

SAP PRESS

SAP
for Utilities

SAP Audit Management

SAP

Product Compliance for Discrete Industries

POWERED BY SAP HANA

SAP S/4 HANA

**A Business and Technical
Roadmap to Deploying SAP**

Copyright(c) 2018 by Nixon Vunganai.

All rights reserved.

Neither this document nor any part of it may be copied or reproduced in any form or by any means or translated into another language, without the prior consent of Nixon Vunganai. The information contained in this document is subject to change without notice.

WHATSAPP +255738656506

INTRODUCTION	7
---------------------	----------

PRODUCT SAFETY AND STEWARDSHIP	8
---------------------------------------	----------

PRODUCT COMPLIANCE FOR DISCRETE INDUSTRIES	8
---	----------

FOUNDATION FOR PRODUCT COMPLIANCE	9
GENERAL CONFIGURATION	10
SPECIFY GENERAL SETTINGS	11
SPECIFY NUMBER RANGE INTERVALS FOR FOUNDATION	11
SPECIFY ACTIVE LANGUAGES	12
SPECIFY FIELD CONTROL	13
CREATE REGULATORY LISTS AND CUSTOMER LISTS	14
SPECIFY DOCUMENT STORAGE	15
BASIC SETTINGS	16
SPECIFY RFC DESTINATION FOR SYSTEM CALLBACK	16
MAINTAIN ARCHIVE RETRIEVAL SETTINGS FOR WORKFLOWS	17
PERFORM AUTOMATIC WORKFLOW CUSTOMIZING PROCESSES	17
PROCESSES	18
SPECIFY PROCESS DEFINITIONS	18
ACTIVATE LINKAGE FOR SCHEDULED PROCESSES	20
SPECIFY TEMPLATES FOR TASK NOTIFICATION	20
BADI: CREATE AND INITIALIZE PCBOs	21
CHECKS AND TOOLS	22
CHECK CONFIGURATION OF WORKFLOW SYSTEM	22
LIST CONFIGURED PROCESSES	23
EXTEND AND ADAPT PROCESSES	23
PRINT FORMS AND INTERACTIVE FORMS	25
SPECIFY FORMS	25
SPECIFY FORM GROUPS AND ASSIGN FORMS	1
DEFINE INBOUND PROCESSING FOR E-MAILS	2
INCIDENT MANAGEMENT	3
HEALTH AND SAFETY MANAGEMENT	3
INTEGRATION	4
SPECIFY DESTINATIONS FOR INTEGRATION	4
ACCESS TO DATA AVAILABLE VIA A REMOTE SYSTEM	4
ACCESS TO DATA AVAILABLE VIA THE LOCAL SYSTEM ONLY	4
FILE-BASED REPORTING	6
CONFIGURE GENERAL SETTINGS	6
SPECIFY FILE FORMATS	7
SPECIFY DATA SELECTIONS	7
SPECIFY EXPORT PROFILES	8
BUSINESS ADD-INS FOR FILE-BASED REPORTING	9
BADI: GENERATE EXPORT FILES	9
GENERAL CONFIGURATION	11
SPECIFY NUMBER RANGE INTERVALS FOR PRODUCT COMPLIANCE	11
SPECIFY OBJECT LIST GROUPS	12
SPECIFY AND SCHEDULE JOBS FOR ALL PROCESSES	13

