



RESOURCE AND PATIENT MANAGEMENT SYSTEM

# **Controlled Drug Export System**

(BPDM)

## **Ensemble Configuration Guide**

Version 2.0 Patch 6  
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Office of Information Technology  
Division of Information Technology

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## Preface

The Controlled Drug Export System is used to identify prescriptions for controlled drugs and other specified drugs dispensed at Indian Health Service and tribal health care facilities and create an export file for transmission to state Prescription Drug Monitoring Programs (PDMP). Data is extracted from the Resource and Patient Management System (RPMS) Outpatient Pharmacy Application in operation at the local facilities. This software creates the export file and saves it in a secure directory as defined by facility's RPMS Site Manager or other Information Technology (IT) management personnel.

This document details the configuration of an Ensemble production to automate the upload of the export file to the state PDMP. Automated upload via Ensemble provides a more robust, reliable upload process and adds more efficient error monitoring and email alert capability.

## 1.0 Ensemble Install and Configuration

It is recommended to configure BPDM in RPMS prior to setting up the Ensemble BPDM Production. Sites currently using the BPDM system will have already completed the configuration. For sites new to BPDM, see the BPDM User Manual for parameter set up.

### 1.1 Create Database and Namespace

Login in to HealthShare Management Portal with appropriate credentials. The Home page displays.

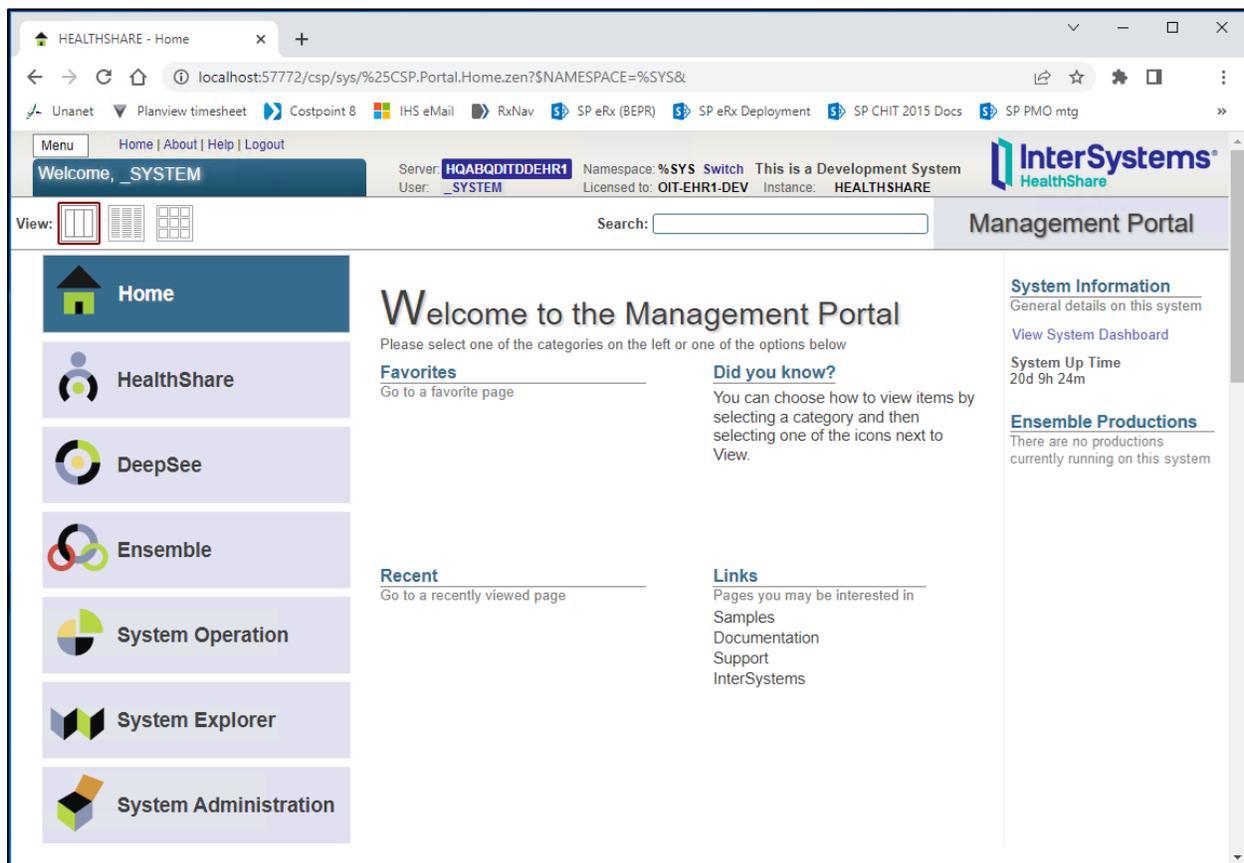


Figure 1-1: Import results

Click on **System Administration**, then select **Configuration**, then **System Configuration**, then **Namespaces**.

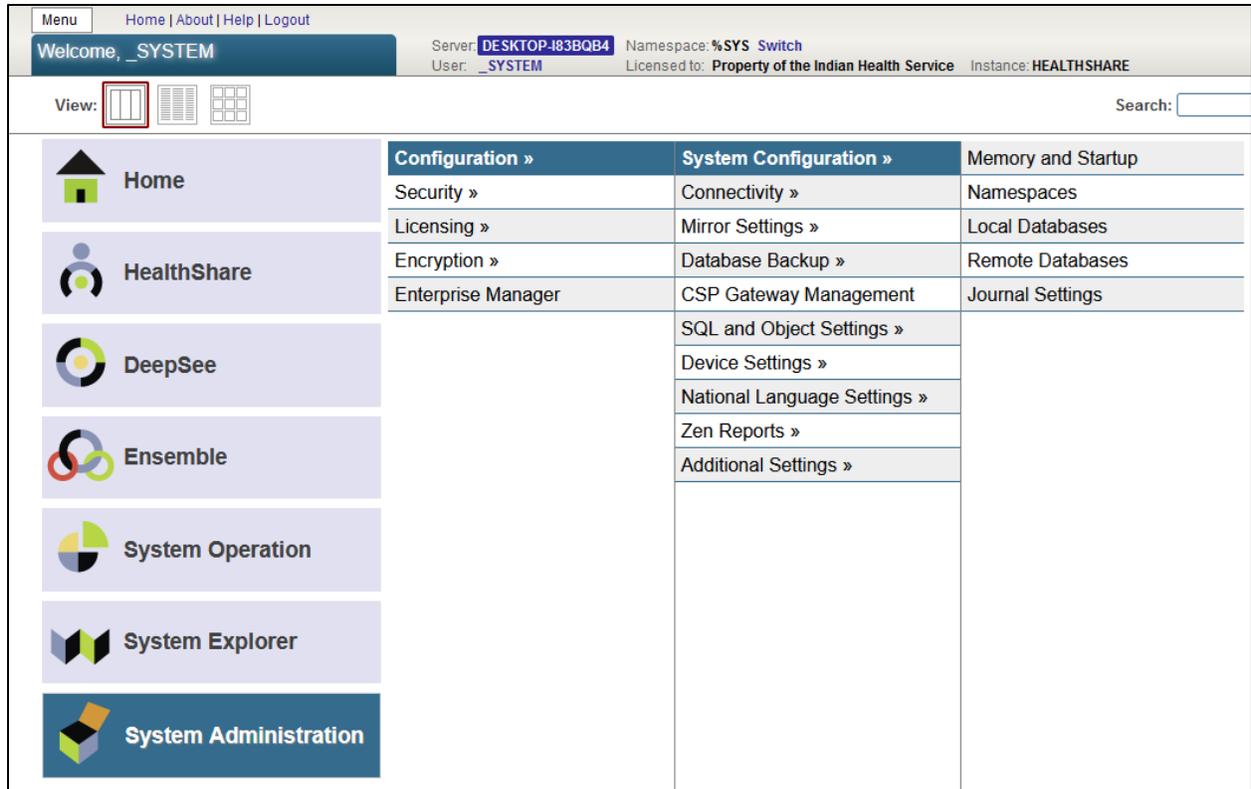


Figure 1-2: Close up view of System Administration window

The Namespaces window opens. Existing namespaces are listed in the main pane and there is a Create New Namespace button at the top.

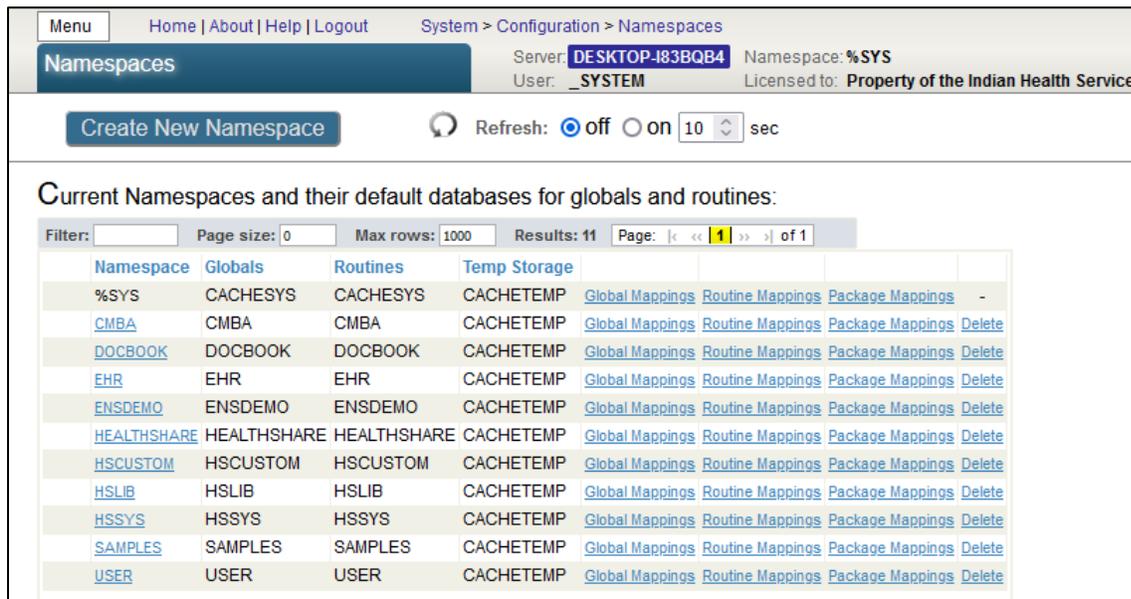


Figure 1-3: Close up view of the Ensemble Namespaces window

Click on **Create New Namespace**. The New Namespace window opens.

Enter the name of the new namespace. It should be named according to your local naming convention but similar in format to what is shown.

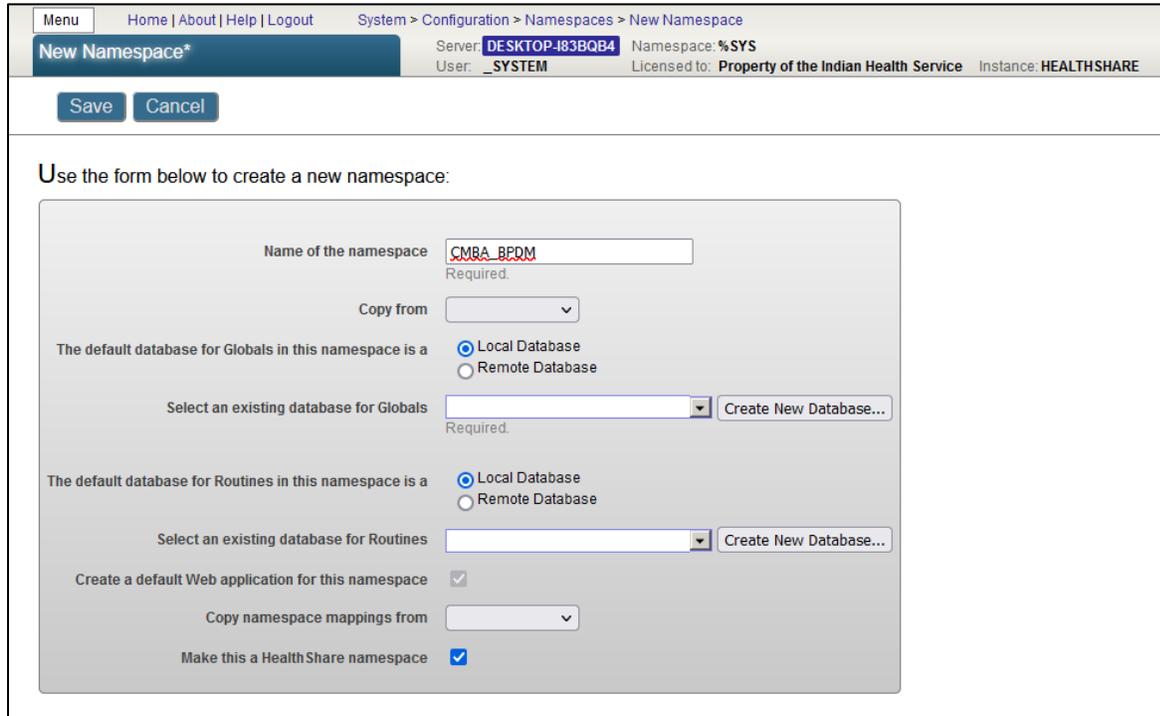


Figure 1-4: Close up view of the New Namespace window

At the ‘Select an existing database for Globals’ field, click on **Create New Database**. The Database Wizard opens.

