

BUILDING BLOCKS - INSTALLATION

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TECHNICAL MANUAL

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Introduction

This manual describes the installation of a PharmaSuite Building Block on top of an installed PharmaSuite environment. For all information on installing your PharmaSuite system, please refer to the current PharmaSuite installation documentation (page [21](#)).

Intended Audience

The manual is intended for administrators of a PharmaSuite system.

Due to the nature of the tasks that need to be performed for a building block scenario, the administrator should be familiar with the PharmaSuite platform and its installation.

Typographical Conventions

This documentation uses typographical conventions to enhance the readability of the information it presents. The following kinds of formatting indicate specific information:

Bold typeface	Designates user interface texts, such as <ul style="list-style-type: none">■ window and dialog titles■ menu functions■ panel, tab, and button names■ box labels■ object properties and their values (e.g., status).
<i>Italic typeface</i>	Designates technical background information, such as <ul style="list-style-type: none">■ path, folder, and file names■ methods■ classes.
CAPITALS	Designate keyboard-related information, such as <ul style="list-style-type: none">■ key names■ keyboard shortcuts.

Monospaced
typeface

Designates code examples.

Installing a PharmaSuite Building Block

IMPORTANT

PharmaSuite Building Blocks require a pre-installed PharmaSuite system. Please refer to the PharmaSuite installation documentation (page 21) for installation instructions. It will guide you through all required steps to set up the PharmaSuite system.

In the following you will find a description of all system requirements that have to be met and all information you need to know about prior to installing a PharmaSuite Building Block on top of PharmaSuite.

The description covers the installation of a new building block version and the update of an existing building block version.

Installation Prerequisites and Information

The following checklist covers all preparatory steps required for installing PharmaSuite Building Blocks.

Prerequisites Checklist

Before you start the installation, check the prerequisites:

	Prerequisite	Your Notes	Done?
1	PharmaSuite has been installed and configured.		

Information Checklist

Before you start to import DSX objects (page 5), consider the following topics:

	Information	Your Notes	Done?
1	A new version (minor or major) of a building block can be installed in parallel to an older version of the same building block and will not be used automatically in existing recipes or workflows. A building block MR (maintenance release) must replace the already installed building block of the same version. Please refer to the "Technical Manual Developing System Building Blocks" documentation (page 21) for instructions how to create a new building block version.		
2	To overwrite objects that have object revisioning enabled, they must have been checked out first. Overwriting will not be successful in some cases, e.g. if you are trying to remove a cell from an ATDefinition. This kind of change must be reflected in a new version of a building block.		
3	To check out the ReportDesign object of a phase, use the mes_PS-BatchReportManager form to locate the report design in the list. To retrieve the name of a phase-specific sub-report, use the mes_PhaseLibManager form.		
4	If you have re-installed an existing building block (e.g. by installing an MR of the building block), do not forget to check in its ReportDesign object and compile it by using the mes_PS-BatchReportManager form.		
5	After the import, reopen the Universe of Recipe and Workflow Designer to make the new building block versions available for adding them to the Setlist.		
6	After the import, open the mes_PhaseLibManager form to verify the installed building block version. The information is provided by the Internal maintenance version attribute.		
7	System configuration considers the following settings: Building Block Installer runs with the 64-bit and 32-bit versions of Java 1.8.0_202.		

Performing the Installation

To install a PharmaSuite Building Block, perform the following steps:

1. Download and expand the Building Block Installer (page 5).
2. Import DSX objects into Process Designer (page 5).
3. Configure audit trail (page 8).
4. Check for duplicate libraries (page 10).
5. Install MR+ revisions of building blocks (page 12).

Downloading and Expanding the Building Block Installer

Each PharmaSuite Building Block Installer is available as an installation package on the Rockwell Automation Download Site.

To download and expand the installation package, proceed as follows:

1. Open Internet Explorer and navigate to the Rockwell Automation Download Site.
2. Navigate to the **PharmaSuite** section.
3. Select the building block package you wish to download.
4. On the Windows machine, expand the file that you have downloaded to extract the Building Block Installer files to a target directory of your choice. From this directory, you will be able to access the building block files.
5. Continue with importing DSX objects (page 5).

Importing DSX Objects

TIP

You can import a single DSX file (page 6) or multiple DSX files (page 7).