VERIFY UNIT OF MEASURE FOR PRODUCT COMPLIANCE	13
ENVIRONMENT PARAMETERS	15
SPECIFY ENVIRONMENT PARAMETERS FOR BACK-END PROCESSES	15
CREATE PHRASE SETS AND CHARACTERISTIC ASSIGNMENTS	16
MAP PHRASES TO TECHNICAL PHRASE KEYS	16
SPECIFY PHRASE LIBRARIES AND PHRASE GROUPS	17
DATA EXCHANGE	18
MAINTAIN ATTACHMENT TYPE SCHEMA	18
SPECIFY OUTGOING AND INCOMING TEMPLATES	19
SPECIFY INCOMING TEMPLATES	19
SPECIFY OUTGOING TEMPLATES	20
SPECIFY TEMPLATE GROUPS FOR CAMPAIGNS	21
SPECIFY CAMPAIGN AND E-MAIL CONFIGURATION	21
DEFINE INBOUND PROCESSING FOR E-MAILS	22
SPECIFY DATA ORIGIN	24
SPECIFY LOGICAL FILE NAMES AND FILE PATHS	24
ADDITIONAL DEFINITIONS	26
SPECIFY DOCUMENT GROUPS AND ASSIGN DOCUMENTS	26
SPECIFY PDM SYSTEMS	26
BUSINESS ADD-INS (BADIs)	27
BADI: REQUEST AND E-MAIL GENERATION	27
BADI: SUPPORTED FILE FORMATS FOR IMPORT	28
BADI: VALIDATION FOR IMPORT	29
AUTOMATED CHANGE PROCESSING	30
SCHEDULE JOBS FOR AUTOMATED CHANGE PROCESSING	30
BUSINESS ADD-INS (BADIs)	31
BADI: COLLECTING RELEVANT CHANGES FROM SPECIFICATION	31
BADI: COLLECTING RELEVANT CHANGES FROM BUSINESS OBJECTS	32
BADI: DETERMINATION AND EXECUTING OF WORKLIST ENTRIES	33
PRODUCT AND SPECIFICATION DATABASE	34
ADOPT SPECIFICATION DATABASE STRUCTURE FOR PRODUCT COMPLIANCE	34
CHECK IDENTIFICATION LISTING	36
SUBSTITUTE PROPERTIES AND CHARACTERISTICS	37
SPECIFY NORMALIZATION VARIANTS	38
SPECIFY COMPOSITION GROUPS AND PRODUCT VARIANTS	39
SPECIFY REFERENCE VALUES FOR THE COMPOSITION	41
CHECK THE EXAMPLES AND CHANGE AS REQUIRED.	41
SAVE ADDITIONAL DATA IN THE SPECIFICATION DATABASE	41
SPECIFICATION MANAGEMENT	42
SPECIFY SPECIFICATION TYPES	42
SPECIFY VALUE ASSIGNMENT TYPES	43
SET UP PROPERTY TREES	45
SPECIFY USER-DEFINED TEXT TYPES	45
SPECIFY VALIDITY AREA CATEGORIES	46
SPECIFY COMPLIANCE VIEWS AND NORMALIZATIONS	50
ASSIGN MATERIAL CATEGORY TO COMPLIANCE DATA	52
DEFINE TEMPLATES FOR THE COMPLIANCE OBJECT	53
DEFINE RULES FOR RELEASE RELEVANT LEVELS	54

[WHATSAPP +255738656506](https://www.whatsapp.com/business/collections/whatsapp-number/+255738656506)

SPECIFY TOLERANCE VALUES FOR WEIGHTS	55
BADI: AUTO RELEASE OF COMPLIANCE REQUIREMENT REVISION	56
REGULATIONS AND COMPLIANCE REQUIREMENTS	57
CHECK LIST FOR A REGULATORY LIST CONFIGURATION	57
SCHEDULE JOBS FOR REGULATORY LIST REVISION	58
SPECIFY REGULATORY LISTS AND CUSTOMER LISTS	59
ENHANCE WORKLIST FOR REGULATORY LIST REVISIONS	60
MANAGE USER EXITS	60
SPECIFY CHECKS FOR COMPLIANCE REQUIREMENT AND CHECK CRITERIA	61
SPECIFY CLASSIFICATIONS	63
EXPORT AND IMPORT OF REGULATORY LIST REVISIONS	64
BADI: PRIORITIES IN WORKLIST FOR REGULATORY LIST REVISIONS	66
ADAPT WORKFLOWS FOR PRODUCT COMPLIANCE	67
SCHEDULE JOBS FOR SUPPLY CHAIN COLLABORATION PROCESS	68
CONFIGURE PROCESS DEFINITIONS	69
ASSIGN DEFAULT ROLES TO WORKFLOW TASKS	69
INTEGRATION	70
LOGISTIC INTEGRATION	70
BILL OF MATERIAL TRANSFER	70
PREREQUISITES FOR BILL OF MATERIAL TRANSFER	70
DEFINE PROCESSING OF BILL OF MATERIAL CHANGES	71
SPECIFY ENVIRONMENT PARAMETERS	72
SPECIFY SELECTION CRITERIA FOR BILL OF MATERIAL TRANSFER	74
BADI: COMPLIANCE REQUEST CREATION	75
DOCUMENT MANAGEMENT	76
DEFINE PROCESSING OF COMPONENT DOCUMENT CHANGES	76
INTEGRATE COMPLIANCE INFORMATION INTO DOCUMENT MANAGEMENT	77
CHECK DOCUMENT TYPES AND DOCUMENT STATUS	79
BADI: COMPLIANCE REQUEST CREATION	80
SUPPLIER AND PURCHASING	81
SUPPLIER/MANUFACTURER MATERIAL INFORMATION	81
SCHEDULE JOB FOR CHANGES IN SUPPLIER AND MANUFACTURER MATERIAL INFORMATION	81
BADI: ACCESS TO CUSTOMER AND SUPPLIER MATERIAL DATA	82
SUPPLIER/MANUFACTURER AND CONTACTS	82
DEFINE CONTACT PERSON FUNCTIONS	82
SPECIFY DETERMINATION FOR BUSINESS PARTNERS AND CONTACTS	83
BUSINESS ADD-INS (BADIs)	83
BADI: FUNCTIONS TO HANDLE BUSINESS PARTNER CONTACTS	83
BADI: DECOUPLING OF VENDOR MASTER	85
INTEGRATE COMPLIANCE INFORMATION INTO PURCHASE ORDER	86
CUSTOMER AND SALES	90
CUSTOMER MATERIAL INFORMATION	90
BADI: ACCESS TO CUSTOMER AND SUPPLIER MATERIAL DATA	90
CUSTOMER AND CONTACTS	91
DEFINE CONTACT PERSON FUNCTIONS	91
SPECIFY DETERMINATION FOR BUSINESS PARTNERS AND CONTACTS	91
BADI: FUNCTIONS TO HANDLE BUSINESS PARTNER CONTACTS	92
INTEGRATE COMPLIANCE INFORMATION INTO SALES ORDERS	94
BADI: INTEGRATION OF COMPLIANCE CHECKS INTO SALES ORDER	96

