



RESOURCE AND PATIENT MANAGEMENT SYSTEM

IHS Communication Support

(BCOM)

Installation Guide and Release Notes

Version 1.0
September 2020

Office of Information Technology
Division of Information Technology

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1.0 Required Resources

The BCOM package requires InterSystems HealthShare 2017.2.1 or newer, but server system resource utilization is minimal. Any server that can run RPMS acceptably should be able to run the BCOM package acceptably.

2.0 Release Notes

The BCOM package is a system to securely transmit files to a remote computer and verify that the data in the file has not been modified during transit.

3.0 Installation Notes

Prefix: BCOM

Current Version: 1.0

Note: Read the entire notes file prior to attempting any installation.

3.1 General Information

Make a copy of this distribution for off-line storage. Print all notes/readme files.

It is recommended that the terminal output during the installation be captured using an auxport printer attached to the terminal at which you are performing the software installation. This will ensure a printed audit trail if any problems should arise.

3.2 Contents of Distribution

Table 3-1: List of distributed files with descriptions

File	Description
bcom0100.k	KIDS file for the IHS Communication Support software
bcom0100.n	Installation Notes File
bcom0100.xml	BCOM SFTP Receiving Server Ensemble Production Classes
bcom010i.pdf	Installation guide for the IHS Communications Support software
bcom010t.pdf	Technical manual for the IHS Communications Support software
bcom010u.pdf	User manual for the IHS Communications Support software

3.3 Requirements

- Kernel v8.0, patch 1018 or higher
- FileMan v22.0, patch 1018 or higher
- InterSystems HealthShare 2017.2.1 or higher

3.4 Installation Issues

- Ensure that the installing user has the appropriate rights to install the software.
- Although this software requires minimal storage space, ensure that any attached storage devices to the server are not already full or near full capacity.

4.0 Installation Instructions

In all Unique Client Identifiers (UCI) running the IHS Communications Support:

Note: This installation is a KIDS install. If you have any questions on how to do a KIDS installation, please contact your Area Information Systems Support Personnel.

1. This installation does not require users be logged off the system. (There is no need to disable logins.)
2. Load the patch and run the Verify Checksums in Transport Global using option **2** in the **KIDS Installation Menu**.
3. Consider using options **3** and **4** on the **KIDS Installation Menu** to print and compare the transport.
4. Install the bcom0100.k file using the Kernel V8.0 Kernel Installation and Distribution Systems (KIDS) menu while logged into your production UCI in programmer mode. Once you start the install, you must let it run to completion. (See Section 5.0 for an example of the KIDS load and install.).

5.0 Sample Installation

```

      I N S T A L L A T I O N   E X A M P L E

1      Load a Distribution
2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution

Select Installation <TEST ACCOUNT> Option: 1  Load a Distribution
Enter a Host File: D:\Z\BCOM0100.K

KIDS Distribution saved on Jul 02, 2020@10:41:31
Comment: BCOM INSTALLER, REMOVED ROUTINE MAPPING

This Distribution contains Transport Globals for the following Package(s):
      IHS COMMUNICATIONS SUPPORT 1.0
Distribution OK!

Want to Continue with Load? YES//
Loading Distribution...

Build IHS COMMUNICATIONS SUPPORT 1.0 has an Environmental Check Routine
Want to RUN the Environment Check Routine? YES//
      IHS COMMUNICATIONS SUPPORT 1.0
Will first run the Environment Check Routine, BCOMINS1

      Executing Environment Check.
Use INSTALL NAME: IHS COMMUNICATIONS SUPPORT 1.0 to install this
Distribution.

1      Load a Distribution
2      Verify Checksums in Transport Global
3      Print Transport Global
4      Compare Transport Global to Current System
5      Backup a Transport Global
6      Install Package(s)
      Restart Install of Package(s)
      Unload a Distribution

Select Installation <TEST ACCOUNT> Option: 6  Install Package(s)
Select INSTALL NAME: IHS COMMUNICATIONS SUPPORT 1.0      Loaded from
Distribution
      7/2/20@10:46:12
      => BCOM INSTALLER, REMOVED ROUTINE MAPPING ;Created on Jul 02,
2020@10:

This Distribution was loaded on Jul 02, 2020@10:46:12 with header of
      BCOM INSTALLER, REMOVED ROUTINE MAPPING ;Created on Jul 02,
2020@10:41:31
      It consisted of the following Install(s):
IHS COMMUNICATIONS SUPPORT 1.0
Checking Install for Package IHS COMMUNICATIONS SUPPORT 1.0
Will first run the Environment Check Routine, BCOMINS1

      Executing Environment Check.