To import the building block DSX objects from the downloaded installation package into Process Designer, proceed as follows:

1. In Process Designer, from the **File** menu, select **Import**.
2. Navigate to the building block DSX file.
3. Select all objects of the DSX for importing and start the import.

4. The system displays a tree view of all already available objects. You have to select which objects should be overwritten (see also Information checklist (page 4)). There are two options:
 - If you install the building blocks for the first time, select **No to All**. The already existing objects are PharmaSuite objects that are included the DSX file because of dependencies. They must not be overwritten.
 - If you re-install the building blocks, select **Yes** for building block-specific objects and **No** for PharmaSuite objects.
5. Start the process with **OK**.
6. Continue with configuring audit trail (page 8).

IMPORTING A SINGLE DSX FILE BY USING PHARMA SUITE INSTALLER

You can also import DSX objects without using Process Designer by means of the DSX import mechanism of the PharmaSuite installer. For this purpose, proceed as follows:

1. Copy the building block DSX file to a directory of your choice.
2. Copy the *log4j-importDSX.properties* file from the PharmaSuite installation directory to the directory that contains the Building Block DSX file.
3. Create a *jars* subdirectory and copy all libraries, provided along with the PharmaSuite installation, to the subdirectory. They are located in the *<Installer directory>\jars* directory.
4. Create a *bin* subdirectory and copy the *jacob.dll*, provided along with the PharmaSuite installation, to the subdirectory. It is located in the *<Installer directory>\bin* directory.
5. Create an *install.bat* batch file in the directory that contains the building block DSX file and add the following lines to the batch file:

```
SET APP_SERVER=localhost

"c:\Program Files (x86)\Java\jdk1.8.0_202\bin\java.exe" -Xmx1024M -Ddsx.overwrite=false
-Djava.library.path=%~dp0bin
-Dcom.rockwell.test.username=pmcadmin -Dcom.rockwell.test.password=pmcadmin
-DHTTP_ADDRESS=http://%APP_SERVER%:8080 -DJNP_ADDRESS=remote+http://%APP_SERVER%:8080
-Dlog4j.configuration=log4j-importDSX.properties -cp jars\*
com.rockwell.mes.systemsetup.defaultdata.ifc.ImportDSX <Phase name>.dsx
```

6. If required, adapt the APP_SERVER settings, the path to the Java installation, and the DSX file name.

TIP

The **dsx.overwrite** switch defines the overwrite behavior. Possible values are **false** and **true**.

To import DSX objects of an MR+ revision of a phase building block with **dsx.overwrite=true**, make sure to check out the objects prior to importing them. Otherwise the import will fail.

7. Continue with configuring audit trail (page 8).

IMPORTING MULTIPLE DSX FILES IN A SINGLE STEP BY USING PHARMASUITE INSTALLER

You can also import multiple DSX objects without using Process Designer by means of the DSX import mechanism of the PharmaSuite installer. For this purpose, proceed as follows:

1. Copy all building block DSX files to a directory of your choice.
2. Copy the *log4j-importDSX.properties* file from the PharmaSuite installation directory to the directory that contains the Building Block DSX files.
3. Create a *jars* subdirectory and copy all libraries, provided along with the PharmaSuite installation, to the subdirectory. They are located in the *<Installer directory>\jars* directory.
4. Create a *bin* subdirectory and copy the *jacob.dll*, provided along with the PharmaSuite installation, to the subdirectory. It is located in the *<Installer directory>\bin* directory.
5. Create an *install.bat* batch file in the directory that contains the building block DSX files and add the following lines to the batch file:

```
SET APP_SERVER=localhost

"c:\Program Files (x86)\Java\jdk1.8.0_202\bin\java.exe" -Xmx1024M -Ddsx.overwrite=false
-Djava.library.path=%~dp0\bin
-Dcom.rockwell.test.username=pmcadmin -Dcom.rockwell.test.password=pmcadmin
-DHTTP_ADDRESS=http://%APP_SERVER%:8080 -DJNP_ADDRESS=remote+http://%APP_SERVER%:8080
-Dlog4j.configuration=log4j-importDSX.properties -cp jars\*
com.rockwell.mes.systemsetup.defaultdata.ifc.ImportDSX -dir <directory of the DSX files>
```

TIP

When adding the lines to the batch file, please make sure that there are no line breaks between the individual parameters, only blanks.