MATERIAL MASTER INTEGRATE COMPLIANCE INFO AND BASIC MATERIALS INTO MATERIAL	96
SAP PRODUCT STEWARDSHIP NETWORK	98
SPECIFY SAP PRODUCT STEWARDSHIP NETWORK INTEGRATION	98
SCHEDULE JOB FOR INITIAL SYNCHRONIZATION AND RE-SYNCHRON.	100
SCHEDULE JOB FOR PROCESSING CHANGE EVENTS	101
BUSINESS ADD-INS (BADIs) FOR NETWORK INTEGRATION	102
BADi: AUTOMATIC RELEASE OF IMPORTED DECLARATION DATA	102
BADi: SUPPLY CHAIN ON-DEMAND INTEGRATION	103
PRODUCT LIFECYCLE MANAGEMENT INTEGRATION	104
INTEGRATE COMPLIANCE INFORMATION INTO CAD ENVIRONMENT	104
IMDS COMPLIANCE	105
INSTALL IMDS BATCH CLIENT	105
SET UP DIRECTORY STRUCTURE FOR IMDS	108
SPECIFY IMDS SYSTEM	109
VERIFY IMDS DEFAULT CUSTOMIZING	110
SET UP SYSTEM WITH IMDS ALL FILES	110
SET UP DAILY SYNCHRONIZATION WITH IMDS	113
SPECIFY MDS IMPORT RESTRICTIONS	116
SPECIFY IMDS MATERIAL DATA SHEET VARIABLES	117
SPECIFY MATERIAL CLASSIFICATION CHECK	118
COMPONENT SETTINGS	120
SPECIFY COMPONENT TYPES FOR COMPOSITIONS	120
SPECIFY CONTEXT-SPECIFIC COMPONENT TYPES	120
SPECIFY EXCEPTION VALUES FOR A COMPONENT	121
SPECIFY CONTEXT-SPECIFIC EXCEPTION VALUES	121
INDUSTRY-SPECIFIC SETTINGS	122
SPECIFY BASIC MATERIAL INDUSTRY STANDARDS	122
BADi: SUPPLIER IMDS COMMUNICATION	123
BADi: CUSTOMER IMDS COMMUNICATION	124
BADi: POST ACTIVITIES FOR CUSTOMER IMDS COMMUNICATION	125
BADi: SUPPLIER REQUEST PROCESSING	127
BADi: CUSTOMER REQUEST PROCESSING	129

INTRODUCTION

Welcome to the fascinating world of SAP. This book helps you crack the tricks of mastering SAP HANA Customization

Product Safety and Stewardship

Product Compliance for Discrete Industries

WHATSAPP [+255738656506](https://wa.me/255738656506)

Foundation for Product Compliance

General Configuration

WHATSAPP [+255738656506](https://wa.me/255738656506)

Specify General Settings

Use

In this Customizing activity, you can configure the following general systems settings:

- Default Language Key
By setting the default language, you determine the language for entering texts as well as the default target language for translating texts. If texts do not exist in the language selected at logon, they will be displayed in this language.
- Currency
Currencies are defined according to the international ISO standard.

Standard settings

The standard system is delivered with examples.

Activities

1. Check the existing examples and adapt them as required.
2. If necessary, define additional entries.
A unique key must be assigned to each entry.

Specify Number Range Intervals for Foundation

Use

In this Customizing activity, you can specify number range intervals for foundation objects. A unique number is assigned to each record. The appropriate number range object determines the number automatically.

You can specify number range intervals for the following number range objects:

- EHFNDACTID - Action ID
- EHFNDATMID - Action Template ID
- EHFNDCHMID - Chemical ID
- EHFNDCTRID - Control ID
- EHFNDLSUID - Listed Substance ID
- EHFNDLCNID - Location ID
- EHFNDPSEID - Process Setup ID
- EHFNDRPTID - Report ID
- EHFND DYNPH - Dynamic Phrase ID
- EHFNDSPLM - Sampling Method ID
- EHFNDSAMPL - Sample ID

- EHFNDSPNG - Sampling ID

For more information about other number range objects, see:

- For *Environment, Health, and Safety*:
- Specify Number Range Intervals for Incidents
- Specify Number Range Intervals for Health and Safety Management - For *Product*

Compliance for Discrete Industries:

- Specify Number Range Intervals for Product Compliance

Standard settings

The standard system is delivered with number range objects. Each number range object includes an internal interval.

