to sort search results by VA Product Name, Print Name, Generic Name, Str (Strength), Dispense Unit, Dosage Form, CMOP ID and PPS OI Name columns • Defect fix for the ability to edit the Hazardous to Dispose field in Edge and Chrome • Updated the Title Page, Revision History, Table of Contents, and Footers 	Liberty ITS

Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Plan for the PPS-N Java portion of the PPS-N v3.1.9 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 v3.1.9.

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 v3.1.8 interfacing systems must be available during the deployment.

- SSOi
- ISAAC
- STS/VETS

1.3 Constraints

There are no constraints for the PPS-N v3.1.9 release.

2 Roles and Responsibilities

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

Team	Phase / Role	Tasks
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)
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 v3.1.9 Java Application will be nationally deployed at AITC after initial operating capacity (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 AITC.

3.2.1 Deployment Topology (Targeted Architecture)

The PPS-N Java Application and Database will be installed on the existing PPS-N v3.1.8 production platform.

3.2.2 Site Information (Locations, Deployment Recipients)

AITC nationally deploys the JAVA web application, PPS-N. User acceptance testing is completed by the Business Office.

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 v3.1.8 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					

Refer to **Table 1** 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	12.2.1.4.0	
Oracle 19g Enterprise Edition Release	19.10.0.0.0	

Required Software	Version	Configuration
Apache httpd	Apache/2.4.6 (Unix)	
Red Hat Enterprise Linux Server	7.9 (Santiago)	
Java SDK	1.8.0_281 or higher	

Refer to **Table 1** 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	N/A	N/A	N/A
Install	N/A	N/A	N/A
Back-Out	N/A	N/A	N/A

4 Installation

4.1 Pre-installation and System Requirements

The PPS-N Java Application and Database will be installed on the existing PPS-N v3.1.8 production platform.

4.2 Platform Installation and Preparation

The pre-existing PPS-N v3.1.8 platform will be used.

4.3 Download and Extract Files

See Section [4.5](#), specific filenames will be detailed in the request for change (RFC) order.

4.4 Database Creation

The pre-existing PPS-N v3.1.8 database will be used.

4.5 Installation Scripts

All required scripts and files are provided to the IO team for deployment at AITC. The installer should follow the instructions in the appropriate RFC documents, delivered by the Health Product Sustainment Tier 3 Clinical (HPSCLIN) team, 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 identified within the RFC referenced in section [4.5](#).

Database Administrator will need:

- Access to the Linux console of the server where PPS-N's Oracle Database is running
- Access to the location identified within the RFC referenced in section [4.5](#).

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 delivered by the HPSCLIN team.

1. Stop the Managed Server

2. Un-deploy the two EAR files for PPS-N v3.1.8 Application
3. Deploy the new EAR files for PPS-N v3.1.9 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 the application logs for the absence of errors.

4.10 System Configuration

4.10.1 Properties Files

No property file changes are required for this deployment. The pre-existing PPS-N v3.1.8 property files will be used.

4.10.2 Import VA Certificates

No certificate changes are required for this deployment. The pre-existing PPS-N v3.1.8 VA certificates will be used.

4.11 Database Tuning

After installation, the AITC data base administrator 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 v3.1.8 EAR file.

5.2 Back-Out Considerations

5.2.1 Load Testing

Not applicable for PREN*3.1*9

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 of PREN*3.1*9 should only be considered if it is determined there is the cause for 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 PREN*3.1*9 is required.

5.6 Back-Out Procedure

1. Stop the Managed Server
2. Un-deploy the two EAR files for PPS-N v3.1.9 Application
3. Deploy the previous EAR files for PPS-N v3.1.8 Application
4. Start the PPS-N Application
5. Perform Smoke Test on PPS-N

5.7 Back-out Verification Procedure

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

6 Rollback Procedure

Not applicable for PREN*3.1*9.

6.1 Rollback Considerations

Not applicable for PREN*3.1*9.

6.2 Rollback Criteria

Not applicable for PREN*3.1*9.

6.3 Rollback Risks

Not applicable for PREN*3.1*9.

6.4 Authority for Rollback

Not applicable for PREN*3.1*9.

6.5 Rollback Procedure

Not applicable for PREN*3.1*9.

6.6 Rollback Verification Procedure

Not applicable for PREN*3.1*9.