6. If required, adapt the APP_SERVER settings, the path to the Java installation, and the name of the directory of the DSX files.

TIP

The **dsx.overwrite** switch defines the overwrite behavior. Possible values are **false** and **true**.

To import DSX objects of an MR+ revision of a phase building block with **dsx.overwrite=true**, make sure to check out the objects prior to importing them. Otherwise the import will fail.

7. Continue with configuring audit trail (page 8).

Configuring Audit Trail

By default, PharmaSuite is configured to store audit trail data for all object types. To avoid collecting unnecessary data and to reduce database growth, PharmaSuite allows to disable the collection of audit trail data on a per-object level.

Related to building blocks, audit trail has been switched off for certain application table objects (AT objects).

In order to switch off audit trail for all phase-related tables, add their table names to the **XFR_AUDIT_OVERRIDE** table in the database.

The scripts listed below switch off audit trail for all phases and parameters with the **RS** as ATDefinition prefix. Adapt the **where** clause according to your needs.

Script for Oracle databases:

```
insert into XFR_AUDIT_OVERRIDE (object_name, object_type, audit_type)
select 'AT_' || at_name, 'Table', 0 FROM APP_TABLE
WHERE ((at_name LIKE 'RS_PhDat%')
OR (at_name LIKE 'RS_PhOut%')
OR (at_name LIKE 'RS_Param%')
OR (at_name LIKE 'RS_RtPar%'))
AND 'AT_' || at_name NOT IN
  (SELECT object_name FROM XFR_AUDIT_OVERRIDE
  );
declare begin dsResetAuditTriggers(); end;
```

Script for SQL database:

```
insert into XFR_AUDIT_OVERRIDE (object_name, object_type, audit_type)
select 'AT_' + at_name, 'Table', 0 FROM APP_TABLE
WHERE ((at_name LIKE 'RS_PhDat%')
OR (at_name LIKE 'RS_PhOut%')
OR (at_name LIKE 'RS_Param%')
OR (at_name LIKE 'RS_RtPar%'))
AND 'AT_' + at_name NOT IN
  (SELECT object_name FROM XFR_AUDIT_OVERRIDE
  )
exec dsResetAuditTriggers
```

Continue with checking the performance of AT definitions (page 9).

Checking the Performance of AT Definitions

All AT definitions have a boolean *lazyFetchDetails* flag. Its default value is **false**. This can be useful for AT definitions that are related by a master-details-dependency. In PharmaSuite, however, it only slows down the performance of the system. For this reason, we recommend to set the flag to **true**.

The **ATDefinitions Performance** tool, supports you with this task. Proceed as follows:

1. To use the tool, run the *mes_ATDefinitionPerformance* form to start the **ATDefinitions Performance** tool.

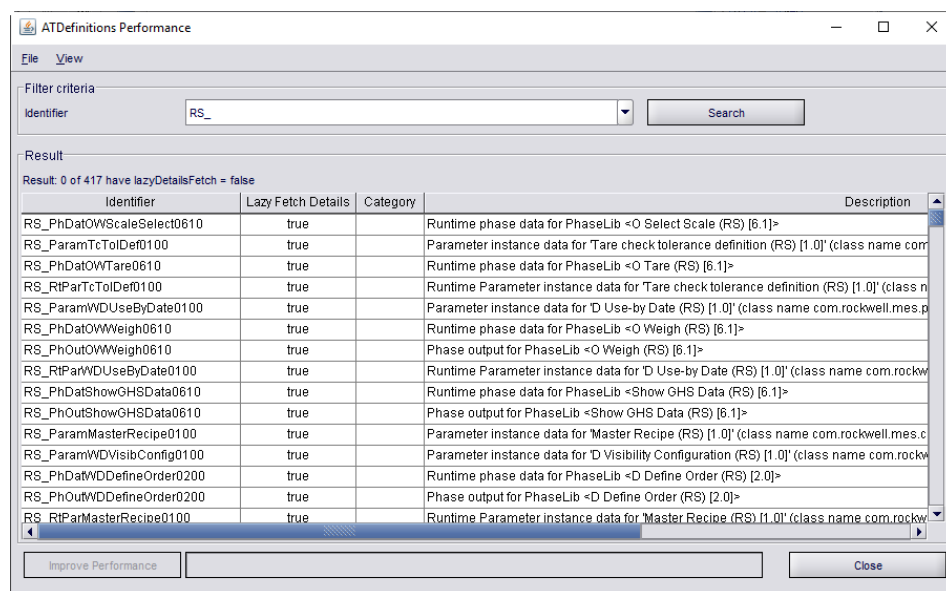


Figure 1: ATDefinitions Performance tool

2. In the **Identifier** box, type the filter criterion for the AT definition you wish to change.
 - With the **X_** prefix you can filter for all AT definitions of PharmaSuite core.
 - With the **RS_** prefix you can filter for all AT definitions of PharmaSuite phases and parameters.
 - With the **WH_** prefix you can filter for all AT definitions of Warehouse Management.
 - With the **RA_** prefix you can filter for all AT definitions of Modular Framework.
 - If you do not want to filter for prefixes, enter the percent character (%) as first character in the **Identifier** box.

3. Click the **Search** button to apply your filter.
If there are AT definitions whose *lazyFetchDetails* flag is set to **false**, the **Improve Performance** button is enabled.
4. Click the **Improve Performance** button to change the value of the *lazyFetchDetails* flag to **true** for these AT definitions.

Continue with checking for duplicate libraries (page 10).

Checking for Duplicate Libraries

TIP

When you install the very first phase building block, there are no duplicate libraries. In all other cases, duplicate libraries may exist.

The final step of the installation process is to check for duplicate libraries in different versions within Process Designer.

We highly recommend to perform this step to clean up your system installation.

- If the 1st (Major version) or 2nd (Minor version) digit of the version number of a JAR file available in Process Designer is increased, the libraries can exist in parallel (e.g. eqm-phase-shared-ai-1.0.0.9.jar and eqm-phase-shared-ai-1.1.0.9.jar).
This does not apply to files of the DCS Adapter. The old Library object must be deleted in any case. It will not be replaced by a new version, since the DCS Adapter has to be installed separately.
- If the 3rd (Maintenance release) or 4th (Build number) digit of the version number of a JAR file available in Process Designer is increased (e.g. eqm-phase-shared-ai-1.0.0.9.jar and eqm-phase-shared-ai-1.0.1.5.jar), you must delete the old Library object.

Which of the installed libraries are affected, depends on your installation. To retrieve the affected libraries, use the phase manager tool.

1. In Process Designer, run the **mes_PhaseLibManager** form to start the phase manager.
2. Navigate to the **Manage Basic Phases** tab.

3. Click the **Info (installed phases)** button to display detailed information about all installed basic phases and libraries. The system displays the following information:
 - In case there are no duplicate libraries installed:
No issues with duplicate libraries found.
 - In case there are duplicate libraries installed:
Potential duplicate library issues found for:
<Library name> with version: [<old version>], [<new version>]
 - The output always provides a list of all installed phase building blocks and libraries including their versions.

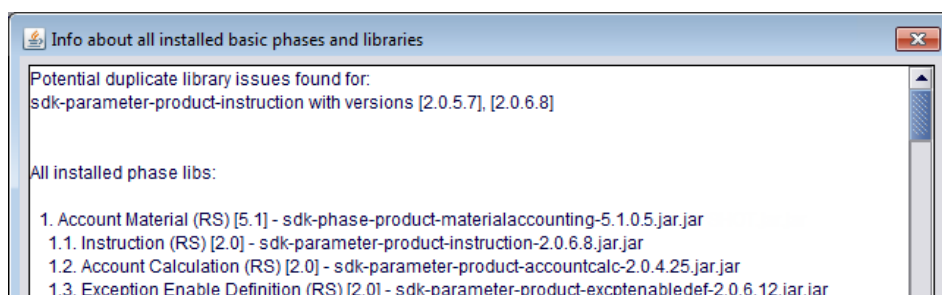


Figure 2: Example of a duplicate library

- If you wish to retain the information listed in the output, click the **Copy to clipboard** button to copy the information and then paste it into a system-external text editor.
4. Close the phase manager, then close the form.