You can change the standard internal interval *IE*, for example, if you want to use a different number range. If you do not have the standard internal interval in your system client, you must create your own internal interval (*IE*).

Note: The standard internal interval for listed substances (EHFNDLSUID) is *01*.

In the standard delivery, the number range interval for the chemical ID starts at 100000. We recommend disjunct number ranges for the chemical and agent number range objects (used in health and safety management).

Activities

If you want to make changes to the standard internal interval of a number range object or if you need to create your own internal interval, perform the following steps:

1. Specify a number range object and choose *Number ranges*.
2. Choose the pushbutton to enter edit mode for the intervals of the number range object.
3. Adapt the limits of the standard internal interval (number range number *IE*) as required, or create an internal interval. Since the standard system uses only the internal interval, leave the checkbox for indicating external number ranges empty.

Note

If you have already created data records in the system, we recommend avoiding changes to the corresponding number range object. Changes to a number range object can lead to inconsistent data.

Specify Active Languages

Use

WHATSAPP +255738656506

In this Customizing activity, you can specify the available target languages for translating free text fields and statements.

If you want to translate a free text or a statement in the application, you can select the languages specified here.

Standard settings

The standard system is delivered with examples.

Activities

1. Check the existing examples and adapt them as required.
2. If necessary, define additional entries.
A unique key must be assigned to each entry.

Specify Field Control

Use

In this Customizing activity, you can specify field control for business objects in components *Environment, Health, and Safety* and *Product Safety and Stewardship*.

You can use field control to adapt the user interface to specific conditions of a data record. You specify these conditions and how the system adapts the UI on the node level of a business object. You can, for example, set up field control to make specific fields visible and editable on the user interface depending on the country or region of the data record. Field control is possible on all nodes of a business object and for all properties of the node. You can also specify more than one profile to accommodate each relevant set of conditions of a data record.

Note: The following business objects are not using this customizing activity for field control, but have a specific logic implemented in a property determination. To adapt the behavior of these business objects, enhance the business object with a custom property determination:

EHPRC_COMPLIANCE_DATA (Property determination class:
CL_EHPRC_COD_SET_PROPERTIES)

Prerequisites

You are familiar with the modeling and structure of the business objects of *Environment, Health, and Safety* and *Product Safety and Stewardship* in the Business Object Processing Framework (BOPF).

You are familiar with the legal reporting requirements of your country or region and the data that is required to be compliant.

Standard settings

The standard system is delivered with examples.

Activities

1. Check the existing examples and adapt them as required.
2. If necessary, define additional entries.

To create new field control profiles, perform the following steps:

1. Specify the business object for which you want to use field control.
2. Specify the node of the business object for which you want to create a profile.
3. Make the settings for the profile. You can decide when field control applies at the node level based on the settings you make for the following fields:
 - Authorization-Based Profile
 - Authorization Check Result
 - Function Class
 - Node Attribute Value(The system determines if field control applies in the order of the just mentioned fields.) If you create more than one profile for a node, you can make settings for the merge strategy for each profile.
4. After creating the profile, you can define the property settings for the business object node in the subdialogs. These property settings control the behavior and appearance of the user interface. In this step, you can also specify how to propagate the settings to subnodes.

Example

You use *Environment, Health, and Safety* to record incidents that occur in the United States and are subject to OSHA requirements. There are certain injury/illnesses that are handled as privacy cases in the United States. In this case, you can use field control to display the *Privacy Case* and *Additional Criteria* radio buttons when you record data about injuries/illnesses that occurred in the United States. Otherwise, these fields are not displayed.

Create Regulatory Lists and Customer Lists

Use

In this Customizing activity, you can create regulatory lists or customer lists, and assign them to the country or region where they apply. Regulatory lists provide information about substances that are subject to legal or industry-specific regulation. If your organization uses its own lists, for example, if your organization places additional restrictions on usage of a substance, you can also create customer lists here.

Standard settings

The standard system is delivered with examples.

Note that you must specify these regulatory lists further for use in the components *Environment, Health, and Safety* and *Product Safety and Stewardship*. For more information, see the following Customizing activities:

WHATSAPP +255738656506

- For *Environment, Health, and Safety*:
- Specify Regulatory Lists for OELs
- Specify Lists for Restricted Substances Check
- For *Product Safety and Stewardship*
- Specify Regulatory Lists and Customer Lists

Activities

1. Check the existing examples and adapt them as required.
2. If necessary, define additional entries.
A unique key must be assigned to each entry. The key must be unique to the other regulatory lists and customer lists in this activity and to the regulations in Customizing activity Create Regulations.
3. Assign the regulatory list to the country or region where the regulatory list applies. In health and safety management, if you want to analyze exposure to chemicals by comparing actual amounts of a chemical (a risk) to its OEL, the country or region of the risk's location must match the country or region of the regulatory list.