```

```
Install Questions for IHS COMMUNICATIONS SUPPORT 1.0

Incoming Files:

    90312.98 BCOM CLASS TRANSPORT (including data)
    90312.99 BCOM SETUP (including data)

Want KIDS to INHIBIT LOGONs during the install? NO//
Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//

Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.

DEVICE: HOME//  CONSOLE
                                IHS COMMUNICATIONS SUPPORT 1.0

Install Started for IHS COMMUNICATIONS SUPPORT 1.0 :
    Jul 02, 2020@10:47:19

Build Distribution Date: Jul 02, 2020

Installing Routines:
    Jul 02, 2020@10:47:19

Running Pre-Install Routine: PRE^BCOMINS1

Executing Pre-Install.

Starting Pre-Install Routine

Verifying Functionality of _system userid.

Creating new directory.

New Directory Name: C:\EnsembleData\BCOMFOIA\

Testing new directory.
Setting up new database.
Setting up new namespace.

Namespace, Global and Package mappings are set. Continuing install.

Installing Data Dictionaries:
    Jul 02, 2020@10:47:22

Installing Data:
    Jul 02, 2020@10:47:22

Running Post-Install Routine: POST^BCOMINS1

Executing Post-Install.
About to install classes.
Creating Stream.
Building Stream.
Decoding Stream.
Decompressing Stream.
Writing Stream.
Loading Stream - Test.
List started on 07/02/2020 10:47:22
Listing file C:\HealthShare\mgr\Temp\3lWgglqSRVw1TQ.xml as xml
List finished successfully.
```

```
    Loading Stream - Real.
Load started on 07/02/2020 10:47:22
Loading file C:\HealthShare\mgr\Temp\Rfxh6b0UbFATYw.xml as xml
Imported class: SFTP.BCOM.AlertRule
Imported class: SFTP.BCOM
Imported class: SFTP.BCOM.RoutingRule
Imported class: SFTP.BCOM.EmailError
Imported project: EnsExportProduction_2020-06-05 13-43-31_561-4.prj
Imported document: EnsExportNotes.EnsExportProduction_2020-06-05 13
-43-31_561-4.PTD
Imported document: ProductionSettings:SFTP.BCOM.PTD
Compiling 4 classes, using 4 worker jobs
Compiling class SFTP.BCOM
Compiling class SFTP.BCOM.EmailError
Compiling class SFTP.BCOM.AlertRule
Compiling class SFTP.BCOM.RoutingRule
Compiling routine SFTP.BCOM.RoutingRule.1
Compiling routine SFTP.BCOM.AlertRule.1
Compiling routine SFTP.BCOM.EmailError.1
Compiling routine SFTP.BCOM.1
Load finished successfully.

Class: CLASS1 Loaded Successfully.
  EnsExportNotes.EnsExportProduction_2020-06-05 13-43-31_561-4.PTD
  EnsExportProduction_2020-06-05 13-43-31_561-4.prj
  ProductionSettings:SFTP.BCOM.PTD
  SFTP.BCOM.AlertRule.cls
  SFTP.BCOM.RoutingRule.cls
  SFTP.BCOM.cls
  SFTP.BCOM.EmailError.cls

Updating Routine file...

Updating KIDS files...

IHS COMMUNICATIONS SUPPORT 1.0 Installed.
      Jul 02, 2020@10:47:24

Not a VA primary domain

NO Install Message sent

Install Completed
```

Figure 5-1: Sample Installation

5.1 Installation Configuration

The BCOM package, through multiple Ensemble Services and Operations, can handle sending files to several different destinations depending on the purpose of those files. Much of the information for the destinations can be gleaned from the ZISH SEND PARAMETERS (#9888888.93) File.