TIP

The system update to PharmaSuite 10.02.00 has added updated Open Source libraries to your installation so that they now exist as duplicates in two versions. In Process Designer, in the **Libraries** node, delete the following obsolete Open Source libraries:

- fontbox-2.0.21.jar
- pdfbox-2.0.21.jar

Continue with installing MR+ revisions of phase building blocks (page 12).

Installing MR+ Revisions of Building Blocks

TIP

An MR+ revision of a building block is an Extended Maintenance Release of a building block. For a detailed definition, see "PharmaSuite Building Blocks - Compatibility Matrix" of the PharmaSuite installation documentation (page [21](#)).

MR+ revisions may require an update of phase-specific DSX files (e.g. report designs, message packs).

The following phase building blocks are affected:

Equipment Tracking package - Phase building block	DSX object
Change equipment status	Report (page 14)
Identify equipment	Report (page 14), Message (page 20)
Trigger graph transition	Report (page 14)
Unbid equipment	Report (page 14)

Equipment Automation package - Phase building block	DSX object
Get alarms	Report (page 14)
Get OPC values	Report (page 14)
Monitor numeric value	Report (page 14)
Show Historical Data Chart	Report (page 14)

EBR Package - Phase building block	DSX object
Show URL	Library (page 18)
Upload image	Library (page 18)
Upload PDF	Library (page 18)

IPC Package - Phase building block	DSX object
Get values	Message (page 20)

Dispense package - Phase building block	DSX object
---	------------

Dispense package - Phase building block	DSX object
D Define order	Report (page 14)
D Identify material	Report (page 14)
D Release scale	Report (page 14)
D Select scale	Report (page 14)
D Tare	Report (page 14)
D Weigh	Report (page 14)
Get Weigh	Report (page 14)
Load Logistic Unit	Data Dictionary (page 19)
O Identify container	Report (page 14)
O Manage produced material	Report (page 14)
O Release scale	Report (page 14)
O Select scale	Report (page 14)
O Tare	Report (page 14)
O Weigh	Report (page 14)
Show GHS data	Report (page 14)

DCS package - Phase building block	DSX object
Send Event	Report (page 14)
Set Order Context	Report (page 14)
Show Consumed Material	Report (page 14)
Show Produced Material	Report (page 14)
Wait for Event	Report (page 14)
Wait for Event (OES)	Report (page 14)

UPDATING PHASE-SPECIFIC REPORT DESIGNS

This task is only relevant for a **migrated** PharmaSuite 10.02.00 system if the following phase building blocks were already installed along with the update of the source PharmaSuite system, since the building block installers contain updated phase-specific report designs.

- Equipment Tracking package
 - Change equipment status 1.0 MR5
 - Identify equipment 2.1 MR1
 - Trigger graph transition 2.0 MR2
 - Unbind equipment 2.0 MR2
- Equipment Automation package
 - Get alarms 1.0 MR5
 - Get OPC values 1.0 MR5
 - Monitor numeric value 1.0 MR5
 - Show Historical Data Chart 1.0 MR7
- Dispense package
 - D Define order 2.0 MR3
 - D Identify material 6.1 MR2
 - D Release scale 6.1 MR2
 - D Select scale 6.1 MR2
 - D Tare 6.1 MR2
 - D Weigh 6.1 MR2
 - Get Weigh 6.1 MR2
 - O Identify container 6.1 MR2
 - O Manage produced material 6.1 MR2
 - O Release scale 6.1 MR2
 - O Select scale 6.1 MR2
 - O Tare 6.1 MR2
 - O Weigh 6.1 MR2
 - Show GHS data 6.1 MR2
- DCS package
 - Send event 2.0 MR2
 - Set Order Context 1.0 MR1
 - Show Consumed Material 1.0 MR3
 - Show Produced Material 1.0 MR2
 - Wait for Event 2.0 MR2
 - Wait for Event (OES) 2.0 MR2

If the phase-specific report designs are installed into a **new** PharmaSuite 10.02.00 system, no additional installation steps are required.