Specify Document Storage

Use

In this activity, you can learn about setting up attachment types and assigning these to attachment schemas. An attachment schema may be assigned for a given business object (BO) node that uses the dependent object attachment folder.

Environment, Health, and Safety uses the Content Management Service to store documents, for example, attachments and generated PDF reports.

The connection to the Content Management Service is specified and implemented by the attachment folder (ATF) of the business object (a reusable object for the BOPF environment in the SAP_BS_FND software layer).

Standard settings

The standard system is delivered with the following:

- Settings that use the content repository BS_ATF_DB_REPOSITORY and the content category BS_ATF_DB to store documents in the database.
- An alternative configuration to connect to a separate file server. To achieve this, the attachment schema needs to be assigned to the content category BS_ATF. This content category uses the content repository BS_ATF_CONTENT_SERVER.
- Customizing settings for attachments, for example, for when you attach a document to a business object delivered with *Environment, Health, and Safety*.

Activities

1. Ensure that the settings for the Content Management Service are correct in Customizing for *SAP NetWeaver* under *Knowledge Management -> Settings in the Knowledge Warehouse System -> Content Management Service*.
2. Ensure that the settings for the attachment schema are correct for the *Environment, Health, and Safety* business objects in Customizing under *Cross-Application Components* in activity *Maintain Attachment Type Schema*.
If you want to attach additional file types, you must add the corresponding MIME types manually. For example, if the standard settings only allow you to attach PDF files for a given business object, you can add a MIME type that allows you to attach a Microsoft Word file (MIME Type: *application/msword*). If you want to create your own attachment schema, you must assign it to the respective BO node.

Process Foundation

Basic Settings

Specify RFC Destination for System Callback

Use

In this Customizing activity, you can define an RFC destination for system callbacks. This RFC destination is used for launching applications and dialog boxes (such as task management) from e-mails and from transactions such as *SAP Business Workplace*.

In addition, this destination is used to open the same set of applications from transactions such as *SAP Business Workplace*.

If you do not define an RFC destination, the system does not know whether you want to open an application in the NetWeaver Business Client or in the Enterprise Portal.

Activities

- Execute the activity and click on the folder *HTTP Connections to ABAP System*.
- Create a new connection by choosing the *Create* button in the toolbar.
- Enter *SAP_EH_FW_WFF_REPORT_TARGET* as connection name and enter a description.
- Enter the URL of the back-end system into the field *Target Host*.
- Enter the HTTP port of the application into the field *Service No.*.
- Enter the following data in the field *Path Prefix*:
 - */nwbc/<NWBC>*, if you want to use the NetWeaver Business Client.
 - */irj/portal<PORT>*, if you want to use the Enterprise Portal.
- Save your new created destination.

Note: The connection test does not work due to the braced statements <NWBC> or <PORT> in the path prefix setting. These placeholders will be replaced by the correct parameters at runtime.

Maintain Archive Retrieval Settings for Workflows

Use

In this Customizing activity, you can define settings for retrieving archived workflows. To read archived workflows, the system must be configured to index these workflows.

Requirements

You have completed the automatic workflow customizing in transaction SWU3.

Activities

To define the workflow retrieval settings:

1. Open transaction SARI or execute this Customizing activity.
2. Choose the *Customizing* button.
3. Create a new entry and provide the following information:
 - Infostructure: WORKITEM
 - Archiving Object: WORKITEM
 - Field Catalog: SAP_O2WI_001 or SAP_BO2WI_001
4. Include all the available fields in your infostructure and save your entries.
5. Return to the entry screen and activate your infostructure.

A database table is created automatically. This database table is used by transaction SARA and also the task management functionality in *Environment, Health, and Safety* and *Product Safety and Stewardship* to retrieve information about archived workflows.

Perform Automatic Workflow Customizing

Use

In this Customizing activity, you can perform automatic customizing for workflows. The activity is mandatory if you use the processes of the components *Environment, Health, and Safety* and *Product Safety and Stewardship*. If you do not perform this activity, the process foundation cannot support your business processes.

Activities

Select the top node of the first section and choose the *Perform Automatic Workflow Customizing* button or F9. Perform this step for all subsequent sections.

To run *Environment, Health, and Safety* or *Product Compliance for Discrete Industries*, ensure that the following settings were made: - *Maintain Runtime Environment*: all settings -

Maintain Definition Environment:

- *Check Number Ranges*
- *Maintain Additional Settings and Services*:
- *Maintain Standard Domain for Internet Mail*
- *Activate Send to Objects and HR Objects*
- *Maintain Demo and Verification Environment - Classify Tasks as General*: all

settings - *Guided Procedures*:

- *Maintain Generation of Standard Tasks*
- *Classify Generic Standard Tasks as General*

When you choose to perform automatic workflow customizing, only those activities that currently have the error status are executed automatically. If an activity still has the error status after performing automatic workflow customizing, you may need to make additional settings, and perform automatic workflow customizing again or manually perform customizing.