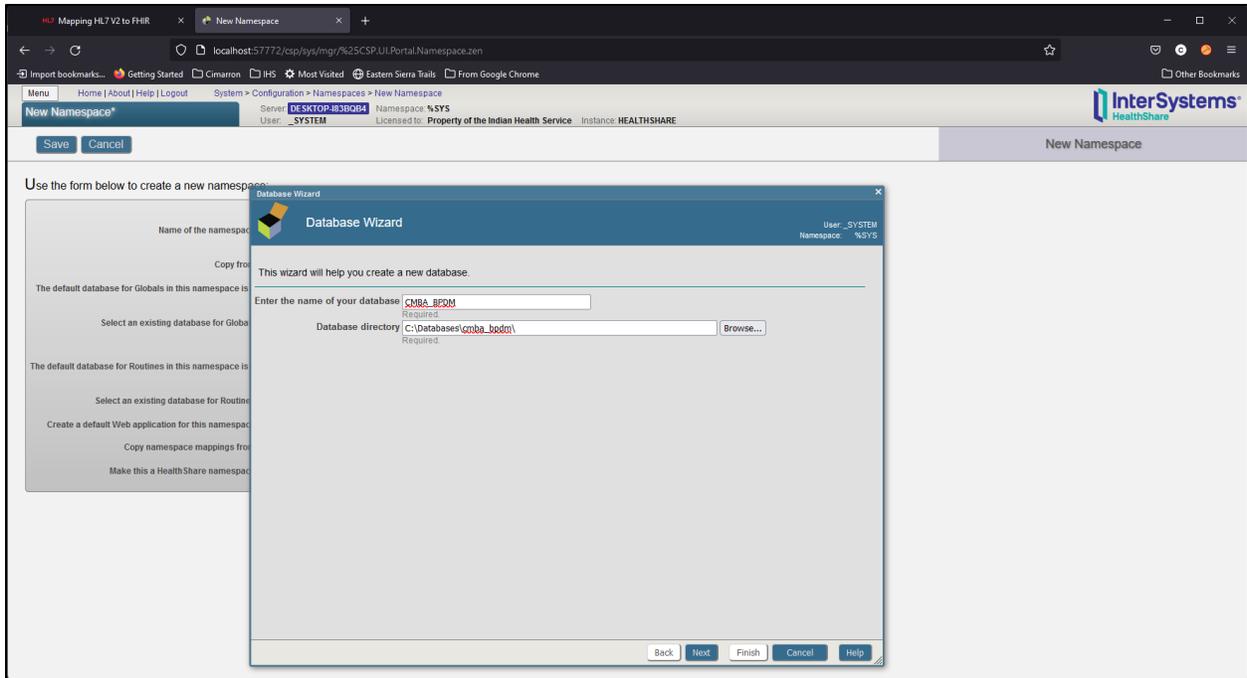


Figure 1-5: Ensemble with Database Wizard window

Enter the name of the database; make it the same as the namespace, unless instructed otherwise. Click **Browse** and navigate to the directory created for this database. If a directory has not been created for this database, you will need to create the directory similar to those for other Ensemble databases.

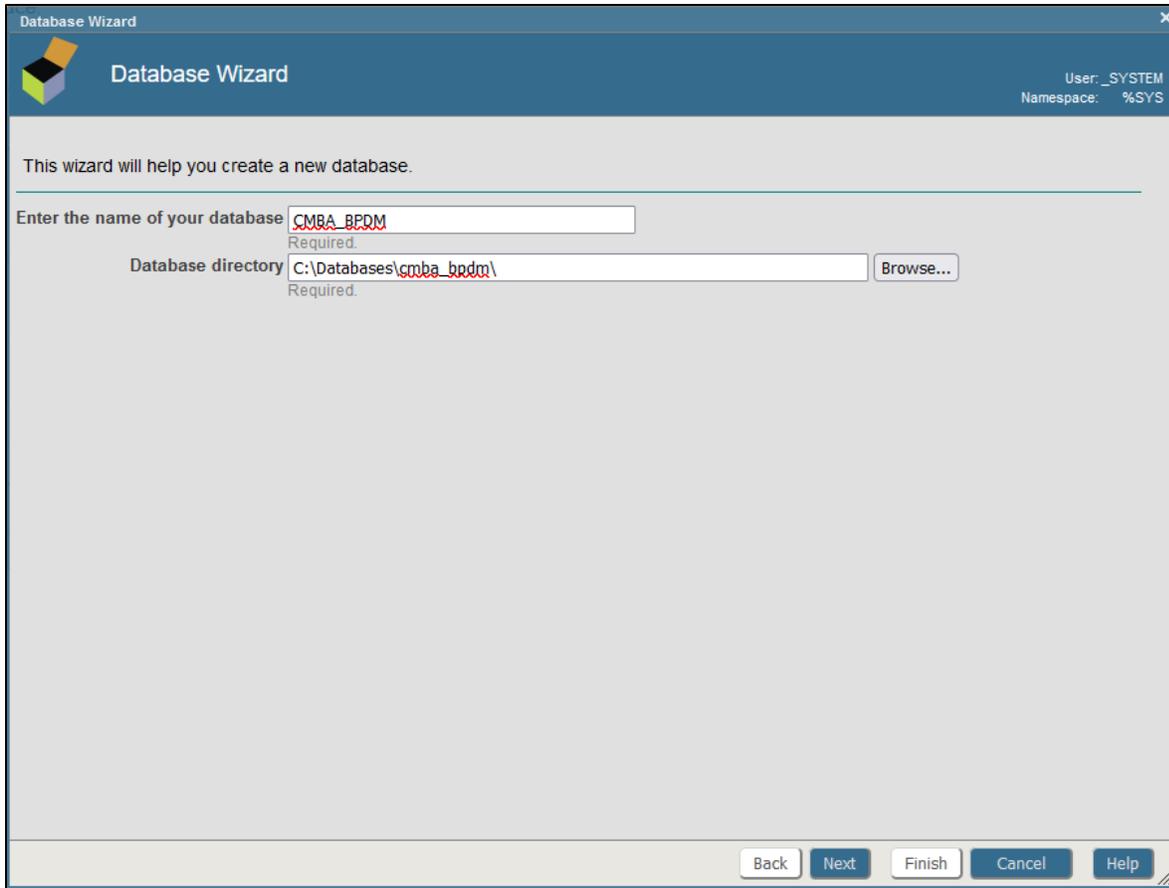


Figure 1-6: Database Wizard name and directory fields

Click **Next**. The database details display. No edits are required on this page.

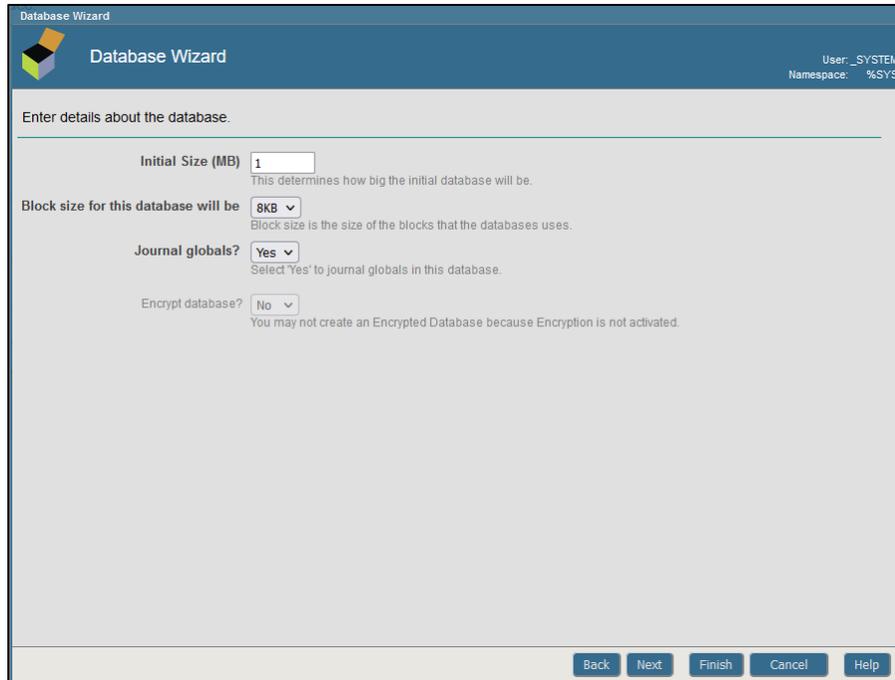


Figure 1-7: Database Wizard database details window

Click **Next**. The database resources display. No edits are required on this page.

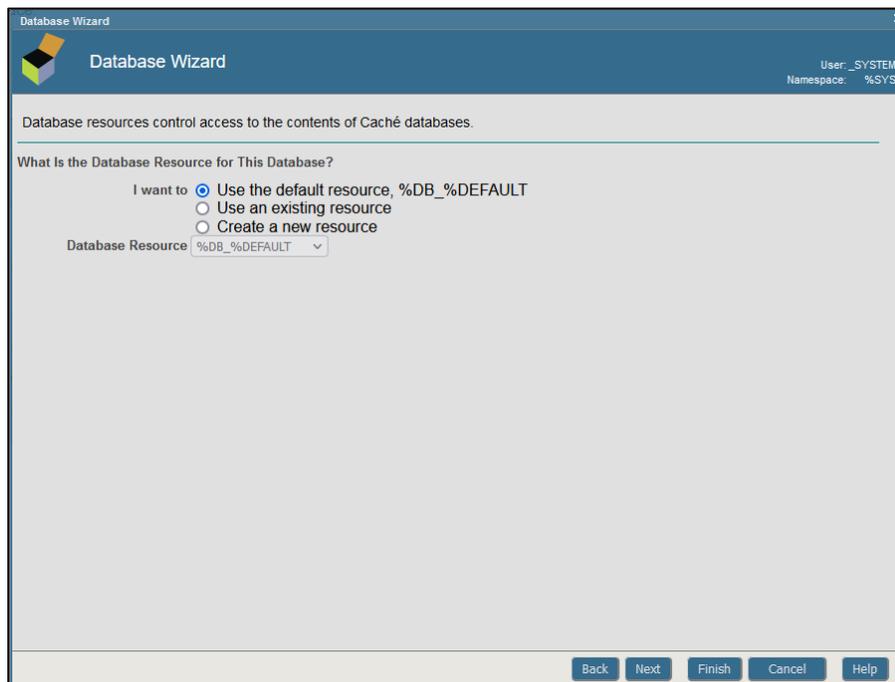


Figure 1-8: Database Wizard resource window

Click **Next**. A summary of the information displays. Review the information and make sure it matches these instructions.

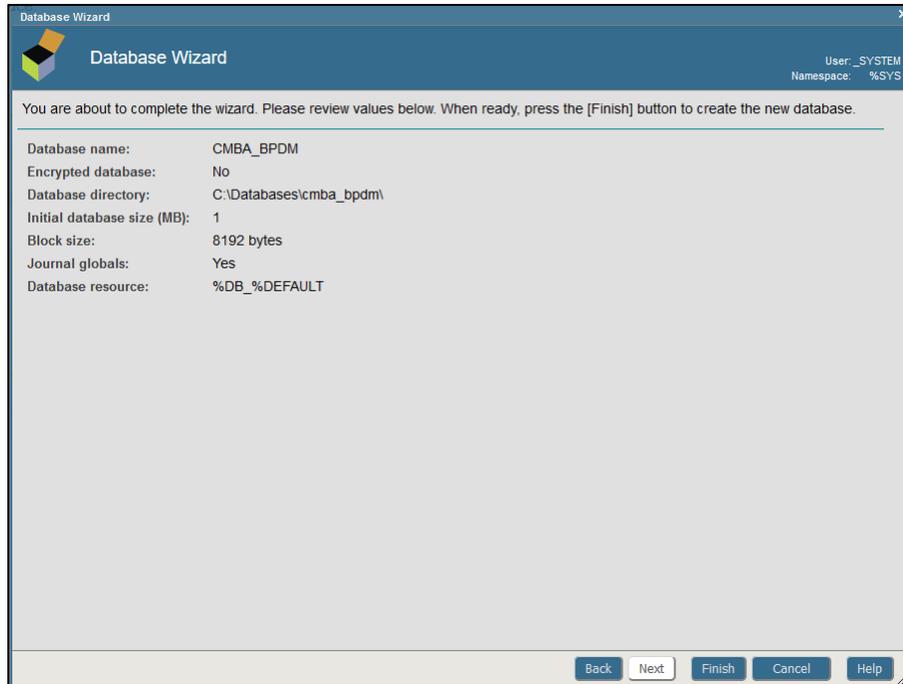


Figure 1-9: Database Wizard summary window

Click **Finish**. You are returned to the New Namespace window.

At the ‘Select an existing database for Routines’ field, click and select the database just created.

Figure 1-10: Close up view of New Namespace window

Click **Save** at the top of the form. The namespace is created. The results are listed in a separate page.