For new destinations created after the writing of this document, you would need to contact the system administrator(s) of the destination server(s) for connection info.

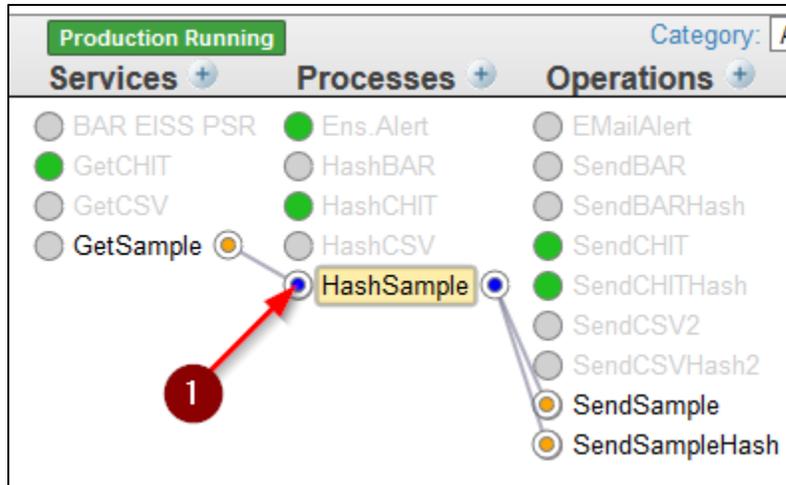


Figure 5-2: HashSample

The GetSample takes input information, sends it to HashSample that creates a unique file name for the file and also generates the SHA-256 hash, and sends the file to SendSample and the hash to SendSampleHash.

1. Click on the **GetSample** service (Figure 5-3) to see the user configurable options:

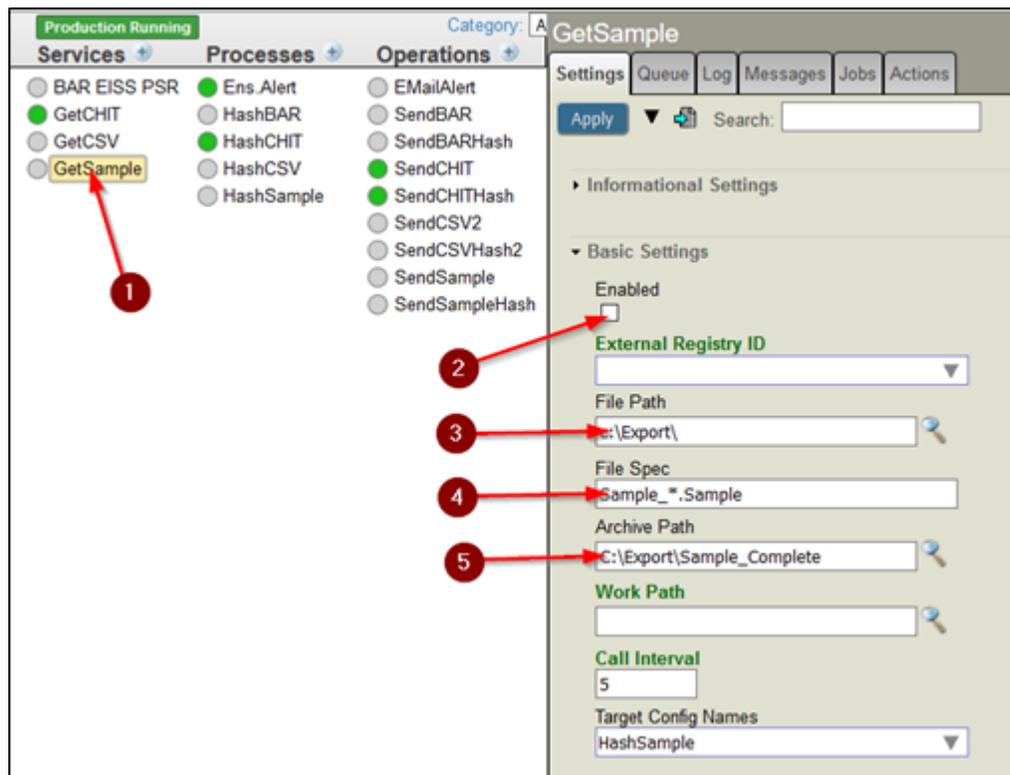


Figure 5-3: GetSample Service example

Enabled: Option #2: Click this if you want to enable the service – allow the production to scan for and send files.