If previous (MR) versions of the phases were already installed in the source system of a **migrated** PharmaSuite 10.02.00 system, the building block installer does not update the available report designs. To install the new report designs, perform the following steps:

1. In Process Designer, expand the **Report Designs** node. Check out the
 - Change equipment status:
PS-BatchReport-PhaseEqChangeStatus_0100.1.xml
 - Identify equipment: **PS-BatchReport-PhaseEqIdentification_0210.1.xml**
 - D Define order: **PS-BatchReport-PhaseWDDefineOrderRS_0200.1.xml**
 - D Identify material: **PS-BatchReport-PhaseWDMatIdentRS_0610.1.xml**
 - D Release scale: **PS-BatchReport-PhaseWDReleaseScaleRS_0610.1.xml**
 - D Select scale: **PS-BatchReport-PhaseWDScaleSelectRS_0610.1.xml**
 - D Tare: **PS-BatchReport-PhaseWDTareRS_0610.1.xml**
 - D Weigh: **PS-BatchReport-PhaseWDWeighRS_0610.1.xml**
 - Get alarms: **PS-BatchReport-PhaseEqAIGetAlarms_0100.1.xml**
 - Get OPC values:
PS-BatchReport-PhaseEqAIGetOPCValuesEmbedded_0100.1.xml,
PS-BatchReport-PhaseEqAIGetOPCValues_0100.1.xml
 - Get Weigh: **PS-BatchReport-PhaseGetWeightRS_0610.1.xml**
 - Monitor numeric value:
PS-BatchReport-PhaseEqAIMonNumeric_0100.1.xml
 - O Identify container: **PS-BatchReport-PhaseOWIdentContRS_0610.1.xml**
 - O Manage produced material:
PS-BatchReport-PhaseOWManProdMatContRS_0610.1.xml
 - O Release scale: **PS-BatchReport-PhaseOWReleaseScaleRS_0610.1.xml**
 - O Select scale: **PS-BatchReport-PhaseOWScaleSelectRS_0610.1.xml**
 - O Tare: **PS-BatchReport-PhaseOWTareRS_0610.1.xml**
 - O Weigh: **PS-BatchReport-PhaseOWWeighRS_0610.1.xml**
 - Send event: **PS-BatchReport-PhaseSendEvent_0200.1.xml**
 - Set Order Context: **PS-BatchReport-PhaseSetOrderContext_0100.1.xml**
 - Show Consumed Material:
PS-BatchReport-PhaseShowConsumedMaterialSubreport_0100.1.xml
 - Show GHS data: **PS-BatchReport-PhaseGHSDDataRS_0610.1.xml**

- Show Historical Data Chart:
PS-BatchReport-PhaseShowHistoricalDataChart_0100.1.xml,
PS-BatchReport-PhaseShowHistoricalDataChartPlot_0100.1.xml
- Show Produced Material:
PS-BatchReport-PhaseShowProducedMaterialSubreport_0100.1.xml
- Trigger graph transition:
PS-BatchReport-PhaseEqTriggerGraphTransition_0200.1.xml
- Unbind equipment: **PS-BatchReport-PhaseEqUnbind_0200.1.xml**
- Wait for Event: **PS-BatchReport-PhaseWaitForEvent_0200.1.xml**
- Wait for Event (OES):
PS-BatchReport-PhaseWaitForEventInOES_0200.1.xml

report design. For each report design, right-click the report design, select **Access Control** <report design> and **Check out**.

2. From the **File** menu, select **Import**.
 For each phase, navigate to its building block installer DSX file and select the corresponding report design for the import. Make sure that there are no other objects selected. Select **Show Log** to display the **Import Summary** when the import is completed. Double-check that only the report design has been updated.
3. Again, expand the **Report Designs** node. Perform the check-in on the
 - Change equipment status:
PS-BatchReport-PhaseEqChangeStatus_0100.1.xml
 - Identify equipment: **PS-BatchReport-PhaseEqIdentification_0210.1.xml**
 - D Define order: **PS-BatchReport-PhaseWDDefineOrderRS_0200.1.xml**
 - D Identify material: **PS-BatchReport-PhaseWDMatIdentRS_0610.1.xml**
 - D Release scale: **PS-BatchReport-PhaseWDReleaseScaleRS_0610.1.xml**
 - D Select scale: **PS-BatchReport-PhaseWDScaleSelectRS_0610.1.xml**
 - D Tare: **PS-BatchReport-PhaseWDTareRS_0610.1.xml**
 - D Weigh: **PS-BatchReport-PhaseWDWeighRS_0610.1.xml**
 - Get alarms: **PS-BatchReport-PhaseEqAIGetAlarms_0100.1.xml**
 - Get OPC values:
PS-BatchReport-PhaseEqAIGetOPCValuesEmbedded_0100.1.xml,
PS-BatchReport-PhaseEqAIGetOPCValues_0100.1.xml
 - Get Weigh: **PS-BatchReport-PhaseGetWeightRS_0610.1.xml**
 - Monitor numeric value:
PS-BatchReport-PhaseEqAIMonNumeric_0100.1.xml