Enable Ensemble Namespace

---

Namespace: CMBA\_BPDM User: \_SYSTEM Begin at 2022-08-15 10:59:43

---

```

Enabling namespace &#39;CMBA_BPDM&#39; for Ensemble:
* This instance is not in a mirror
* Mappings
- Class:
+ Adding class mapping Ens -&gt; ENSLIB
+ Adding class mapping EnsLib -&gt; ENSLIB
+ Adding class mapping EnsPortal -&gt; ENSLIB
+ Adding class mapping CSPX.Dashboard -&gt; ENSLIB
- Routine:
+ Adding routine mapping Ens* -&gt; ENSLIB
- Global:
+ Creating new global directory entry for ^CacheMsg
+ Creating new global directory entry for ^CacheMsgNames
+ Creating new global directory entry for ^EnsDICOM.Dictionary
+ Creating new global directory entry for ^EnsEDI.ASTM.Description
+ Creating new global directory entry for ^EnsEDI.ASTM.Schema
+ Creating new global directory entry for ^EnsEDI.Description
+ Creating new global directory entry for ^EnsEDI.Schema
+ Creating new global directory entry for ^EnsEDI.X12.Description
+ Creating new global directory entry for ^EnsEDI.X12.Schema
+ Creating new global directory entry for ^EnsHL7.Description
+ Creating new global directory entry for ^EnsHL7.Schema
+ Adding global mapping ^CacheMsg(&quot;Arial,Tahoma,Verdana&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;Confirm&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EDIDocumentView&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;Ens&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsAlert&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsBPL&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsColumns&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsColumnsENSEMO&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsDICOM&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsDemo&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsEDI&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsEDIEDIFACT&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsEDIHL7&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsEDISEF&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsEDIX12&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsEnt&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsPushNotifications&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsRecordMap&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsSAP&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsSearchTable&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsWf&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsXPath&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;EnsXML&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;Ensemble&quot;) -&gt; ENSLIB
+ Adding global mapping ^CacheMsg(&quot;ITK&quot;) -&gt; ENSLIB

```

Figure 1-11: Partial view of Ensemble namespace creation results

Scroll to the bottom of the page and click **Close**. The new namespace is created and appears in the list.

## 1.2 Import the Production

Open Studio from the HealthShare Taskbar icon. Log in with appropriate credentials.

If you have not previously selected a namespace, the Cache Connection Manager opens. If you have previously selected a namespace, you will need to click **File** and select **Change Namespace** to open the Cache Connection Manager window.

Select the namespace that was created in the previous steps and click **OK**.

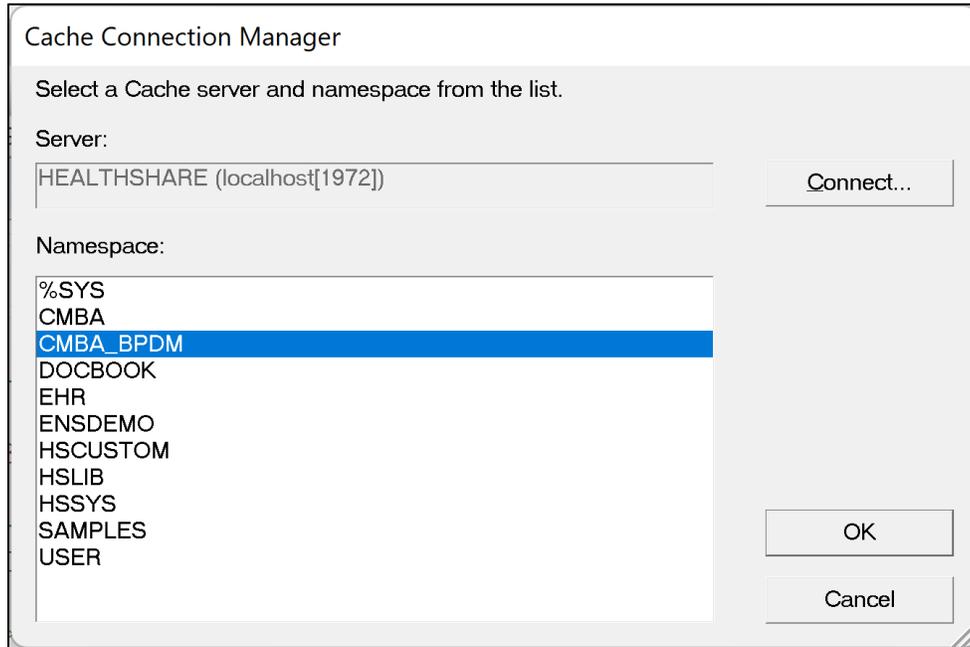


Figure 1-12: Cache Connection Manager window

Click **Tools** then select **Import Local**.

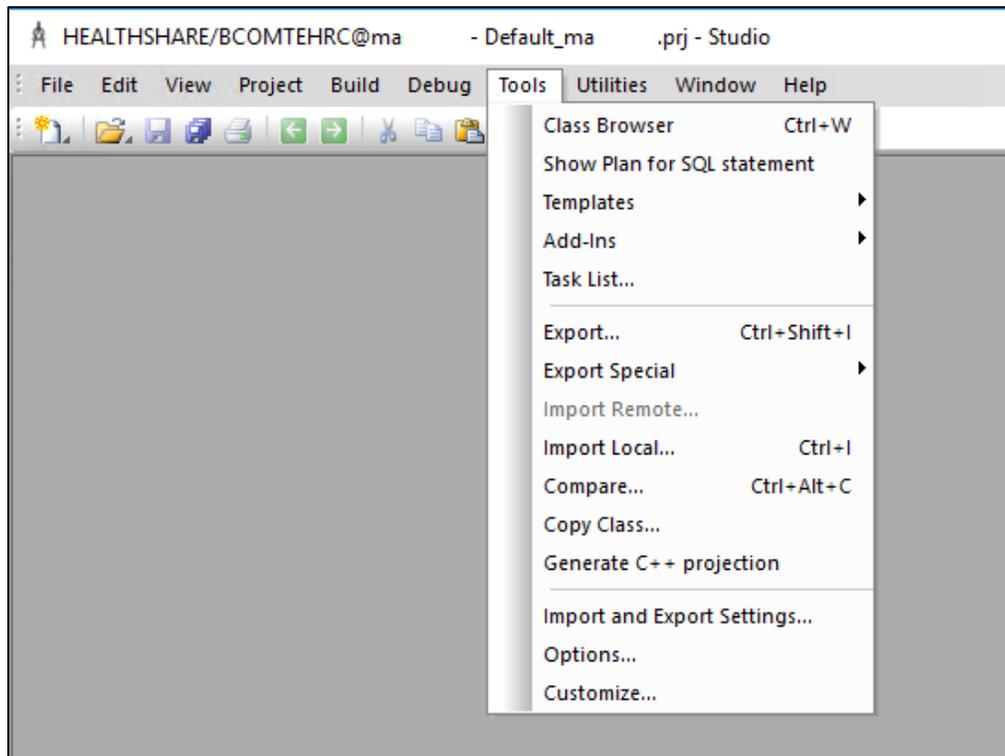


Figure 1-13: A close up view of the Studio Tools menu

The Open window opens. Navigate to and select the **bpdm0200.06.xml** file and click **Open**.

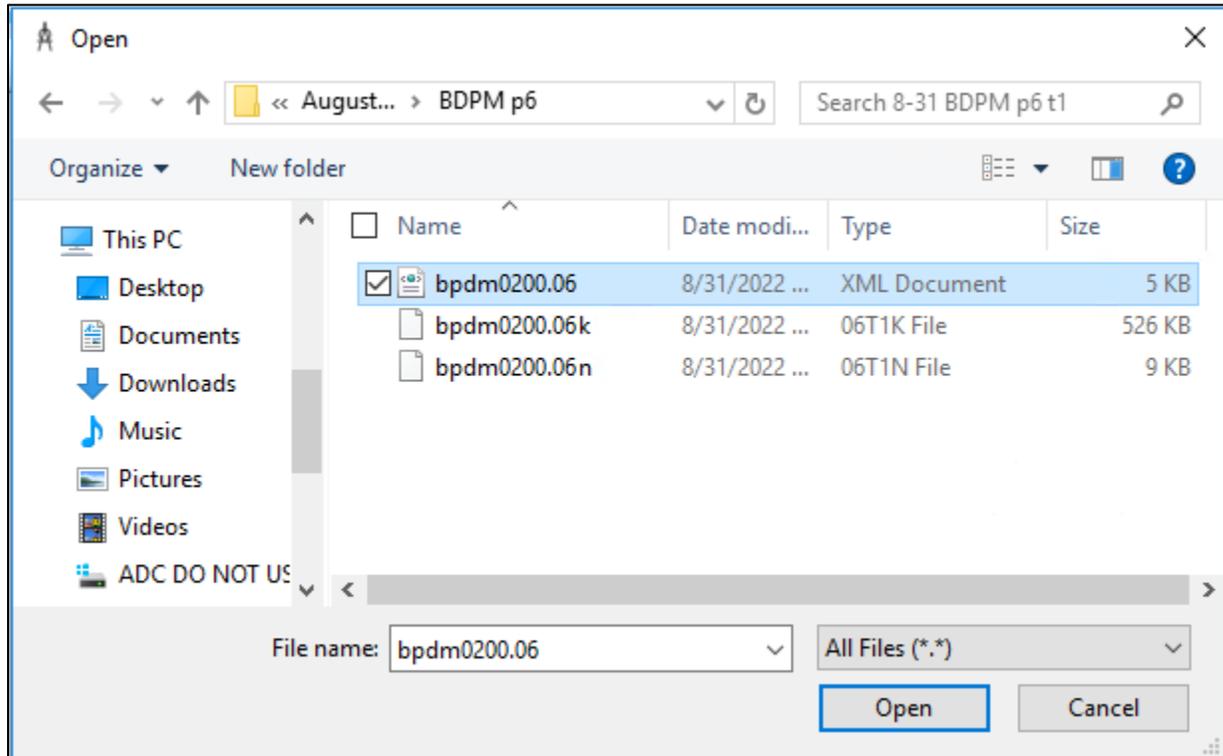


Figure 1-14: Selecting the import file

The import dialog displays. There will be four files to import. The names may be slightly different than shown here.

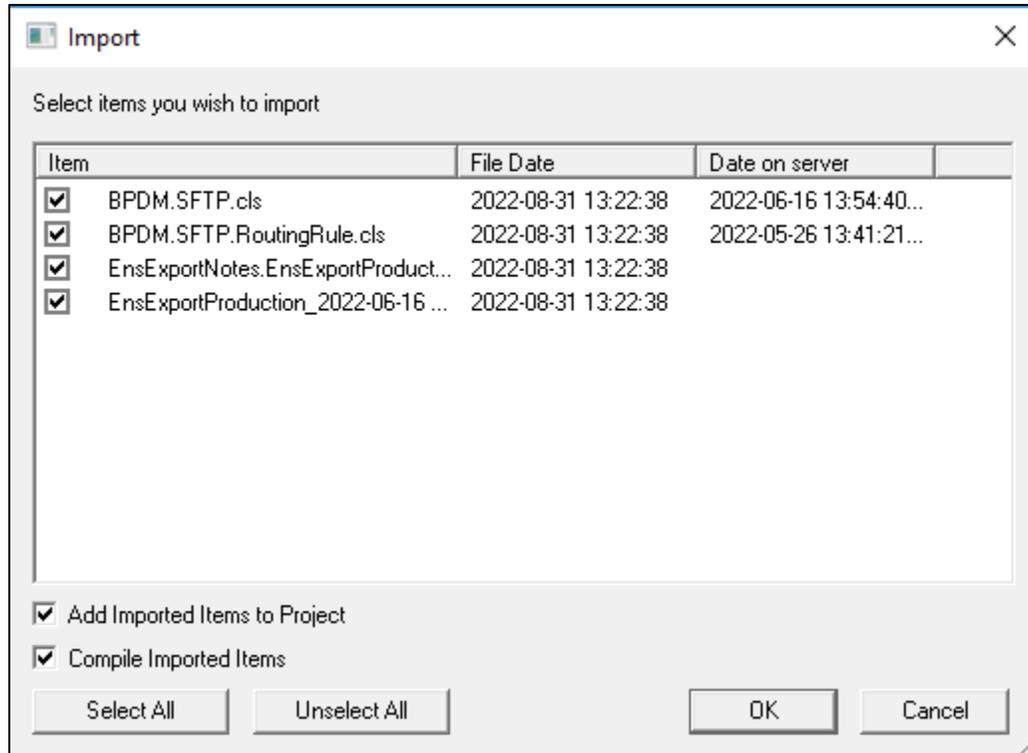


Figure 1-15: Import dialog with 4 files

Click **OK**.

If successful, the following displays in the Output pane:

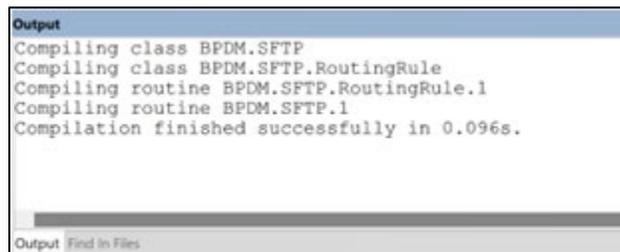


Figure 1-16: Import results

You may exit Studio.

### 1.3 Configure the sFTP Production for PDMP

The following configuration instructions are for the main or only site. If there are additional divisions at your site that upload using different credentials, please use the instructions in Section 1.4 once the main site is configured.

**Note:** Before Enabling the BPDM Production you will need to make sure all current files that have already been sent to the PMP are moved to the Archive folder. This is very important otherwise they will get uploaded to the PMP again when the production is Enabled.

Ensure the BPDM Production is installed per the previous steps.

If you are a new PMP Upload site, you will need to create and upload keys as described in the BPDM User Manual section 5.2 before configuring the Ensemble production.

If this is an existing PMP Auto Upload site, someone at the facility with Superuser access will need to run the following from a command prompt on the existing key file(s) in the folder where the key exists:

```
ssh-keygen -p -m pem -f authorized_keys
```

Go to the BPDM Production in Ensemble. Click **Ensemble**, then **Configure**, then **Production**.