File Path: Option #3: This is where the files should be found on the local filesystem. This info should come from either the ZISH SEND PARAMETERS file or from the package owner.

File Spec: Option #4: This is the file specification of the specific files. In the example, any files that start with “Sample_” and end with “. Sample” will be sent; all other files will be ignored. Please keep in mind that if the local server is Windows-based, the file specifications is *not* case sensitive. However, if it is AIX based, it *is* case sensitive. This means on AIX hosts that “Sample” does not equal “SAMPLE” or “sample.”

Archive Path: Option #5: If you want to keep a local copy of the file that you are sending, enter the archive directory for each file in the **Archive Path** field.

2. Click on **SendSample** (Figure 5-4):

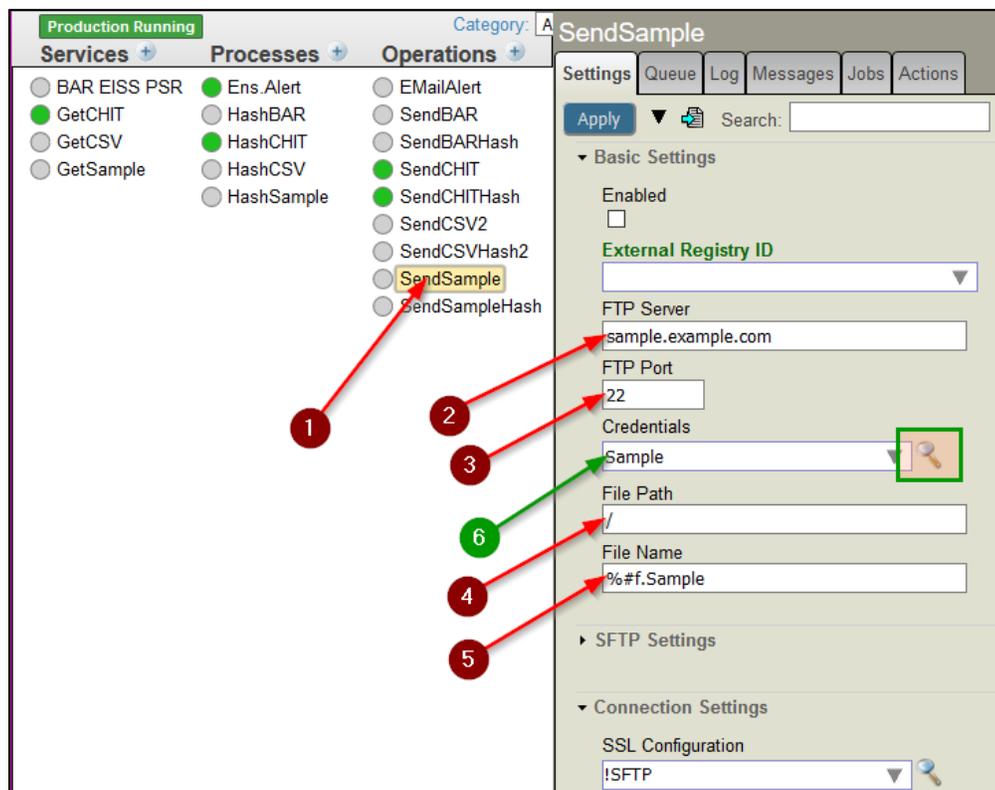


Figure 5-4: Send Sample Example

All of the following options need information obtained from the system administrator(s) of the destination server(s).

FTP Server: Option #2 is the destination server name or IP address where the files will be sent.

FTP Port: Option #3 is the SFTP port number. 22 is the default but verify with the system administrator of the remote server in case this port has been changed.

File Path: Option #4: This is the file path on the destination server where files should be saved.

File Name: Option #5: This is the file name of the file itself.

