

Prescription Drug Monitoring Program – Demo

Installation and User Guide

v. 1.0

10/30/2018

1. Pilot Installation

1.1 CONNECT

Install CONNECT version 5.2 (or later) using Java 8 and Wildfly 8.1.2. Installation instructions can be found [here](#). Validate CONNECT using the SoapUI validation suite and be sure to set up the database correctly with nhincdb.sql and populateTestData.sql.

1.2 PMP Gateway Configuration

Contact Appriss to obtain a user name and password for accessing the [PMP Gateway](#).

1.3 Certificates

First, download the required certificates from the Appriss gateway and NIST RxNav sites. Navigate to each URL listed below in table 1.1 and download the certificate.

Table 1.1 URLs for used services.

Service	URL
Appriss PDMP Gateway	https://gateway-prep.pmp.appriss.com
NIST RxNav	https://rxnav.nlm.nih.gov

Using Google Chrome web browser, click on the lock symbol as shown in figure 1.2 and follow the download wizard to create a base-64 encoded certificate (CER). Download all leaf and intermediate certificates (and any needed base certificates depending on Firewall settings).

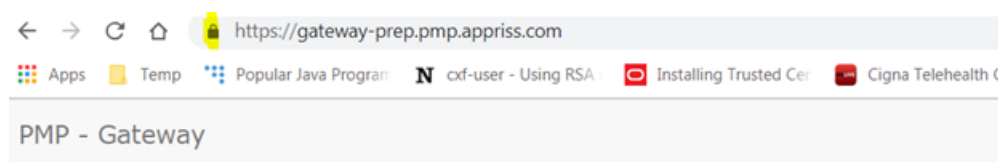


Figure 1.2 – Certificate download from PMP Gateway URL.

Install downloaded certificates to trust store located in the CONNECT properties folder in Wildfly (nhinc.properties.dir). The keytool command for adding a certificate is:

```
keytool -v -import -trustcacerts -file <downloaded cert> -alias <cert alias> -keystore cacerts.jks
```

1.4 Database and Configuration

Update the user name and password in the PDMP/Install/pdmp.properties file to the values provided by Appriss. Copy the 2 configuration files (pdmp.properties and AdapterMpiConfig.xml) to the CONNECT Wildfly configurations folder. The AdapterMpiConfig.xml replaces an existing file.

Run the SQL script for adding the PDMP test patient, found at PDMP/Install/addPdmpTestPatient.sql.

1.5 Build and Deploy

Pull down PDMP code from the CONNECT Plugin repository. The local command is:

```
git clone https://github.com/CONNECT-Solution/Plugins.git
```

At the PDMP root directory, run the maven build and install command: mvn clean install.

Open the Wildfly admin console and deploy (and then enable) the built WAR file: Plugins/PDMP/PDMP-Demo/target/pdmp-demo-4.6.0-SNAPSHOT.war.

2. User Guide

Navigate to the main page by entering the following URL into the browser:

<http://localhost:8080/PDMP-Demo>

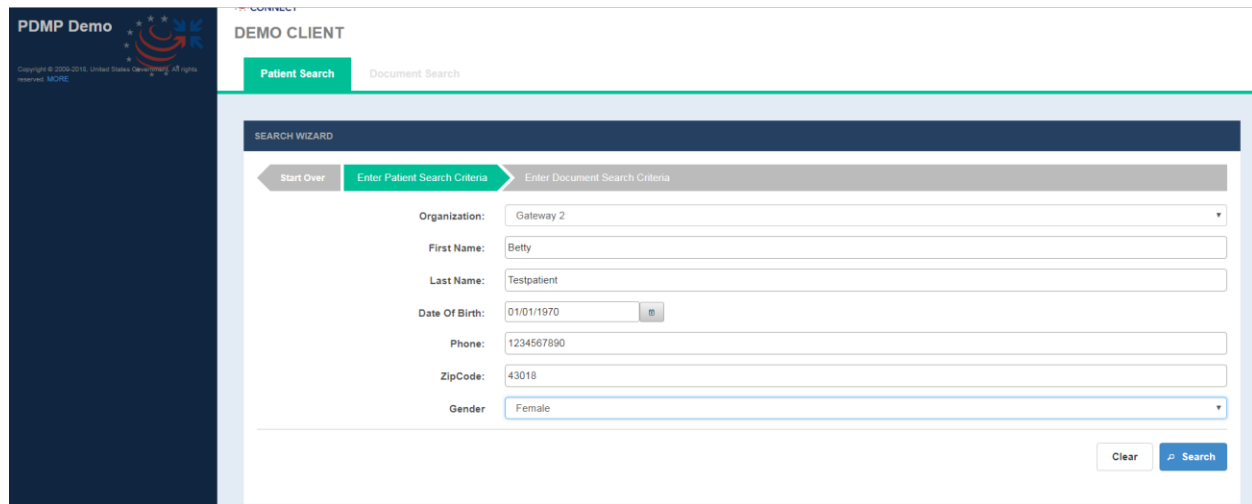
The screenshot shows the PDMP Demo application interface. On the left is a dark blue sidebar with the PDMP Demo logo and copyright information. The main content area is titled 'DEMO CLIENT' and has two tabs: 'Patient Search' (active) and 'Document Search'. Below the tabs is a 'SEARCH WIZARD' section with three steps: 'Start Over', 'Enter Patient Search Criteria' (current step), and 'Enter Document Search Criteria'. The 'Enter Patient Search Criteria' step contains a form with the following fields: Organization (Gateway 2), First Name (Betty), Last Name (Testpatient), Date Of Birth (01/01/1970), Phone (1234567890), Zip Code (43018), and Gender (Female). At the bottom right of the form are 'Clear' and 'Search' buttons.

Figure 1.3 Patient Search with Demographics

Enter in the demographic information as shown in Figure 1.4. The demographic information is for a test patient with information found in Table 1.3.

Table 1.4 Demographic information for test patient

Demographic	Value
Organization	Gateway 2
First Name	Betty
Last Name	Testpatient
Date of Birth	01/01/1970
Phone	1234567890
Zip Code	43018
Gender	Female

PDMP Demo
Copyright © 2009-2010, United States Department of Justice
All rights reserved. DOJ/DE

DEMO CLIENT

Patient Search Document Search

SEARCH WIZARD

Start Over **Enter Patient Search Criteria** Enter Document Search Criteria

Organization: Gateway 2

First Name: Betty

Last Name: Testpatient

Date Of Birth: 01/01/1970

Phone: 1234567890

ZipCode: 43018

Gender: Female

Clear Search

Patient Record Found:

Name	Patient ID	Organization
Betty Testpatient	D11111	Gateway 2

View Details

Figure 1.5 Patient found view

The search should return a found patient. If no patient is returned, check the entered demographic information and the information inserted into the database to confirm the data is correct. Click on the “View Details” button to continue to next tab and view the document search view as shown in Figure 1.6.

PDMP Demo
Copyright © 2009-2010, United States Department of Justice
All rights reserved. DOJ/DE

DEMO CLIENT

Patient Search **Document Search**

SEARCH WIZARD

Start Over Enter Patient Search Criteria **Enter Document Search Criteria**

Current Patient Details:

Name:	Betty Testpatient	Patient ID:	D11111	Organization:	Gateway 2
Gender:	F	Date Of Birth:	01/01/1970	Phone:	(703) 555-5000

Document Search

Search for current patient's clinical documents such as COAs.

Document Type: Document Types

Clear Search

Prescription Drug Search

Search for current patient's prescription drug history using state exchange connection.

Clear Search Meds

Figure 1.6 Document and patient search

On the document and prescription search page, search for documents and then search for medications selecting each of the blue buttons in order. The results of the searches should be the same as shown in Figure 1.7.