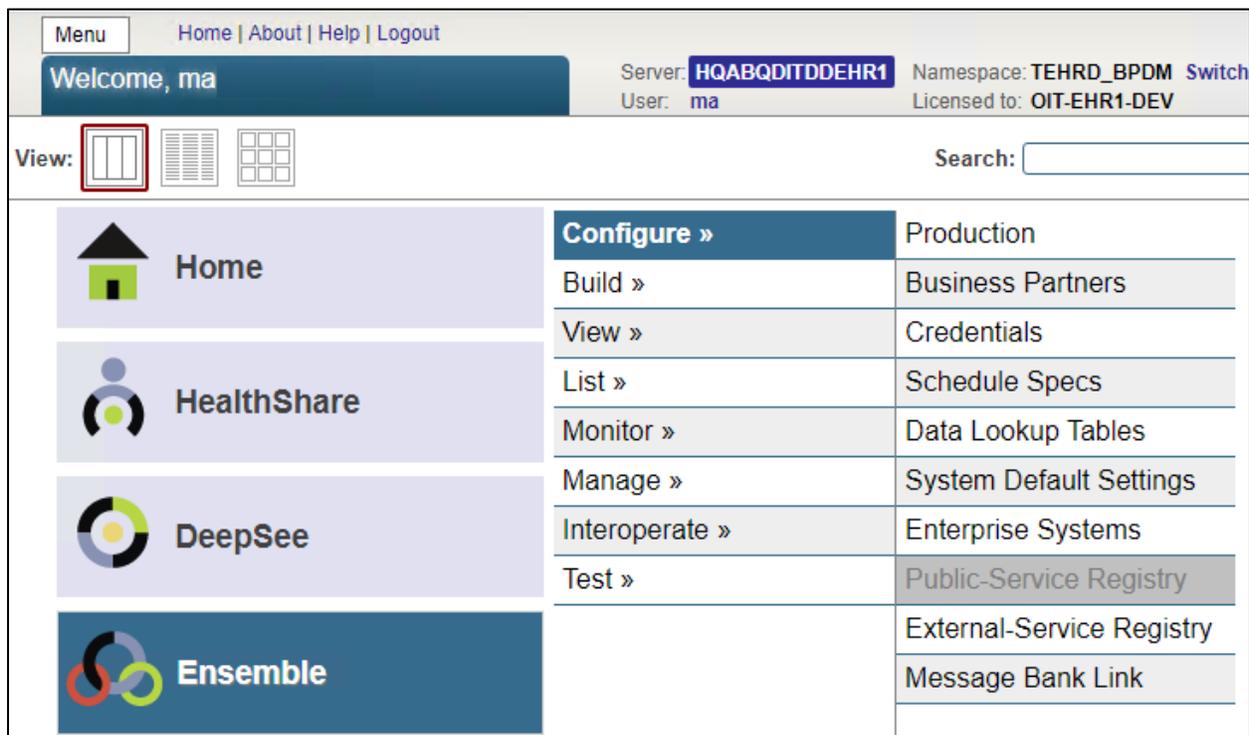


Figure 1-17: A close up of Ensemble selecting Configure menu option

The first time you do this, the production will not be open, but there are New and Open buttons at the top of the page. Click **Open**, then select **BPDM**, then **SFTP**.

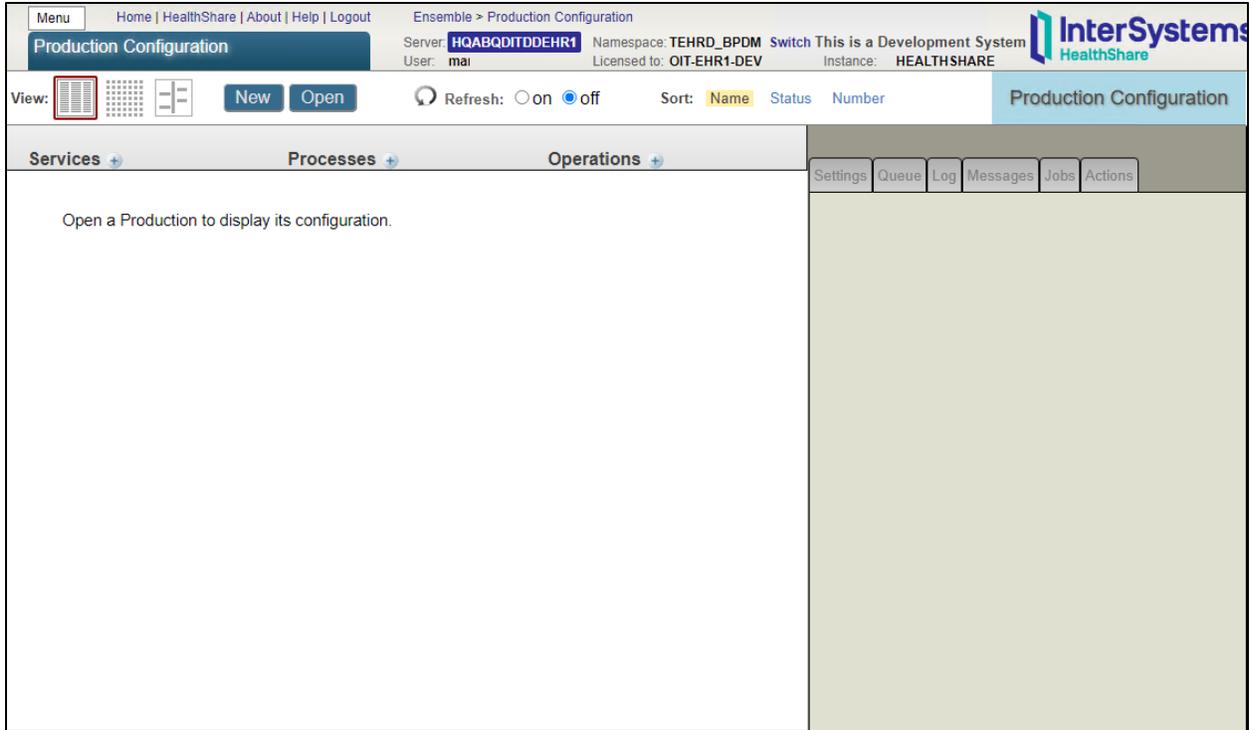


Figure 1-18: Ensemble Production Configuration before opening the production

Select the **GetBPDM** Service and open the Basic Settings.

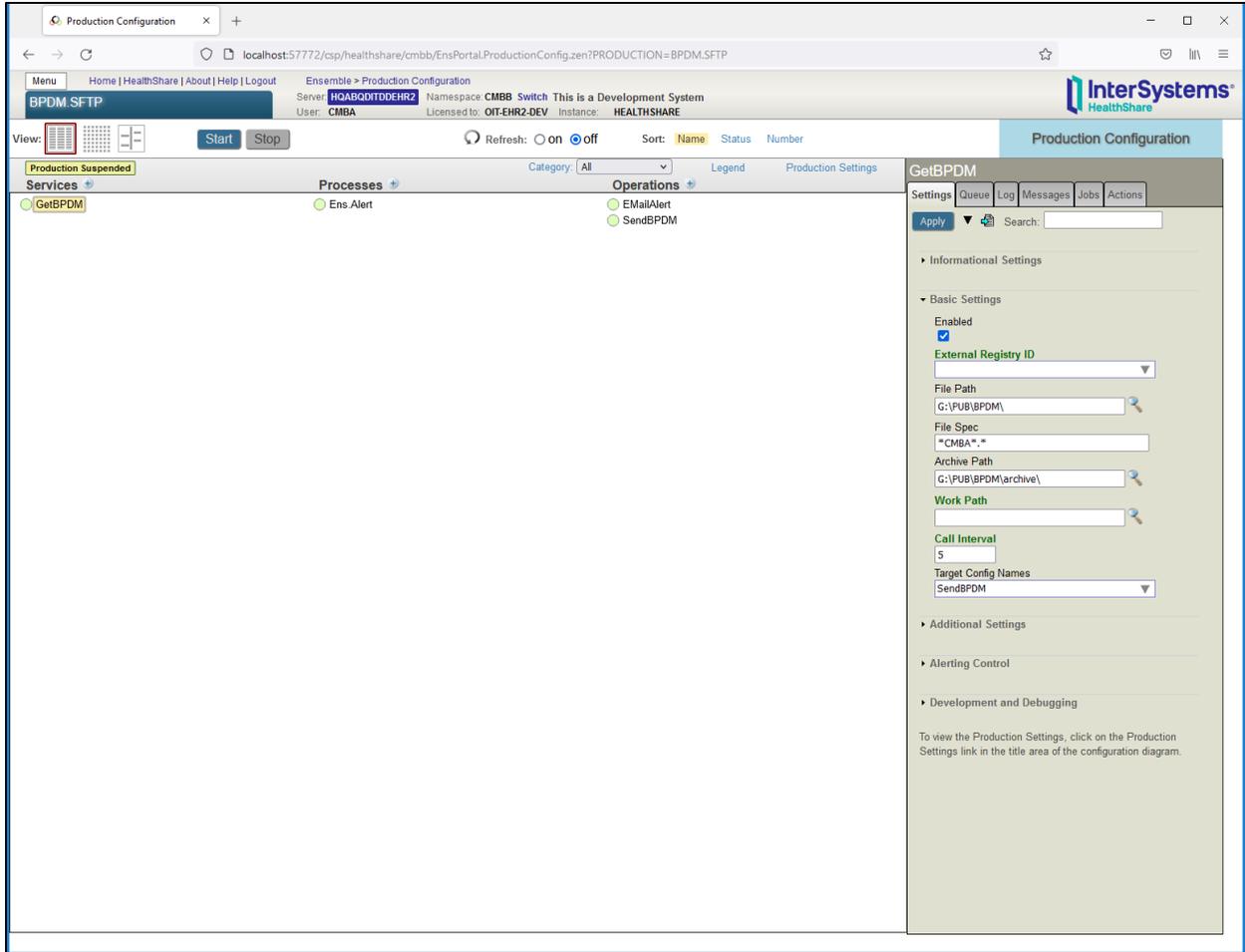


Figure 1-19: Ensemble Production Configuration GetBPDM service.

Check the **Enabled** box if not already checked.

The screenshot shows the 'Production Configuration' window for 'GetBPDM'. The 'Settings' tab is active, with other tabs for 'Queue', 'Log', 'Messages', 'Jobs', and 'Actions'. An 'Apply' button and a search field are at the top. The 'Basic Settings' section is expanded, showing the following fields:

- Enabled:** A checked checkbox.
- External Registry ID:** A dropdown menu.
- File Path:** A text field containing 'G:\PUB\BPDM\' with a magnifying glass icon.
- File Spec:** A text field containing '\*CMBA\*.\*'.
- Archive Path:** A text field containing 'G:\PUB\BPDM\archive\' with a magnifying glass icon.
- Work Path:** An empty text field with a magnifying glass icon.
- Call Interval:** A text field containing '5'.
- Target Config Names:** A dropdown menu containing 'SendBPDM'.

Below the 'Basic Settings' section, the 'Additional Settings' section is partially visible.

Figure 1-20: GetBPDM Basic Settings detail

In the File Path field enter the path to where the PDM Export files are created or use the magnifying glass to select.

In the File Spec field enter the masking for the file, this will usually be the FILE NAME DESCRIPTOR field in the PDM SITE PARAMETERS concatenated with the DEFAULT FILE EXTENSION field, in the example above it is \*CMBA\*.\*.

In the Archive Path field enter the path where the successfully uploaded files will be moved for backup purposes. If this folder does not currently exist it will need to be created.

Click **Apply**.

In the main pane, click **SendBPDM Operation** and open the Basic Settings.

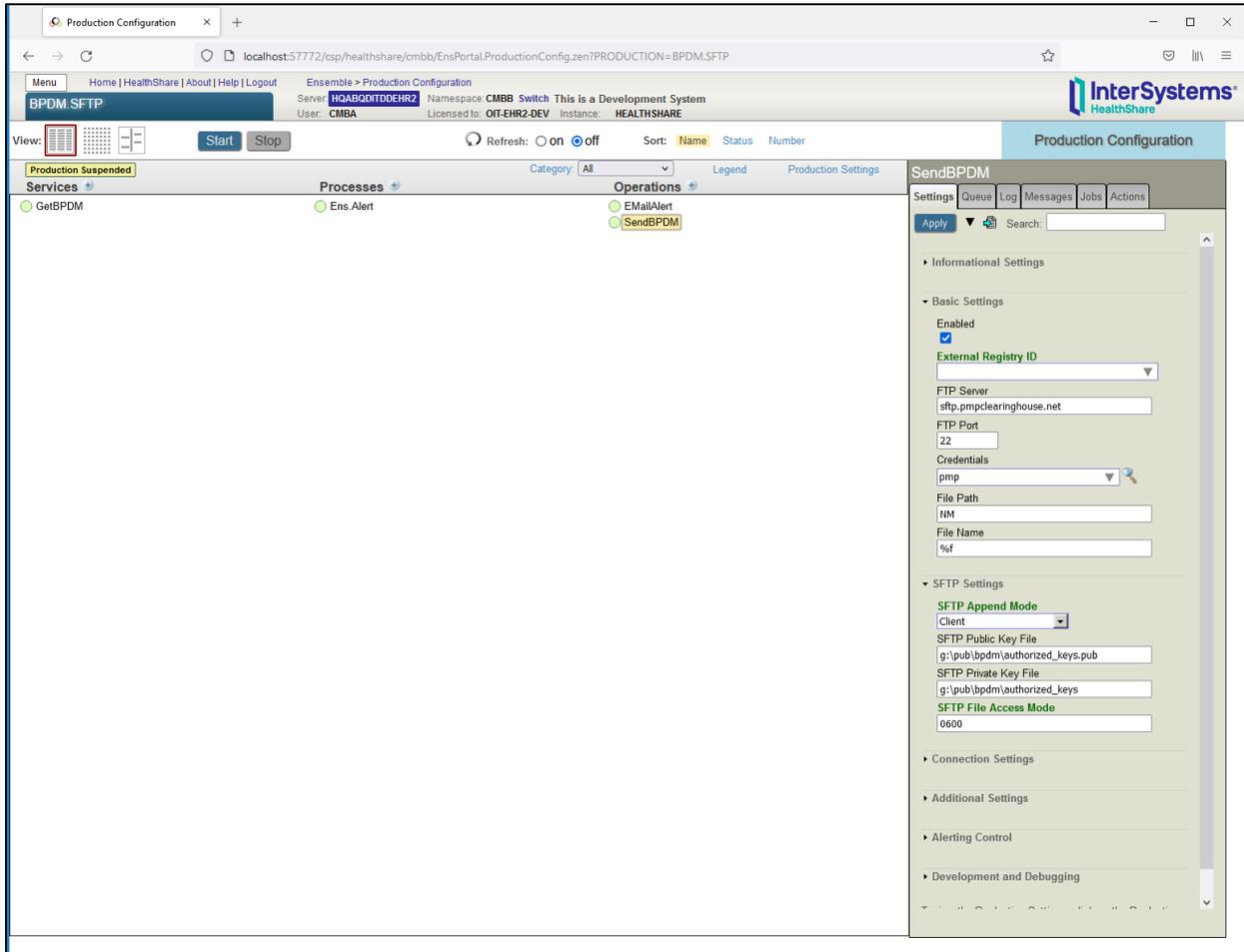


Figure 1-21: SendBPDM Operation Settings

Check the **Enabled** box if not already checked.