Credentials: Option #6: These are the credentials needed to upload files to the remote server. The reason this is in green is that the user needs to go to a different area to set this information. Sometimes Ensemble will let you click on the magnifying glass next to the file to take you there, but if that does not work see Figure 5-4 where to go to change the credentials.

To change the credentials, go to the main screen, and make sure you are in the BCOM namespace:

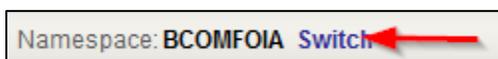


Figure 5-5: BCOMFOIA Switch Namespace

If you are in the BCOM namespace, click the **Switch** link and switch to the BCOM namespace. Then, click **Ensemble** (1), **Configure** (2), and then **Credentials** (3).

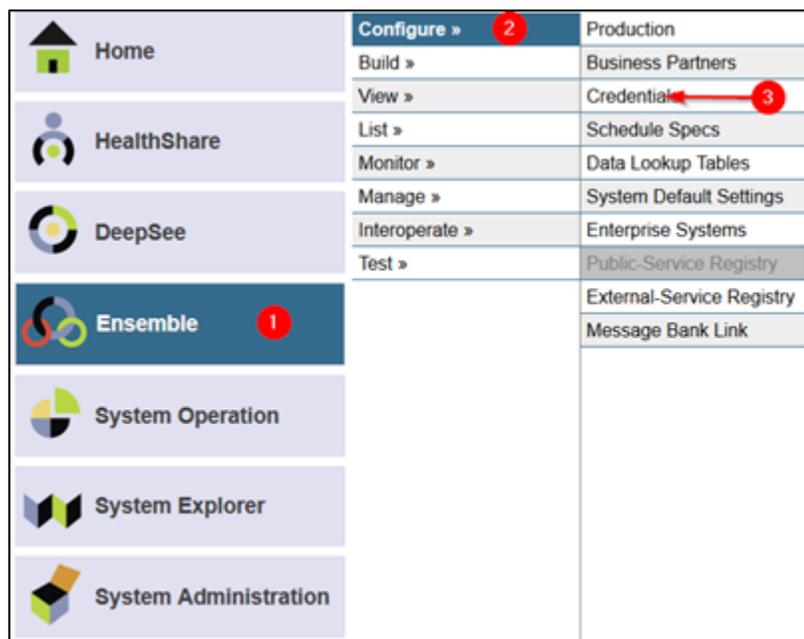


Figure 5-6: Switch to BCOM Namespace

- Click on the correct set of credentials (1) for that Ensemble Operation (you can have more than one) and edit the username (2) and password (3) to the correct credentials received from the system administrator of the remote SFTP server and click **Save**.



Figure 5-7: Edit Set of Credentials

- Start the production if it is not already running:

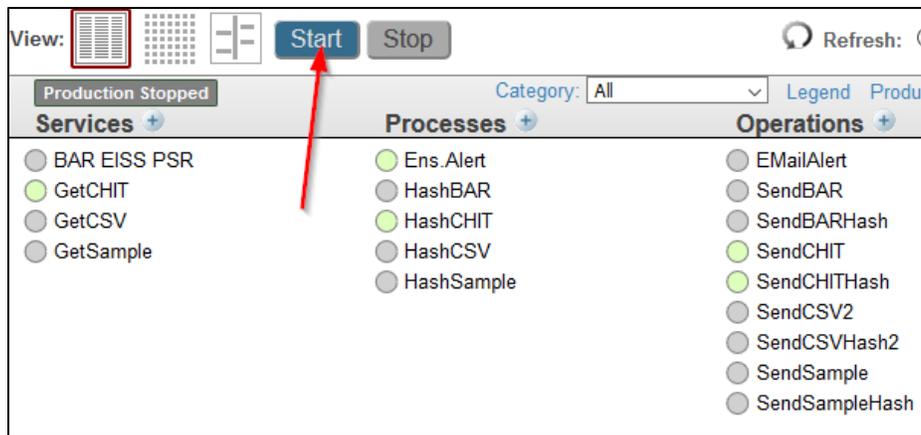


Figure 5-8: Start Button for Production

Note: Verify with the remote system administrator(s) that any files that should be sent according to the settings in the production were received successfully at the remote site.