Documents Found:

Document ID	Document Type	Content Type	Title	Creation Time	Size	
1.22222.22222	Unknown Document	text/xml	Testpatient CONNECT TESTGATEWAY Document 2	05/17/2007 16:49:06	30 KB	<div>Metadata</div> <div>Open</div>
1.22222.33333	Unknown Document	text/xml	Testpatient CONNECT TESTGATEWAY Document 3	04/17/2008 16:49:06	29 KB	<div>Metadata</div> <div>Open</div>

Prescription Drug Search

Search for current patient's prescription drug history using state exchange connection.

Select Document

Add Prescription To Document

Clear

Search Meds

Prescription Results, Betty Testpatient

Add	Name	Class	Date	Count	Duration	State
<input type="checkbox"/>	Clonazepam 0.5 MG Tablet	BENZODIAZEPINE DERIVATIVE SEDATIVES/HYPNOTICS	10/25/2018	90	30	KS
<input type="checkbox"/>	Alprazolam 1 MG Tablet	BENZODIAZEPINE DERIVATIVE SEDATIVES/HYPNOTICS	10/10/2018	120	30	KS
<input type="checkbox"/>	Clonazepam 0.5 MG Tablet	BENZODIAZEPINE DERIVATIVE SEDATIVES/HYPNOTICS	09/30/2018	90	30	KS

Opioids Only: ☐

Figure 1.7 Results for document and prescription searches

The prescription results can be filtered by opioid type using the “Opioid Only” check box. To create a new document with added prescriptions, select at least one prescription using the check boxes in the “Add” column in the prescription results table. Select a document ID from the “Select Document” drop down and then click on the “Add Prescription to Document” button. A new document will be built and then displayed as shown in Figure 1.8 and 1.9 as a modal. The document can be downloaded to the local file system by clicking on the “Download” button in the modal.

Unknown Document for Betty Testpatient

Download

Summarization of Episode Note

Patient	Mrs. Betty Testpatient		
Date of birth	June 27, 1999	Sex	Male
Race	White	Ethnicity	Not Hispanic Or Latino
Contact info	1111 Main Street Roma, TN 37662, US Tel: +1-423-555-9876	Patient IDs	1234567890
Document Id	D123401 2.16.840.1.113883.3.333		
Document Created:	June 17, 2008, 08:49:06, EST		
Performer (primary care provider)	Dr. Joseph Hoodwink of Children Car Group		
Author	Dr. Joseph Hoodwink, Main Children's Hospital		
Next of kin {<code>@code='NFTH'</code>?}	Mrs. Betty Testpatient from June 27, 1999		
Contact info	1111 Main Street Roma, TN 37662, US Tel: +1-423-555-9876		
Document maintained by			

Table of Contents

- Conditions or Problems
- Allergies, Adverse Reactions, Alerts
- Insurance Providers
- Medications
- Advance Directives
- Vital signs
- Results

Figure 1.8 Document with download button

Unknown Document for Betty Testpatient				
Febrile Seizure		Diagnosis	20010713	
Allergies, Adverse Reactions, Alerts				
Substance	Event Type	Severity		
Iodine	Drug Allergy	Mild		
Penicillin	Drug Allergy	Moderate		
Insurance Providers				
Insurance Provider Name	Insurance Provider Type	Insurance Provider Group Number		
ACME Health plan sponsor	ACME Health plan sponsor	GID888111		
Medications				
Product Display Name	Free Text Brand Name	Ordered Value	Ordered Unit	Expiration Time
Acetaminophen	Tylenol	1.0	Chewable Tablet	20101115
Ibuprofen	Motrin Suspended	1.0	3ml	20091012
Azithromycin	Zithromax	60.0	Tablet	20080825
Oxycodone Hcl Er 40 MG Tablet	OPIOID ANALGESICS	30	05/12/2018	
Oxycontin 20 MG Tablet	OPIOID ANALGESICS	60	06/28/2018	
Percocet 5-325 MG Tablet	OPIOID ANALGESICS	15	03/18/2018	
Advance Directives				
There are no advanced directives for this patient				

Figure 1.9 Document with medications list (OPIOID ANALGESICS shown are added)