The screenshot displays the 'SendBPDM' configuration window under the 'Production Configuration' header. The 'Settings' tab is active, with sub-tabs for 'Queue', 'Log', 'Messages', 'Jobs', and 'Actions'. An 'Apply' button is visible. Below the tabs, there is a search bar and a section for 'Basic Settings'. The 'Basic Settings' section includes: 'Enabled' (checked), 'External Registry ID' (dropdown menu), 'FTP Server' (text field containing 'sftp.pmpclearinghouse.net'), 'FTP Port' (text field containing '22'), 'Credentials' (dropdown menu containing 'pmp' with a magnifying glass icon), 'File Path' (text field containing 'NM'), and 'File Name' (text field containing '%f').

Figure 1-22: SendBPDM Operation Basic Settings detail

In the FTP Server field enter **sftp.pmpclearinghouse.net** if not already present.

In the FTP Port field enter **22** if not already present.

Click **Apply**.

In the Credentials field enter **pmp** and then click the magnifying glass. The Credentials Viewer window opens.

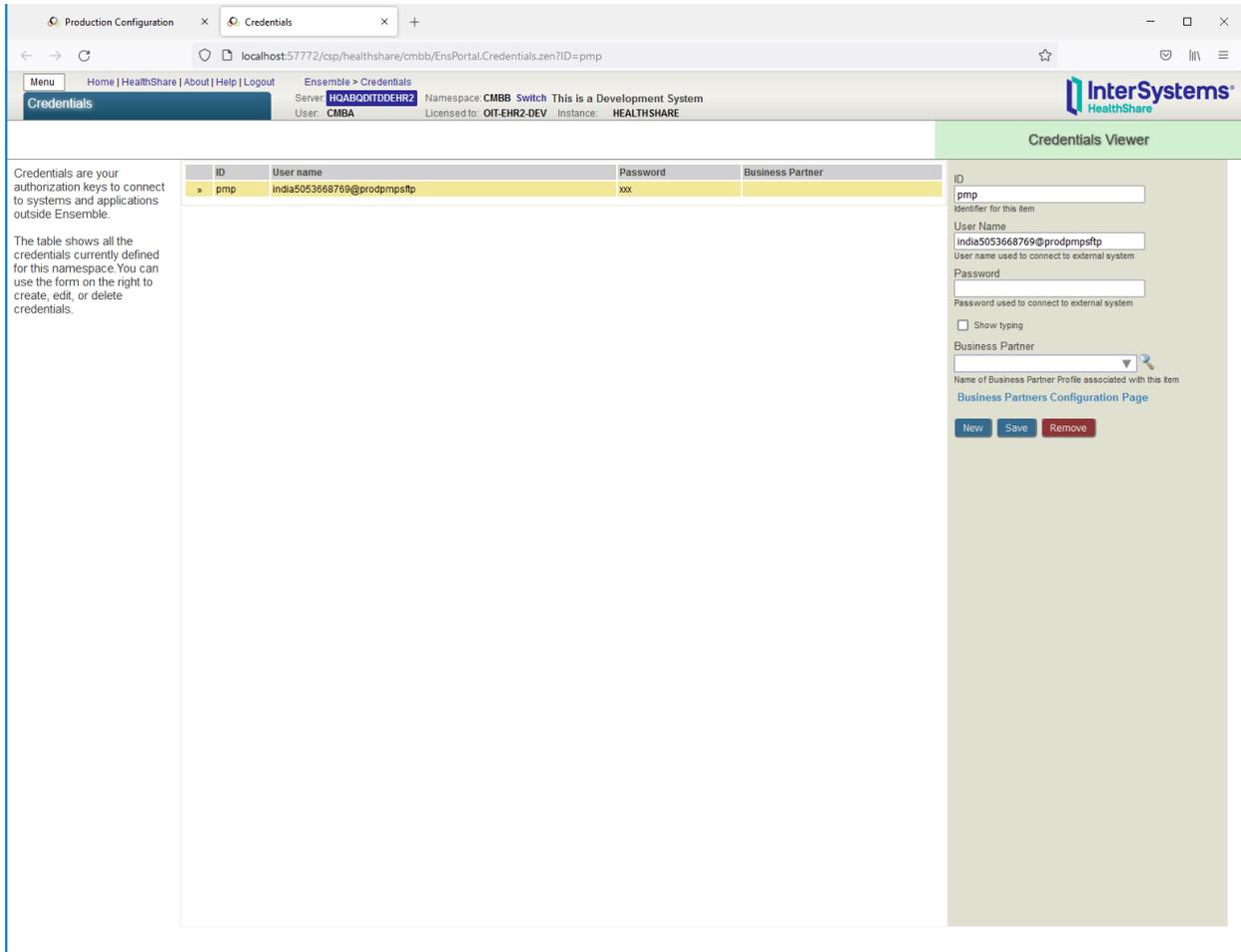


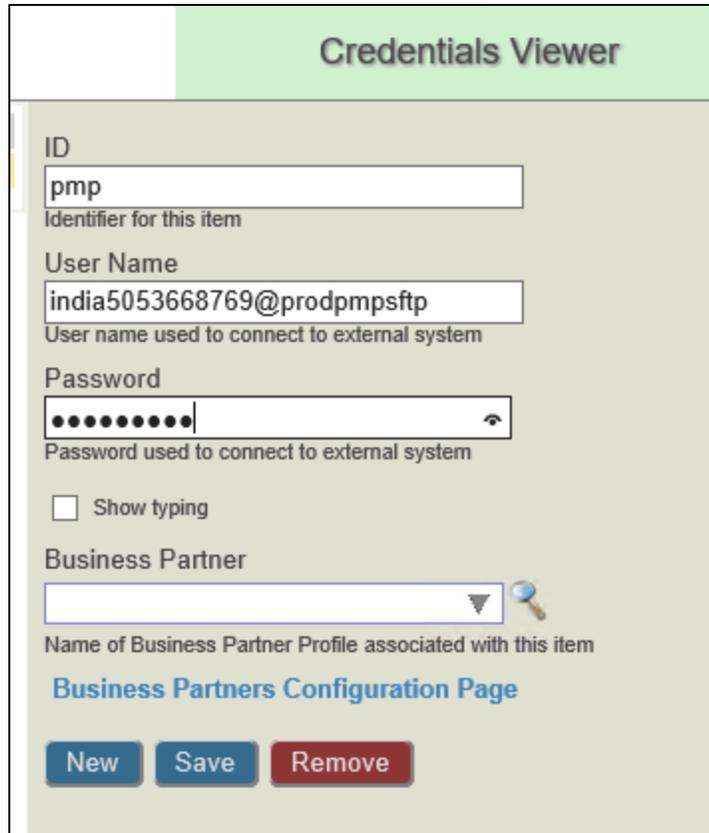
Figure 1-23: Credentials Viewer

In the ID field enter **pmp**.

In the User Name field enter the User Name as listed in the PDM SITE PARAMETERS in RPMS.

In the Password field enter the password for the entered User Name.

**Note:** If the site has not used automated upload via sFTP before, the User Name and Password may have to be configured on the PMP Clearinghouse website.



**Credentials Viewer**

ID  
pmp  
Identifier for this item

User Name  
india5053668769@prodpmpsftp  
User name used to connect to external system

Password  
●●●●●●●●●●  
Password used to connect to external system

Show typing

Business Partner  
Name of Business Partner Profile associated with this item

[Business Partners Configuration Page](#)

New Save Remove

Figure 1-24: Credentials Viewer detail

Click **Save**. You should now see the credentials listed.

To Navigate back to the Production, close the Credentials Tab at the top of the window. You should still see the SendBPDM Operation Basic Settings.

In the File Path field enter the path on the PMP server where the files are going to be uploaded. This is typically the relevant state abbreviation with no slashes.

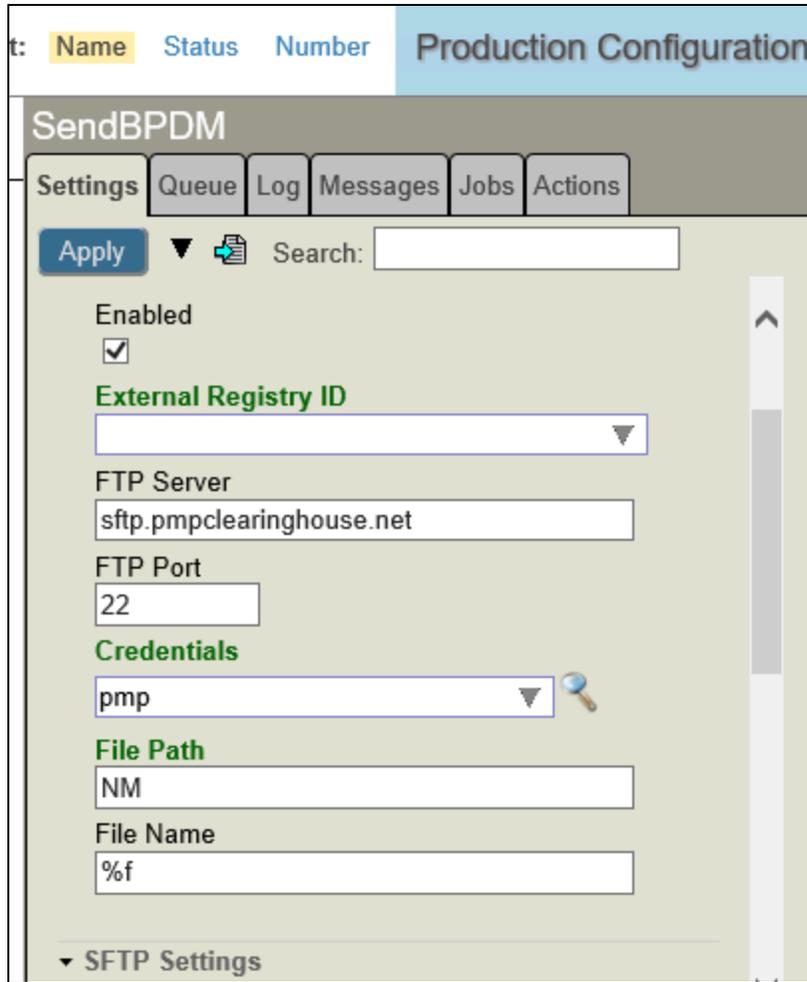
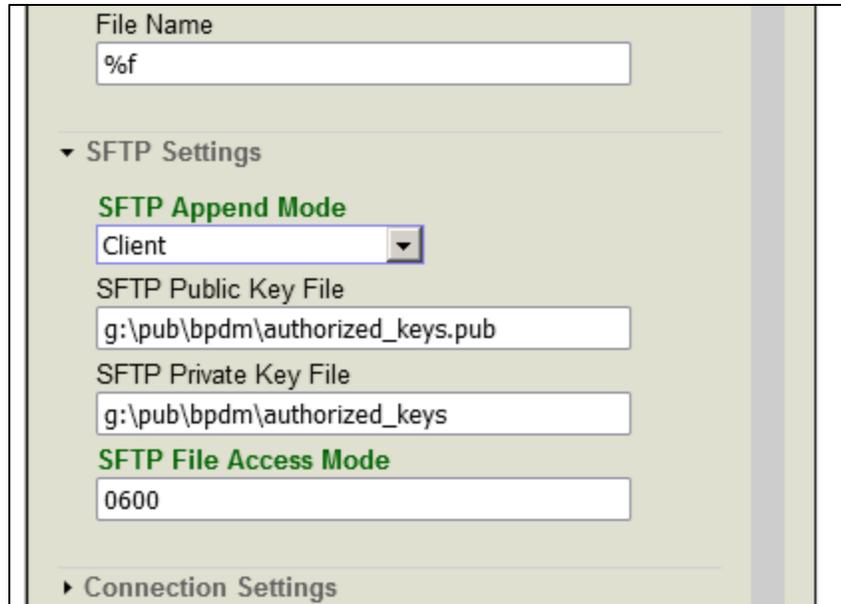


Figure 1-25: Detail view of SendBPDM Basic Settings showing File Path

Open **SFTP** Settings.