- O Identify container: **PS-BatchReport-PhaseOWIdentContRS_0610.1.xml**
- O Manage produced material:
PS-BatchReport-PhaseOWManProdMatContRS_0610.1.xml
- O Release scale: **PS-BatchReport-PhaseOWReleaseScaleRS_0610.1.xml**
- O Select scale: **PS-BatchReport-PhaseOWScaleSelectRS_0610.1.xml**
- O Tare: **PS-BatchReport-PhaseOWTareRS_0610.1.xml**
- O Weigh: **PS-BatchReport-PhaseOWWeighRS_0610.1.xml**
- Send event: **PS-BatchReport-PhaseSendEvent_0200.1.xml**
- Set Order Context: **PS-BatchReport-PhaseSetOrderContext_0100.1.xml**
- Show Consumed Material:
PS-BatchReport-PhaseShowConsumedMaterialSubreport_0100.1.xml
- Show GHS data: **PS-BatchReport-PhaseGHSDDataRS_0610.1.xml**
- Show Historical Data Chart:
PS-BatchReport-PhaseShowHistoricalDataChart_0100.1.xml,
PS-BatchReport-PhaseShowHistoricalDataChartPlot_0100.1.xml
- Show Produced Material:
PS-BatchReport-PhaseShowProducedMaterialSubreport_0100.1.xml
- Trigger graph transition:
PS-BatchReport-PhaseEqTriggerGraphTransition_0200.1.xml
- Unbind equipment: **PS-BatchReport-PhaseEqUnbind_0200.1.xml**
- Wait for Event: **PS-BatchReport-PhaseWaitForEvent_0200.1.xml**
- Wait for Event (OES):
PS-BatchReport-PhaseWaitForEventInOES_0200.1.xml

report designs. For each report design, right-click the report design, select **Access Control <report design>** and **Check in**.

4. Expand the **Forms** node and run the **mes_PS-BatchReportManager** form to start the batch report manager.
Re-compile the updated report designs. The re-compile process must not lead to a compilation error.
5. Close the batch report manager, then close the form.
6. Close Process Designer.

UPDATING PHASE-SPECIFIC LIBRARIES

This task is only relevant for a **migrated** PharmaSuite 10.02.00 system if the following phase building blocks were already installed along with the update of the source PharmaSuite system, since the building block installers contain updated phase-specific libraries.

- EBR package
Show URL 1.0 MR5
Upload Image 1.0 MR9
Upload PDF 1.0 MR10

If the phase-specific libraries are installed into a **new** PharmaSuite 10.02.00 system, no additional installation steps are required.

If previous (MR) versions of the phases were already installed in the source system of a **migrated** PharmaSuite 10.02.00 system, the building block installer does not update the available libraries. To install the new libraries, perform the following steps:

1. In Process Designer, expand the Libraries node.
2. Locate and delete the following old libraries. Make sure that there are no other objects selected.
 - pdfbox-X.jar
if the version number X is not 2.0.24
 - fontbox-X.jar
if the version number X is not 2.0.24
 - From the **File** menu, select **Import**.

TIP

Make sure you have really deleted the obsolete libraries before importing.

Only for the **Upload PDF** phase, navigate to its building block installer DSX file and select the following libraries for importing:

- pdfbox-2.0.24.jar
- fontbox-2.0.24.jar

Make sure that there are no other objects selected. Select **Show Log** to display the **Import Summary** when the import is completed. Double-check that only the selected libraries have been updated.