Processes

Specify Process Definitions

Use

In this Customizing activity, you can specify the process definitions for processes handled by the process foundation. You can also exclude existing processes from process monitoring and process analysis.

You can use the process definition to specify the workflows that are available where and when you want them in the application. You can also create a variant of a standard workflow to accommodate variations of the process. Be aware that the UI refers to *Tasks* for simplicity, but tasks are part of processes. For example, when a user creates a task in the application, the system creates a process instance in the back-end system.

A process definition consists of the following information:

- Component
- Purpose
- Variant
- PCO class

Requirements

You have set up the workflow system in the one of the following Customizing activities:

[WHATSAPP +255738656506](https://www.whatsapp.com/business/calling?phone_number=255738656506)

- For *Environment, Health, and Safety*: Perform Automatic Workflow Customizing
- For *Product Safety and Stewardship*: Perform Automatic Workflow Customizing

If you want to extend your processes with additional functionalities in the *SAP Business Workflow*, you have implemented a customer-specific PCO class to handle the process. For more information about extending or changing the PCO class, see one of the following Customizing activities:

- For *Environment, Health, and Safety*: Extend and Adapt Process
- For *Product Safety and Stewardship*: Extend and Adapt Process

Standard settings

The standard system is delivered with examples.

You can use the standard process definitions and their corresponding workflows to support your business processes. If you want to adapt the processes or the workflows, you can change the process definitions to incorporate the adaptations. We recommend that a system administrator or a person with the necessary experience in adapting workflows and developing classes is involved in making the settings in this Customizing activity.

Activities

1. Check the existing examples and adapt them as required.
2. If necessary, define additional entries.
A unique key must be assigned to each entry.
3. If necessary, select the *Exclude* checkbox to exclude a process from process monitoring and analysis.

Example

The standard system is delivered with a process definition for the offline investigation step. The elements of this process definition are explained in the following text:

- Component: Health and Safety
The applications in the health and safety component, such as incident management or health and safety management, can use this process definition.
- Purpose: INC_INVESTIGATION_STEP
The process definition supports the processing of a step in the incident investigation.
- Process Variant: OFFLINE
The process definition is available in an offline situation. In the offline variant, the system sends an inquiry form via e-mail. The recipient can fill the form out offline and send it back.
- PCO Class Name: CL_EHHSS_PCO_INC_INQUIRY
This PCO contains the logic for creating an inquiry form, sending the form as an e-mail to the person responsible for the investigation step, and handling the form once it is returned to the system.

Activate Linkage for Scheduled Processes

Use

In this Customizing activity, you can activate the event type linkage to link the event creator and the event receiver for scheduled processes.

When you schedule an action or notification in the application, you can schedule the task, for example, to recur every week for a year. In the system, the task is part of a process that must be scheduled and triggered again to occur the following week. By activating the event type linkage, you allow a central user with batch administration authorizations (WF-BATCH) to schedule and trigger the corresponding process for the task.

You must activate the linkage, so that the central user (event receiver) can schedule and trigger the processes for the user (event creator) that created and scheduled the action or notification originally.

Standard settings

The standard system is delivered with the event type linkage deactivated.

Activities

For the following object, activate the event type linkage:

Object Category:	ABAP Class
Object Type:	CL_EHFND_SCHEDULER_REPLANNER
Event:	TRIGGER_REPLANNING

Specify Templates for Task Notification

Use

In this Customizing activity, you can configure templates for notifications that you send manually from task management. You can specify the text source (a standard task from SAP Business Workflow) and assign templates to processes. If you assign a template to a specific process, the template is only available when you send notifications related to that process. Unassigned templates are available for notifying processors of any task.

You can use templates to standardize notification texts and reduce the effort involved in notifying task processors. Within these templates, it is possible to include variables from the workflow, work item container, and from the process control object (PCO). It is recommended to use the same (or extended) PCO class for the template as for the process itself. This enables you to include the variables that are needed for the process.

Requirements

- You have experience using SAP Business Workflow.
- You have specified process definitions in Specify Process Definitions, and are familiar with their corresponding workflows in Workflow Builder. Note that the PCO class is the link between a process and a workflow.
- You have created or edited standard tasks in transaction PFTC_INS or PFTC_CHG, respectively.

Standard settings

The standard system is delivered with examples.

Activities

1. Check the existing examples and adapt them as required.
2. If necessary, define additional entries.
A unique key must be assigned to each entry.

Example

You want to notify a processor to remind him or her about a reporting task. In Customizing, you have specified the two following templates:

- Report Verification - The template uses a standard task that requires the processor to verify that a report is relevant for legal authorities.
- Report Generation - The templates uses a standard task that requires the processor to generate a legal report manually.