The screenshot shows a configuration window for SFTP settings. At the top, there is a 'File Name' field containing '%f'. Below this is a section titled 'SFTP Settings' with a downward arrow. Under 'SFTP Settings', there is a green heading 'SFTP Append Mode' followed by a dropdown menu currently set to 'Client'. Below that are two text input fields: 'SFTP Public Key File' with the path 'g:\pub\bpdm\authorized\_keys.pub' and 'SFTP Private Key File' with the path 'g:\pub\bpdm\authorized\_keys'. Another green heading 'SFTP File Access Mode' is followed by a text input field containing '0600'. At the bottom of the 'SFTP Settings' section is a right-pointing arrow and the text 'Connection Settings'.

Figure 1-26: SFTP Settings for SendBPDM

In the SFTP Public Key File field, enter the path and filename to the public key file. It will typically be named `authorized_keys.pub`.

In the SFTP Private Key File field, enter the path and filename of the private key file. It will typically be named `authorized_keys`.

Click **Apply**.

On the main pane, select the **EMailAlert** Operation.

Open **Additional Settings**.

The screenshot shows the 'Production Configuration' window for 'EMailAlert'. The interface includes a top navigation bar with 'Settings', 'Queue', 'Log', 'Messages', 'Jobs', and 'Actions'. Below this is an 'Apply' button and a search field. The main content area is titled 'Additional Settings' and contains the following fields:

- Schedule:** A dropdown menu with a search icon.
- Pool Size:** A text input field containing the value '1'.
- Recipient:** A text input field containing the email addresses 'demouser.user@ihs.gov, demouser.admin@ihs.gov'.
- Cc:** An empty text input field.
- Bcc:** An empty text input field.
- From:** A text input field containing the email address 'bpdmpmpuploaderror@ihs.gov'.
- Continue If Invalid Recipient:** A checked checkbox.

Figure 1-27: EMailAlert Operation Additional Settings

In the Recipient field, enter email addresses of users that should receive transmission failure alerts separated by commas, e.g., [demouser.user@ihs.gov](mailto:demouser.user@ihs.gov), [demouser.admin@ihs.gov](mailto:demouser.admin@ihs.gov).

The From email will already be filled in. However, consider adding “error” to the “From” email address as shown.

Open **Alerting Control** and change the Alert Retry Grace Period to 300 seconds.

The screenshot shows the 'EMailAlert' configuration window. At the top, there are tabs for 'Settings', 'Queue', 'Log', 'Messages', 'Jobs', and 'Actions'. Below the tabs is an 'Apply' button, a search icon, and a search input field. The main content area is divided into sections: 'Additional Settings', 'Alerting Control', and 'Development and Debugging'. The 'Alerting Control' section is expanded and contains the following settings:

- Alert Retry Grace Period:** 300
- Queue Count Alert:** 0
- Queue Wait Alert:** 0
- Alert On Error:**
- Inactivity Timeout:** 0
- Alert Groups:** (empty dropdown menu)

At the bottom of the window, there is a note: 'To view the Production Settings, click on the Production'.

Figure 1-28: EMailAlert Operation Alerting Control settings

Click **Apply**.

Select the **Ens.Alert** Process. Confirm the Basic Settings and Additional Settings are as follows:

Ens.Alert

Settings Queue Log Messages Jobs Actions

Apply Search:

Enabled

Business Rule Name  
BPDM.SFTP.RoutingRule

Additional Settings

Schedule

Pool Size  
1

Alert On Bad Message

Bad Message Handler

Response From  
SendBPDM

Response Target Config Names  
EmailAlert

Response Timeout  
-1

Force Sync Send

Act On Transform Error

Act On Validation Error

Reply Code Actions

Retry Interval  
5

Failure Timeout  
15

Alerting Control

Figure 1-29: Ens.Alert Process settings detail

If needed, configure additional sites as noted in the following section. If no additional sites need to be configured, skip to section 1.5.

## 1.4 Additional BPDM Sites

If you have additional divisions that use separate credentials, you will need to create a new Service and Operation for each additional site. The following describes the process for creating an additional site.

### 1.4.1 Services

Click the **plus sign (+)** button next to the Services label.

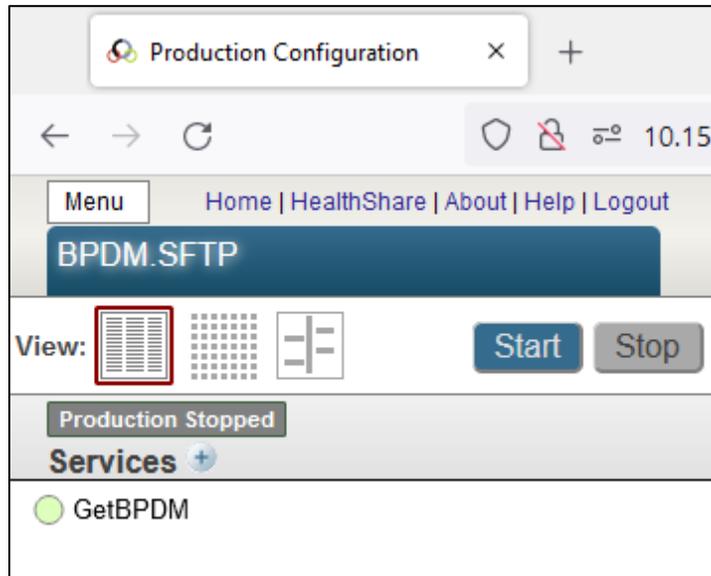


Figure 1-30: Close up of Services label and plus sign button

The Business Service Wizard opens.

Business Service Wizard

Server: HQABQDITDDEHR1 Namespace: TEHRD\_BPDM Switch: This is a Developer

Business Service Wizard  
Add a new Business Service to this Production.

All Services | HL7 Input | X12 Input | Business Metric

Service Class: EnsLib.File.PassthroughService

Service Name: GetBPDMTEHRD

Display Category: [Empty]

Comment: [Empty]

Enable Now:

Use this form to add a new business service to the production.  
For help with any setting in this form, hover the cursor over the setting name.

Cancel OK

Figure 1-31: Business Service Wizard

Under the Service Class select **EnsLib.File.PassthroughService**.

In the Service Name field, name the Service **GetBPDM<sitename>**.

Click **OK**.

Select the service you just created and open **Basic Settings**.

Figure 1-32: The new Service's Basic Settings

In the File Path field enter the path to where the PDM Export files are created or use the magnifying glass to select.

In the File Spec field enter the masking for the file, this will usually be the FILENAME field in the PDM SITE PARAMETERS concatenated with the DEFAULT FILE EXTENSION field, in the example it would be \*TEHRD\*.\*.

In the Archive Path field enter the path where the successfully uploaded files will be moved for backup purposes.

Open **Additional Settings**.

The screenshot shows the 'GetBPDMTEHRD' application interface. At the top, there are tabs for 'Settings', 'Queue', 'Log', 'Messages', 'Jobs', and 'Actions'. Below the tabs is an 'Apply' button and a search field. The main content area is titled 'Additional Settings' and contains several configuration fields:

- Schedule:** A dropdown menu.
- Pool Size:** A text input field containing the value '1'.
- Subdirectory Levels:** A text input field containing the value '0'.
- Charset:** A dropdown menu with 'Native' selected.
- Append Timestamp:** A text input field containing the value '0'.
- Confirm Complete:** A dropdown menu with 'Writable' selected.
- File Access Timeout:** A text input field containing the value '10'.
- Semaphore Specification:** An empty text input field.
- Generate SuperSession ID:** An unchecked checkbox.

Figure 1-33: The new Service's Additional Settings

In the Append Timestamp field change this to **0**.

In the Confirm Complete field change this to **Writable**.

In the File Access Timeout field, change this to **10**.

Click **Apply**.

Repeat for any additional sites.

## 1.4.2 Operations

Click the **plus sign (+)** button next to the Operations label.

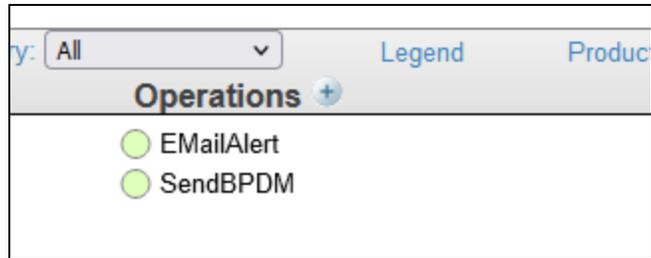


Figure 1-34: The Operations label with the plus sign button to the right

The Business Operation Wizard opens.

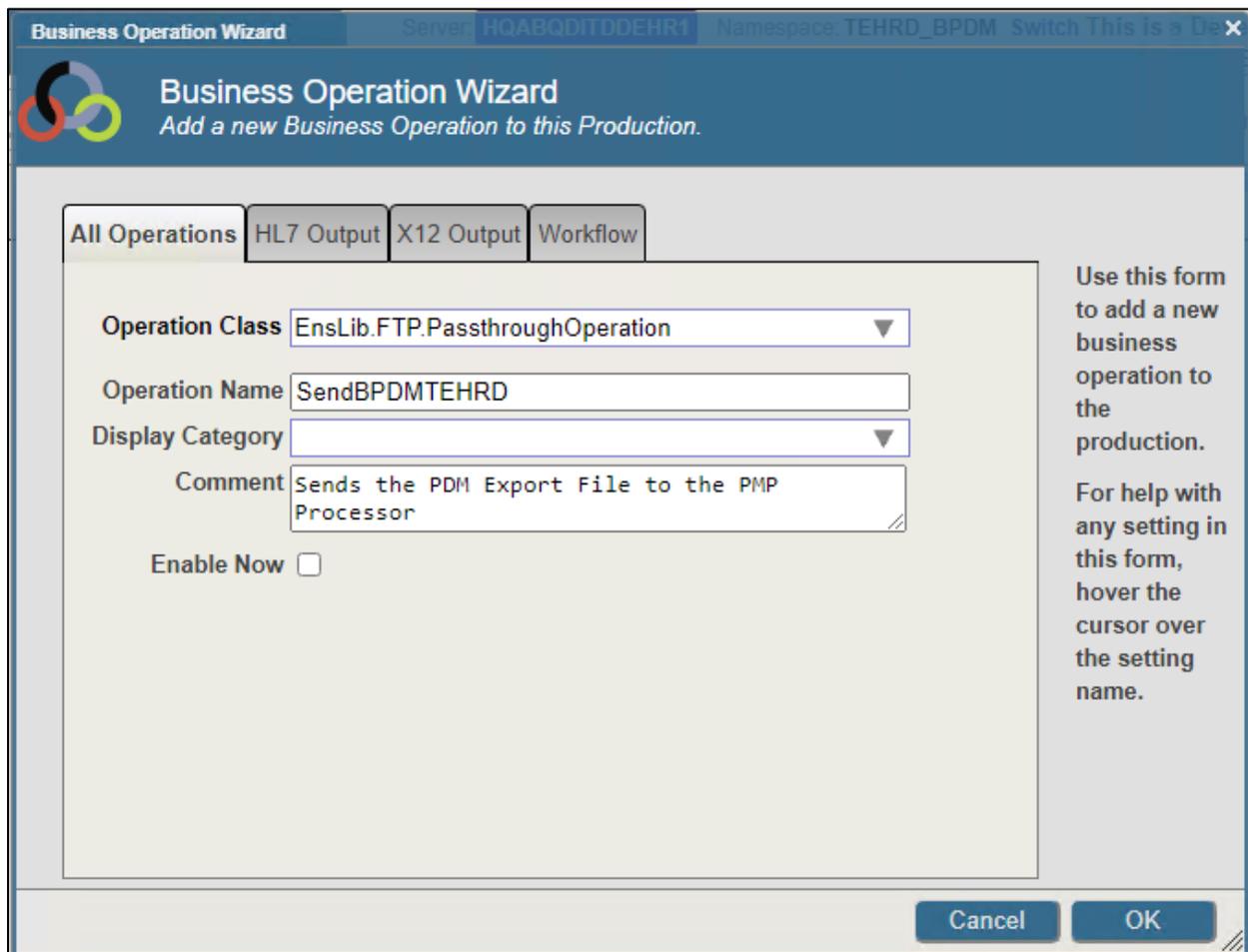


Figure 1-35: Business Operation Wizard

In the Operation Class select **EnsLib.FTP.PassthroughOperation**.

In the Operation Name field, name the operation **SendBPDM<sitename>**.

In the Comment field enter **Sends the PDM Export File to the PMP Processor**.

Click **OK**.

Select the Operation you just created and open **Basic Settings**.

The screenshot shows the 'SendBPDMTEHRD' configuration window with the 'Basic Settings' tab selected. The window has a top navigation bar with tabs for 'Settings', 'Queue', 'Log', 'Messages', 'Jobs', and 'Actions'. Below the navigation bar is an 'Apply' button, a search icon, and a search input field. The 'Basic Settings' section is expanded, showing the following fields:

- Enabled:** A checkbox that is currently unchecked.
- External Registry ID:** A dropdown menu.
- FTP Server:** A text input field containing 'sftp.pmpclearinghouse.net'.
- FTP Port:** A text input field containing '22'.
- Credentials:** A dropdown menu with a magnifying glass icon to its right.
- File Path:** An empty text input field.
- File Name:** A text input field containing '%f\_%Q'.