6.0 Sample BCOM XML Installation

Note: Only sites that are running SFTP receiving servers will need to install the bcom0100.xml file on their server. At the time of this writing, there are no production servers that require this file and only one test server nationally that can use this file. I/T/U sites and Area Offices do not require this file as of yet. If you feel you may be able to use this file, please contact the IT Service Desk and open a ticket.

In any UCI that may require running the IHS Communications Support server software:

Note: This installation is a HealthShare XML based Class install. If you have any questions on how to install XML based classes, please contact your Area information systems support personnel.

1. In **Ensemble**, click **System Explorer** then **Classes**.



Figure 6-1: System Explorer Option

2. Click the namespace that you would like to install the BCOM Server production (1) and then click the **Import** button (2):

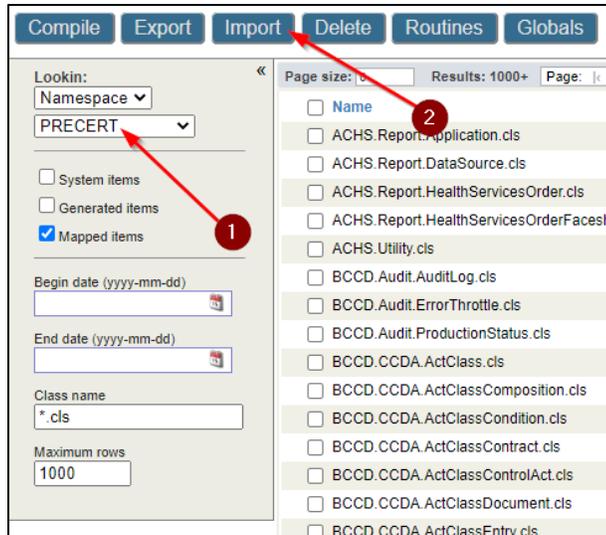


Figure 6-2: Import Button

3. Select where the file would be kept (1), click the **Choose File** button (2) and select the **bcom0100.xml** file, then click **Next** (3).