You have assigned the templates to the process for reporting, and selected the report verification template as the default.

In the application, you select a reporting task and choose the *Notify Processor* pushbutton. The system opens a notification screen and fills the text fields with the report verification template's text.

BAdI: Create and Initialize PCBOs

Use

This Business Add-In (BAdI) is used in the components *Environment, Health, and Safety* and *Product Safety and Stewardship*. You can use this BAdI to implement customer-specific logic to adapt the processes in the system. You can use this BAdI, for example, if your organization must comply with regulatory requirements in more than one country or region. You can create a variation of the process for a specific country or region.

The PCBO creation BAdI is called each time the system creates a process control business object (PCBO).

Requirements

You have made settings in the following Customizing activities:

- For *Environment, Health, and Safety*:
- Specify Process Definitions
- List Configured Processes - For *Product Safety and Stewardship*: -
- Specify Process Definitions
- List Configured Processes

You have performed a consistency check without errors in the Customizing activity

Standard settings

This BAdI does not have a default implementation.

Checks and Tools

Check Configuration of Workflow System

Use

In this Customizing activity, you can perform several checks on the workflow system that is used in the process foundation.

Upon executing the activity, the checks are run and the result is displayed.

If the checks are successful, the system is set up correctly and you can execute the processes in the components *Environment, Health, and Safety* and *Product Safety and Stewardship*.

Requirements

You have performed the following Customizing activities:

For *Environment, Health, and Safety*:

- Perform Automatic Workflow Customizing
- Specify Process Definitions

For *Product Safety and Stewardship*

- Perform Automatic Workflow Customizing
- Specify Process Definitions

List Configured Processes

Use

In this Customizing activity, you can display a list of the process definitions in the *Environment, Health, and Safety* component. From this list, you can view the status, the instances, and the technical information of process definitions. This helps you ensure that the process definitions are configured correctly.

Requirements

You have specified process definitions in the Customizing activity Specify Process Definition for *Foundation for EHS*.

Standard settings

The system displays the configured processes automatically using the report R_EHFND_WFF_PROCDEF_LIST.

Activities

Choose the *Status* traffic light icon to display details about the status of the configured process definition. The system displays the results of the process definition check in the report R_EHFND_WFF_PROCDEF_CHECK.

Choose the *List* icon to display a list of the instances of the specified process in the report R_EHFND_WFF_PROCESS_LIST.

Choose the *Info* icon to display technical information about the selected process in the report R_EHFND_WFF_PROCDEF_INFO.

Extend and Adapt Processes

Use

In this activity, you can learn about how to extend and adapt the process foundation in the components *Environment, Health, and Safety* and *Product Safety and Stewardship* to suit your customer-specific business processes. You can make the following changes:

- Adapt existing processes
- Add data fields to the PCBO
 - Add new variants of a process definition
- Change the BAdI implementation for PCBOs
- Extend or change the PCO class for a process

Activities

To extend and adapt processes in the following ways, perform the activities described below:

Adapt Existing Processes

1. Create a copy of the workflow template in the *Workflow Builder* that you want to modify.
2. Make the desired changes in the copied template.
Note that if you add customer-specific dialog steps and these step appear in the user's inbox, you must configure the corresponding tasks in the workflow inbox. Changes to workflow templates can also affect how tasks are displayed in the system. For more information, see *Note* below.
3. Activate the event binding for the CREATE event of the corresponding PCO class.
4. Disable the event linkage for the old workflow template to prevent creating two workflow instances when the event occurs.

Add Data Fields to a PCBO

You can add customer-specific data fields to a process control business object (PCBO) by modifying the extension structure in transaction *SE11*.

Add New Variants of a Process Definition

You can create customer-specific variants of processes by adding a new definition with your own variant name.

For more information, see the following Customizing activities:

- For *Environment, Health, and Safety*: Specify Process Definitions
- For *Product Safety and Stewardship*: Specify Process Definitions

Change the BAdI implementation for PCBOs

To change the implementation of the BAdI for the creation of the PCBOs, you can do one of the following:

- Extend the default implementation CL_EHFND_WFF_DEF_PCBO_CREATION and add the required methods or overwrite existing ones.
Implement the IF_EHFND_WFF_PCBO_CREATION interface.

After you have implemented the class, configure it in the BAdI.

For more information about implementing the BAdI, see the following Customizing activities:

- For *Environment, Health, and Safety*:
BAdI: Create and Initialize PCBOs (PCBOs) - For *Product Safety and Stewardship*:
BAdI: Create and Initialize PCBOs (PCBOs)

Extend or Change the PCO Class for a Process

If you want to implement a customer-specific PCO, you can do one of the following:

- Inherit and then modify the class of an existing purpose and variant that is delivered in the standard system (recommended).

- Create an own implementation of a PCO class by implementing the interface IF_EHFND_WFF_PCO, or by extending the abstract base class for the PCO class CL_EHFND_WFF_ROOT_PCO.