Below the 'Basic Settings' section is a collapsed 'SFTP Settings' section.

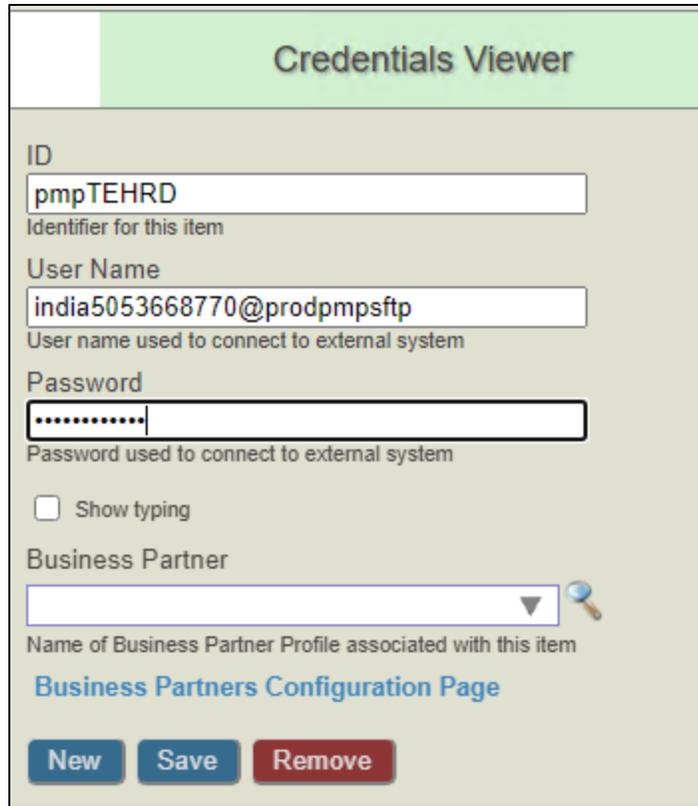
Figure 1-36: The new Operation's Basic Settings

In the FTP Server field enter **sftp.pmpclearinghouse.net**.

In the FTP Port field enter **22**.

Click **Apply**.

In the Credentials field enter **pmp<sitename>** and then click the magnifying glass. The Credentials Viewer window opens.



**Credentials Viewer**

ID  
pmpTEHRD  
Identifier for this item

User Name  
india5053668770@prodpmpsftp  
User name used to connect to external system

Password  
.....  
Password used to connect to external system

Show typing

Business Partner  
.....  
Name of Business Partner Profile associated with this item

[Business Partners Configuration Page](#)

**New** **Save** **Remove**

Figure 1-37: Credentials Viewer detail

In the ID field enter **pmp<sitename>**.

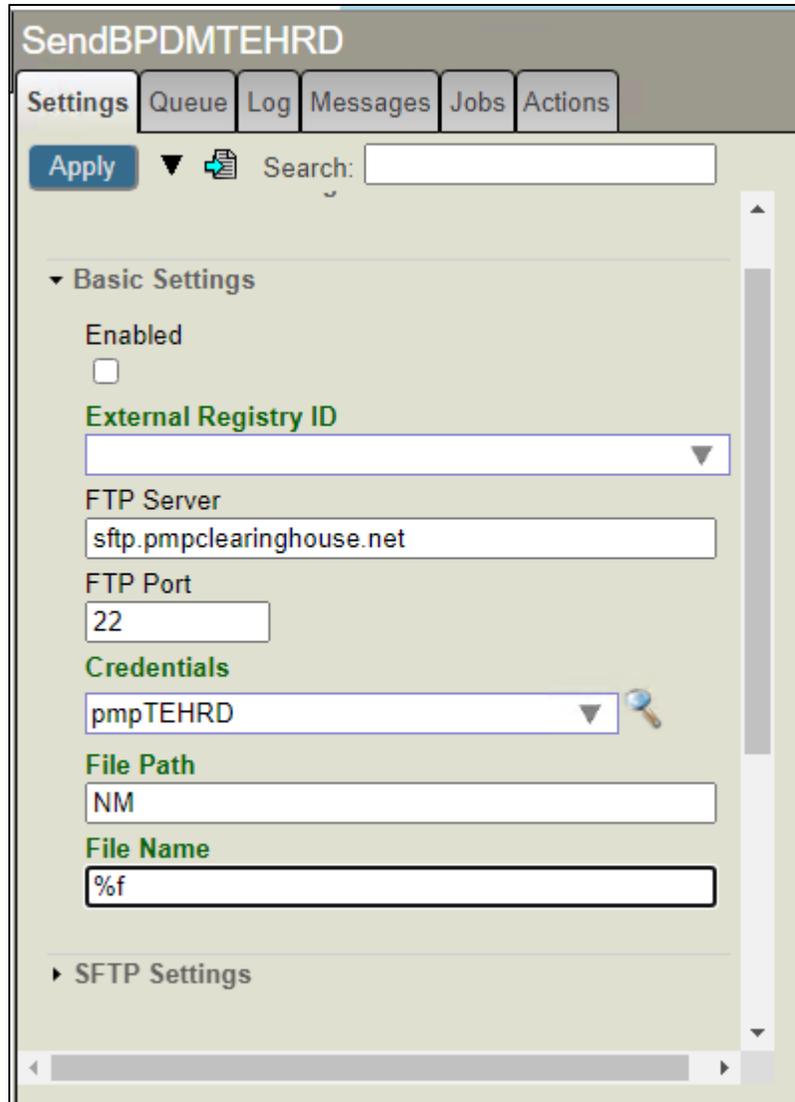
In the User Name field enter the User Name as listed in the PDM SITE PARAMETERS.

In the Password field enter the password for the entered User Name.

**Note:** If the additional site has not used automated upload via sFTP before, the User Name and Password may have to be configured on the PMP Clearinghouse website.

Click **Save**. You should now see the credentials listed.

To Navigate back to the Production, close the Credentials Tab at the top of the window. You should still see the SendBPDM Operation Basic Settings.



The screenshot shows a web-based configuration interface titled "SendBPDMTEHRD". At the top, there are tabs for "Settings", "Queue", "Log", "Messages", "Jobs", and "Actions". Below the tabs is an "Apply" button, a search icon, and a search input field. The main content area is divided into two sections: "Basic Settings" and "SFTP Settings".

**Basic Settings:**

- Enabled:** A checkbox that is currently unchecked.
- External Registry ID:** A dropdown menu.
- FTP Server:** A text input field containing "sftp.pmpclearinghouse.net".
- FTP Port:** A text input field containing "22".
- Credentials:** A dropdown menu containing "pmpTEHRD" with a search icon to its right.
- File Path:** A text input field containing "NM".
- File Name:** A text input field containing "%f".

**SFTP Settings:** This section is currently collapsed, indicated by a right-pointing arrow.

Figure 1-38: The new Operation's Basic Settings, continued

In the File Path field enter the path on the PMP server where the files are going to be uploaded. This is typically the relevant state abbreviation with no slashes.

In the File Name field remove everything except %f.

Click **Apply**.

Open **SFTP Settings**.

File Name  
%f

▼ SFTP Settings

**SFTP Append Mode**  
Client

SFTP Public Key File  
g:\pub\bpdm\authorized\_keys.pub

SFTP Private Key File  
g:\pub\bpdm\authorized\_keys

**SFTP File Access Mode**  
0600

▶ Connection Settings

Figure 1-39: The new Operation's SFTP Settings

In the SFTP Public Key File enter the path and filename of the public key, it should be `authorized_keys.pub`.

In the SFTP Private Key File field enter the path and filename of the private key, it should be `authorized_keys`.

Click **Apply**.

Open **Connection Settings**.

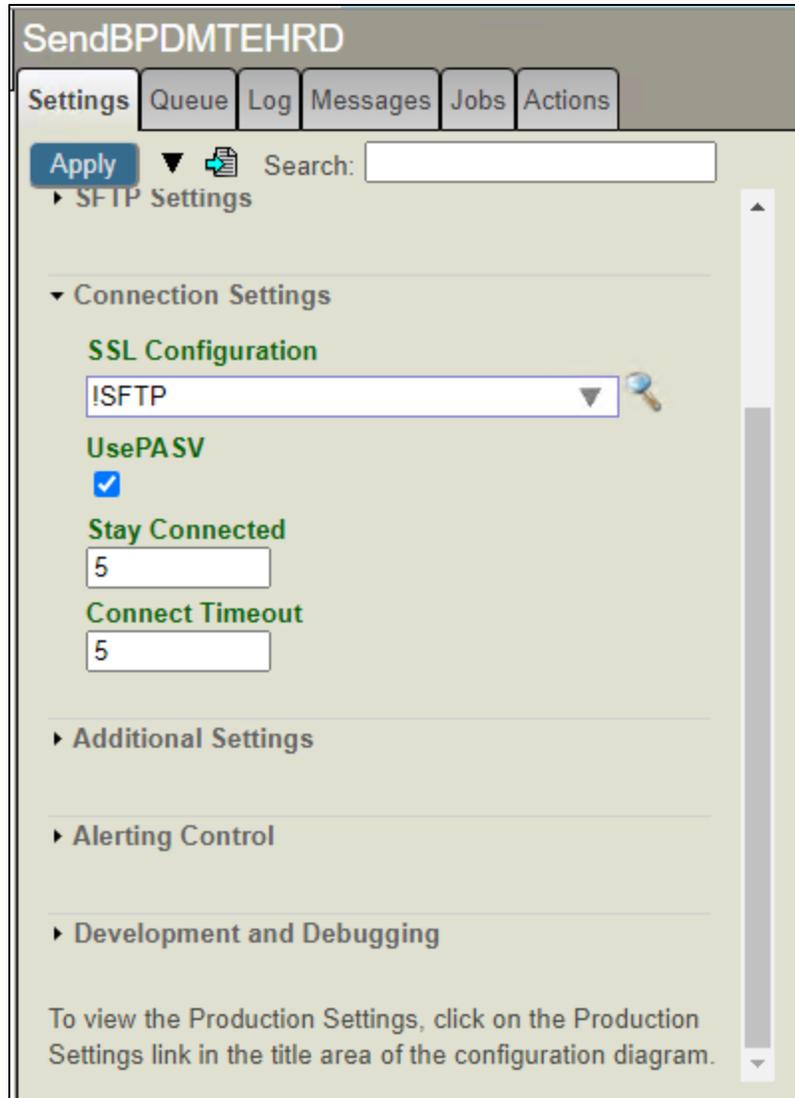


Figure 1-40: The new Operation's Connection Settings

In the SSL Configuration field enter **!SFTP**.

In the Stay Connected field change this to **5**.

Click **Apply**.

Repeat for any additional sites.

### 1.4.3 Link Operation to Service

Click on the Service that was created in Section 1.4.1.

In the Basic Settings section click on the **Target Config Names** drop down and select the matching Operation that was created.

The screenshot shows the 'GetBPDMTEHRD' application window. At the top, there are tabs for 'Settings', 'Queue', 'Log', 'Messages', 'Jobs', and 'Actions'. Below the tabs is an 'Apply' button and a search field. The main content area is titled 'Basic Settings' and contains several configuration fields:

- Enabled:** A checkbox that is currently unchecked.
- External Registry ID:** A dropdown menu that is currently empty.
- File Path:** A text input field containing 'G:\PUB\BPDM\TEHRD\'. A magnifying glass icon is to the right.
- File Spec:** A text input field containing '\*TEHRD\*.\*'.
- Archive Path:** A text input field containing 'G:\PUB\BPDM\TEHRD\Archive\'. A magnifying glass icon is to the right.
- Work Path:** An empty text input field with a magnifying glass icon to the right.
- Call Interval:** A text input field containing the number '5'.
- Target Config Names:** A dropdown menu with 'SendBPDMTEHRD' selected.

Figure 1-41: Basic Settings Section, click Target Config Name drop down menu and select newly created matching Operation

Click **Apply**.

Repeat for each Service you created.

## 1.5 Enable the Production

**Note:** Before Enabling the BPDM Production you will need to make sure all current files that have already been sent to the PMP are moved to the Archive folder. This is very important otherwise they will get uploaded to the PMP again when the production is Enabled.

If your site is an existing auto upload site, you will need to use Fileman in RPMS to edit the PDM SITE PARAMETERS file. You must set the AUTO UPLOAD and SFTP RENAME EXPORT FILE fields to **NO** as this Ensemble automated upload process does not use those parameters. Leaving the settings will cause duplicate uploads.

```
Select OPTION: ENTER OR EDIT FILE ENTRIES
INPUT TO WHAT FILE: PDM SITE PARAMETERS
                                     (3 entries)
EDIT WHICH FIELD: ALL// AUTO UPLOAD?
THEN EDIT FIELD: SFTP RENAME EXPORT FILE
THEN EDIT FIELD:

Select PDM SITE PARAMETERS SITE/LOCATION: DEMO HOSP
AUTO UPLOAD?: YES// NO
SFTP RENAME EXPORT FILE: YES// NO
Select PDM SITE PARAMETERS SITE/LOCATION:
```

Figure 1-42: FileMan in RPMS to edit the PDM SITE PARAMETERS file

If this is an existing PMP Auto Upload site, someone at the facility with Superuser access will need to run the following from a command prompt on the existing key file(s) in the folder where the key exists:

```
ssh-keygen -p -m pem -f authorized_keys
```

Once everything has been configured, click the **Start** button at the top to start the production.

After clicking Start, any export files in the folder designated in the File Path field in GetBPDM will be automatically uploaded to the state. If no export files exist in the folder, you can move a file from the Archive folder to test the automated upload. This may result in a duplicate upload if the file was previously uploaded but will serve as a valid test of automated upload settings.