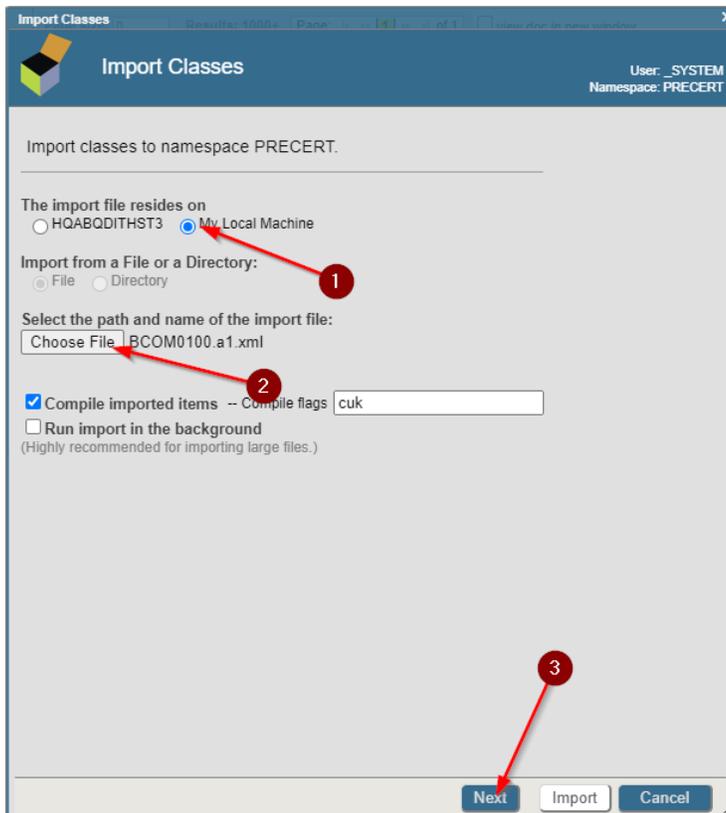


Figure 6-3: Import Classes to Namespace PRECERT

4. On the next screen, click **Import**.

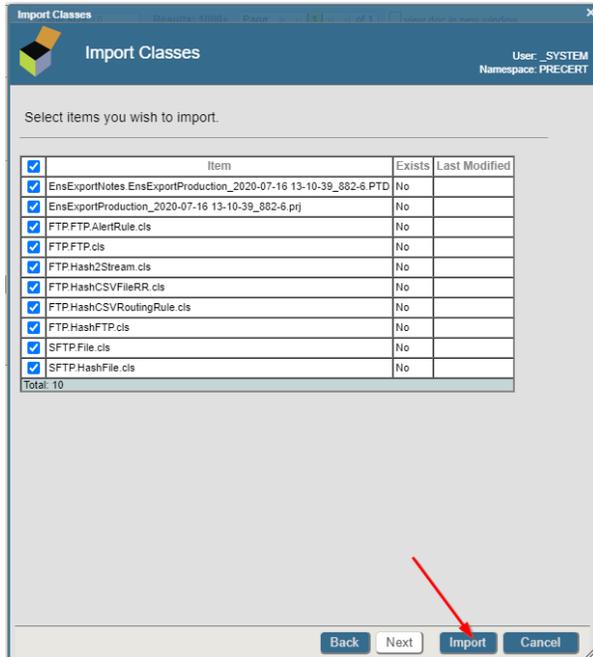


Figure 6-4: Select Items to Import

5. If you see the **Load finished successfully** line on the next screen, click **Done** . If the load does not finish successfully, contact the IT Service Desk.

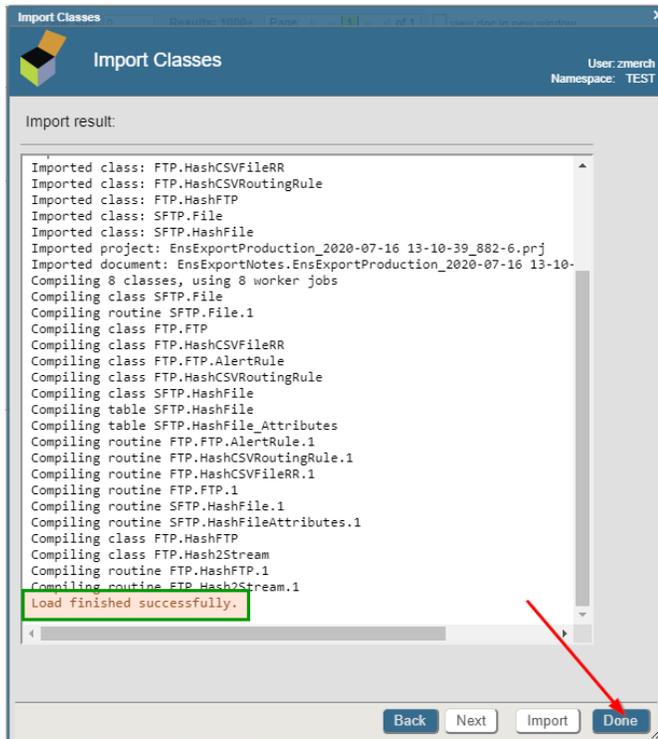


Figure 6-5: Load Finished Successfully – Done Button

6. Installation is now complete!

6.1 Installation Configuration

As the BCOM server sample XML file is intended solely for demonstration purposes only, installation and configuration should only be attempted by server administrators who are knowledgeable in setting up SFTP and/or OpenSSH file server daemons. As the configuration of the BCOM server XML system is dependent on the configuration of the SFTP/OpenSSH server, it is beyond the scope of this document to suggest a “default configuration” as no such defaults exist.

6.2 Installation Issues

- Ensure that the installing user has the appropriate rights to install the software.
- Although this software requires minimal storage space, ensure that any attached storage devices to the server are not already full or near full capacity.

Acronym List

Acronym	Meaning
IHS	Indian Health Service
KIDS	Kernel Installation and Distribution Systems
NDW	National Data Warehouse
NPIRS	National Patient Information Reporting System
RPMS	Resource and Patient Management System
UCI	Unique Client Identifier

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