3. Again, expand the **Libraries** node and check the new imported versions.
4. Close Process Designer.

UPDATING PHASE-SPECIFIC DATA DICTIONARY CLASSES

This task is only relevant for a **migrated** PharmaSuite 10.02.00 system if the following phase building blocks were already installed along with the update of the source PharmaSuite system, since the building block installers contain updated phase-specific data dictionary classes.

- Dispense package
Load Logistic Unit 6.1 MR2

If the phase-specific data dictionary classes are installed into a **new** PharmaSuite 10.02.00 system, no additional installation steps are required.

If previous (MR) versions of the phases were already installed in the source system of a **migrated** PharmaSuite 10.02.00 system, the building block installer does not update the available data dictionary classes. To install the new data dictionary classes, perform the following steps:

1. In Process Designer, run the **mes_DataDictManagerForm** form to start the **Data Dictionary Management** tool.
2. Navigate to the **Class management** tab.
In the **Data Dictionary Classes** panel, in the **Class-related actions** panel, select the **RtPhaseTableRowModelSublotGrid0600** DD class
(com.rockwell.mes.phase.product.loadlogisticunit.RtPhaseTableRowModelSublotGrid0600).
3. Click the **Load** button. If version control is enabled, click the **Check out** button.
4. Reload the class with the **Create / Reload** button.
5. If version control is enabled, click the **Check in** button.
6. Close the **Data Dictionary Management** tool, then close the form.
7. Close Process Designer.

UPDATING PHASE-SPECIFIC MESSAGE PACKS

This task is only relevant for a **migrated** PharmaSuite 10.02.00 system if the following phase building blocks were already installed along with the update of the source PharmaSuite system, since the building block installers contain updated phase-specific message packs.

- Equipment Tracking package
Identify equipment 2.1 MR1
- IPC package
Get values 2.1 MR2

If the phase-specific message packs are installed into a **new** PharmaSuite 10.02.00 system, no additional steps are required.

If previous (MR) versions of the phase was already installed in the source system of a **migrated** PharmaSuite 10.02.00 system, the building block installer does not update the available message packs. To install the new message packs, perform the following steps:

1. In Process Designer, from the **File** menu, select **Import**.
For each phase, navigate to its building block installer DSX file and select the message packs for the import
 - Identify equipment: **PhaseEqmEqIdentification0210**
 - IPC package: **PhaseGetValues0210**

Make sure that there are no other objects selected. Select **Show Log** to display the **Import Summary** when the import is completed. Double-check that only the message packs have been updated.

2. Close Process Designer.

Reference Documents

The PharmaSuite documentation is available from the Rockwell Automation Download Site.

TIP

To access the Rockwell Automation Download Site, you need to acquire a user account from Rockwell Automation Sales or Support.

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- FT PharmaSuite® - Technical Manual Installation - Building Blocks
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Revision History

The following tables describe the history of this document.

Changes related to the document:

Object	Description	Document
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Changes related to "Introduction" (page [1](#)):

Object	Description	Document
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Changes related to "Installing a PharmaSuite Building Block" (page [3](#)):

Object	Description	Document
Checking for Duplicate Libraries (page 10)	Versions of duplicate external libraries updated fontbox-2.0.21.jar, pdfbox-2.0.21.jar	1.0
Installing MR+ Revisions of Building Blocks (page 12)	Updated: "Equipment Tracking package - Phase building block" table with: Identify equipment Change equipment status Unbind equipment Trigger graph transition Updated "Equipment automation package - phase building block" table with: Monitor numeric value Get alarms Get OPC values Updated EBR package - Phase building block table with: Upload Image Upload PDF Show URL Updated IPC package - Phase building block table with: Get values Updated "Dispense package - Phase building block" table	1.0

Object	Description	Document
	with: D weigh Get weigh Show GHS data D Identify material D Select scale D Release scale O Identify container O Manage produced material O Release scale O Select scale O Tare O Weigh D Tare D Define order Updated "DCS package- Phase Building Block" table with: Send Event Show Consumed Material Wait for Event Wait for Event (OES) Set Order Context Show Produced Material	
Updating Phase-specific Report Designs (page 14)	Updated: Equipment Tracking package Equipment Automation package Dispense package	1.0
Updating Phase-specific Libraries (page 18)	Updated: EBR package	1.0
Updating Phase-specific Message Packs (page 20)	Updated: Equipment Tracking package	1.0

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