## 2.0 Monitoring the BPDM Production

If transmission fails for any reason, the recipients entered during the configuration steps above should receive an email alert. The emails will be specific to the problem encountered.

```

From: bpdmmpuploaderror@ihs.gov <bpdmmpuploaderror@ihs.gov>
Sent: Thursday, June 30, 2022 2:29 PM
To: [REDACTED] (IHS/HQ) [REDACTED]; [REDACTED] (IHS/HQ) [C]
<[REDACTED]>; [REDACTED]
Subject: BPDM PMP Upload Error Ensemble Alert from configuration item 'SendBPDM' on system
'HEALTHSHARE'

Ensemble alert email triggered at 2022-06-30 15:29:04.412 [2022-06-30 21:29:04.412 UTC]
Alert Text:          ERROR <Ens>ErrGeneral: Retrying Message body 7@Ens.StreamContainer /
2 because Status 'ERROR <Ens>ErrOutConnectFailed: SFTP Connect failed for
sftp.pmpclearinghouse.net:22/pmp/SSL='!SFTP'/PubKey='G:\PUB\BPDM\Patch_6_Release\authorized_keys
with error ERROR #7500: SSH AuthenticateWithKeyPair Error '-2146430958': SSH Error [80101012]:
Username/PublicKey combination invalid [80101012] at Session.cpp:313,0' matched ReplyCodeAction 1 :
'E=R' resulting in Action code R
Alert Time:          2022-06-30 15:28:22.219 [2022-06-30 21:28:22.219 UTC]
Production:         BPDM.SFTP
Source:             SendBPDM
Session:            555
System:             HEALTHSHARE
Instance:          HEALTHSHARE
Node:              [REDACTED].D1.NA.IHS.GOV

```

Figure 2-1: A sample alert email

If it is a temporary issue, the file will upload once the issue is resolved. If it doesn't resolve, you can view the Event Log in Ensemble for the SendBPDM Operation.

To view the Event Log, click on the **SendBPDM** Operation and click the **Log** tab. This will display what the process has been doing over time.

Sort: Name Status Number

**Production Configuration**

Legend Production Settings

**Operations**

- EMailAlert
- SendBPDM

**SendBPDM**

Settings Queue Log Messages Jobs Actions

50+ row(s) 11:19:19 [Go To Event Log](#)

Type	Time	Text
Info	2022-05-11 15:43:36.140	Disconnecting from sftp.pmpclearinghouse.net
Info	2022-05-11 15:43:31.138	Put stream 8@%Library.FileCharacterStream to NM/TEHRCDEMO_051122_1817T.txt
Info	2022-05-11 15:43:30.958	Put stream 8@%Library.FileCharacterStream to NM/TEHRCDEMO_051122_1816T.txt
Info	2022-05-11 15:43:30.772	Put stream 8@%Library.FileCharacterStream to NM/TEHRCDEMO_051122_1815T.txt
Info	2022-05-11 15:43:30.602	Connected to FTP Server 'sftp.pmpclearinghouse.net:22/pmp /SSL=!SFTP/PubKey=g:\pub\bpdm\tehrc\authorized_keys.pub' /PrivKey=g:\pub\bpdm\tehrc\authorized_keys" at path 'NM' using Credentials 'pmp'
Info	2022-05-11 15:43:29.241	ConfigItem 'SendBPDM' (EnsLib.FTP.PassthroughOperation) started in job 51304
Alert	2022-05-11 15:40:42.011	ERROR <Ens>ErrFailureTimeout: FailureTimeout of 15 seconds exceeded in EnsLib.FTP.PassthroughOperation; status from last attempt was ERROR <Ens>ErrOutConnectFailed: SFTP Connect failed for sfp.pmpclearinghouse.net:22/pmp /SSL=!SFTP/PubKey=g:\pub\bpdm\tehrc\authorized_keys.pub' /PrivKey=g:\pub\bpdm\tehrc\authorized_keys' with error ERROR #7500: SSH Connect Error '-2147013895': No such host is known. [80072AF9]: No such host is known. [80072af9] at ..\..\shared\Utility\utlNetMessage.cpp:969,0 (alert request ID=58)
Error	2022-05-11 15:40:42.010	ERROR <Ens>ErrFailureTimeout: FailureTimeout of 15 seconds exceeded in EnsLib.FTP.PassthroughOperation; status from last attempt was ERROR <Ens>ErrOutConnectFailed: SFTP Connect failed for sfp.pmpclearinghouse.net:22/pmp /SSL=!SFTP/PubKey=g:\pub\bpdm\tehrc\authorized_keys.pub'

Figure 2-2: The SendBPDM Log

To get a detailed look at the log, click the **Go To Event Log** link at the top. The Event Log will open in a new tab.

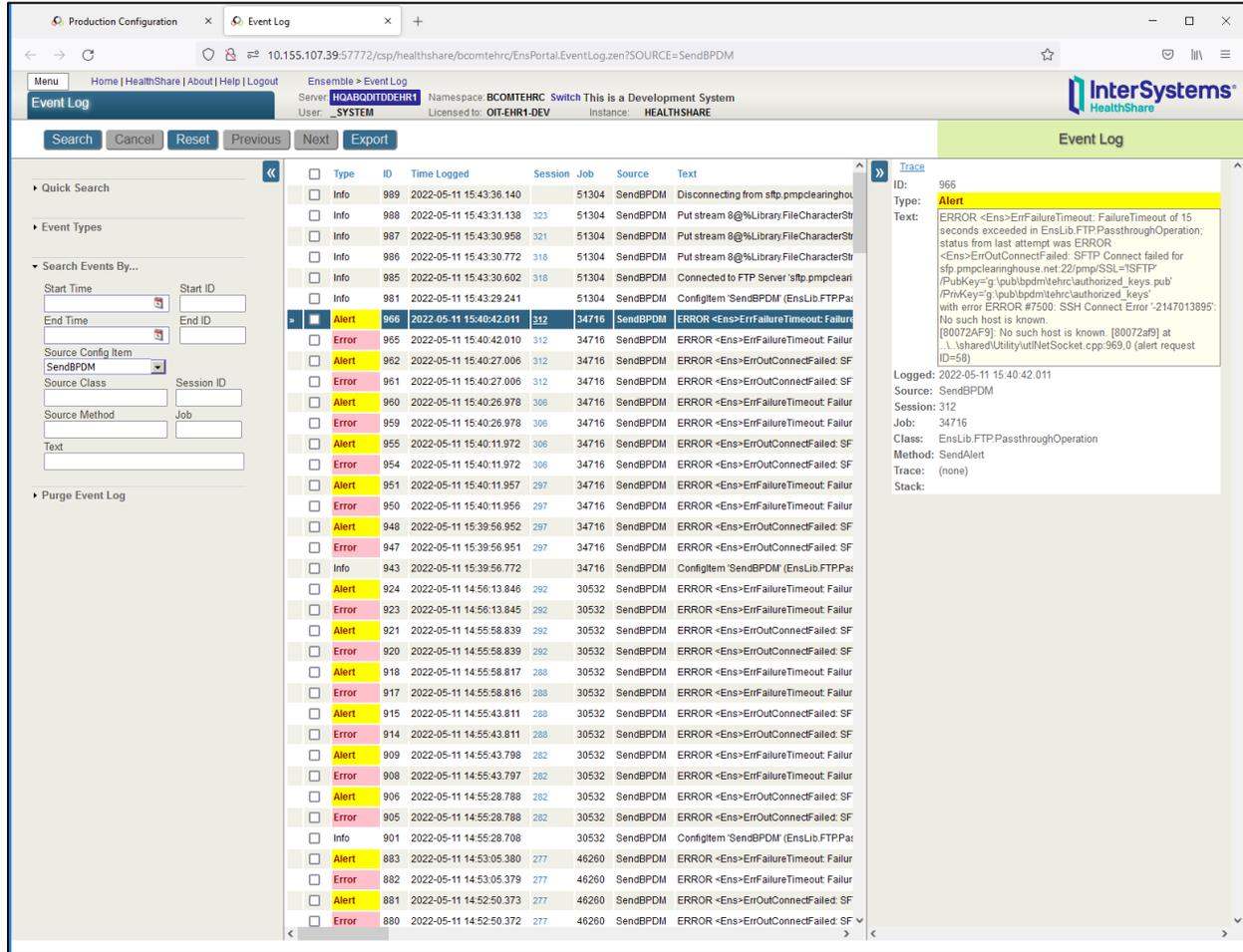
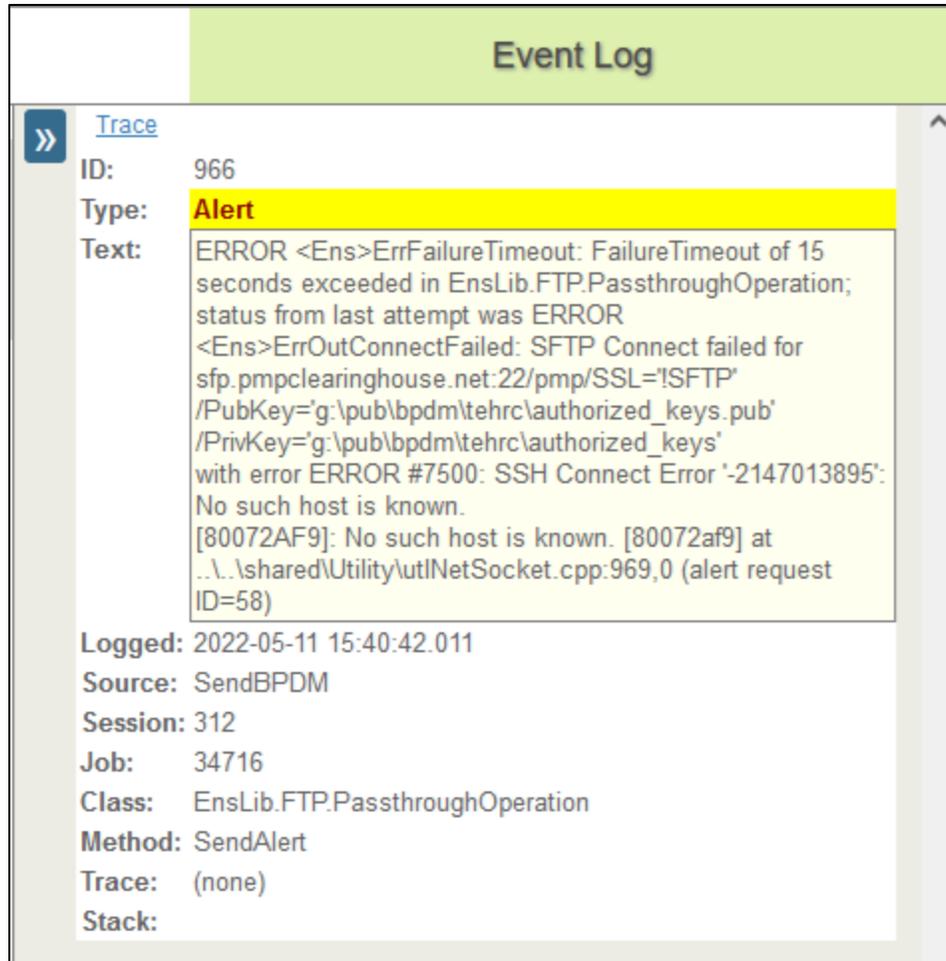


Figure 2-3: Event Log main view

Click on one of the line items to get a description of what is happening.



**Event Log**

[Trace](#)

**ID:** 966

**Type:** **Alert**

**Text:**  
ERROR <Ens>ErrFailureTimeout: FailureTimeout of 15 seconds exceeded in EnsLib.FTP.PassthroughOperation; status from last attempt was ERROR  
<Ens>ErrOutConnectFailed: SFTP Connect failed for sfp.pmpclearinghouse.net:22/pmp/SSL=!SFTP' /PubKey='g:\pub\bpdm\tehrc\authorized\_keys.pub' /PrivKey='g:\pub\bpdm\tehrc\authorized\_keys' with error ERROR #7500: SSH Connect Error '-2147013895': No such host is known. [80072AF9]: No such host is known. [80072af9] at ...\.shared\Utility\utlNetMessage.cpp:969,0 (alert request ID=58)

**Logged:** 2022-05-11 15:40:42.011

**Source:** SendBPDM

**Session:** 312

**Job:** 34716

**Class:** EnsLib.FTP.PassthroughOperation

**Method:** SendAlert

**Trace:** (none)

**Stack:**

Figure 2-4: Close up view of an alert's details

## Glossary

### **Controlled Substance**

In this context, a medication whose manufacture, possession, and use is regulated and designated as a controlled substance by the Drug Enforcement Administration or State.

### **Prescription Drug Monitoring Program (Prescription Monitoring Program)**

In this context, an electronic database that tracks controlled substance and other designated medication prescriptions in a state.

## Acronym List

Acronym	Meaning
IHS	Indian Health Service
IT	Information Technology
KIDS	Kernel Installation and Distribution System
PDMP	Prescription Drug Monitoring Program, also known as Prescription Monitoring Program
PMP	Prescription Monitoring Program, also known as Prescription Drug Monitoring Program
RPMS	Resource and Patient Management System
sFTP	Secure File Transfer Protocol

## Contact Information

If you have any questions or comments regarding this distribution, please contact the IHS IT Service Desk.

**Phone:** (888) 830-7280 (toll free)

**Web:** <https://www.ihs.gov/itsupport/>

**Email:** [itsupport@ihs.gov](mailto:itsupport@ihs.gov)