After you create the PCO class, enter it in the Customizing activity *Specify Process Definition* for the relevant process definition.

Note

If you create a new version of a workflow template, any tasks already performed based on the previous version of the template can still be displayed during a search on the *Tasks* menu or in analytical dashboards. However, if you create a new template, any tasks created with the previous template are no longer displayed in the system.

Environment, Health, and Safety and *Product Safety and Stewardship* use the POWL-based inbox. If you adapt processes and the corresponding workflow templates, you must configure the tasks in the workflow inbox in Customizing for *Cross-Application Components* under *Processes and Tools for Enterprise Applications* -> *Inbox*.

See also the corresponding process component to obtain the correct application ID and POWL type for the workflow inbox.

Print Forms and Interactive Forms

Specify Forms

Use

In this Customizing activity, you can specify the following:

SAP Interactive Forms by Adobe

Forms contain data for a business object. You can use forms, for example, in legal and internal reporting or as inquiry questionnaires.

In this Customizing activity, you can specify and configure forms to integrate them into the application. You can also assign the languages in which the forms are available. Each form can exist in multiple languages. The available languages are determined dynamically at runtime. If you need the form in an additional language, you can translate it using transaction *SFP* and choosing *Goto -> Translation*. Furthermore, you can specify one language as a fallback language. If the requested language is not available, the system uses the fallback language.

If you use the form to collect user input (such as an inquiry), the form contains a pre-defined e-mail address that should receive the content, once the form is filled out and sent back by the user. In this Customizing activity, a system administrator can define the e-mail address that is included in the form.

If you use a form that includes scripts, you have to assign it to the form category *Dynamic Questionnaire*. Otherwise, the scripts will not be processed.

- **Custom document types**

Document types provide means for classification of documents.

In this Customizing activity, you can specify custom document types that you can integrate into the application. You can use the document types to group and classify attached documents. Additionally, the document type enables you to control the access to the corresponding documents. You can grant or revoke access to specific groups of documents depending on their type.

For example, in incident management you can classify the documents that you attach to the incident record of an injured person. Documents of type *Medical Document* can potentially contain private information that must not be displayed publicly. Thus, by manipulating the security settings of the document type (using the corresponding authorization profiles) you can grant access to medical documents to particular users only.

To specify a custom document type, you can create an entry in the table and set the *Unknown Document* form type to it.

Requirements

The configured classes (*Form Controller*, *Data Provider* and, if relevant, the *Inbound Persister*) must be available and active. Furthermore, the *Form Object* (*Form Repository Object* of transaction *SFP*) must be active and the corresponding interface structure must be the same as the one that is returned by the *GET_DATA* method of the *Data Provider*.

If the form requires a response e-mail address, you have defined the address in the Customizing activity *Define Inbound Processing for E-Mail* (under *Incident Management -> Print Forms and Interactive Forms* and under *Health and Safety Management -> Print Forms and Interactive Forms*). When you configure the e-mail, you specify the class (exit handler) that processes the data that is returned in the form for this e-mail address.

Standard settings

The standard system is delivered with examples.

Note that the German accident notification form (*BG_UNF_BER*) is available in German only. You must be logged on in German to use the form.

Activities

1. Check the existing examples and adapt them as required.
2. If necessary, define additional entries.
A unique key must be assigned to each entry.
3. If the form is a questionnaire and you would like to store the data within an inquiry process, define the *Inbound Persister*.
4. If the form contains a *Send* pushbutton (such as a questionnaire), enter a response e-mail address that receives the returned form.
5. If required, set the form popup name.
6. If a dialog for accepting the data exists, you can also add the *Configuration for Accepting Data* to use a specified Web Dynpro configuration ID.

Example

The following example describes the definition of an SAP Interactive Form by Adobe.

- Form name: INC_INFO_WITNESS
- Description: Incident Information Questionnaire for a Witness
- Form type: SAP Interactive Form
- Form category: Questionnaire
- Form creation controller: CL_EHFND_FW_ADS_FORM_CR_CTRL
Specifies a class that enables you to create, manipulate and store SAP Interactive Forms by Adobe.
- Data provider: CL_EHHSS_AIF_INC_WITN_Q_DPROV
A data provider is used to extract persistent data and to create the interface structure for the form.
- Name of form object: EHHSS_INC_AIF_INC_WITN
Specifies the name of the form object that is used as a template for the offline form that is configured in this activity. You create the form object in transaction SFP.

The following example describes the definition of a custom document type.

- Form name: MEDICAL
- Description: Medical Document
- Form type: Unknown Document (cannot be created)
- Form category: <empty>
- Form creation controller: <empty>
- Data provider: <empty>
- Name of form object: <empty>

Specify Form Groups and Assign Forms

Use

In this Customizing activity, you can define into which groups you want to subdivide forms and assign each form group to a component.

In a second step, you assign forms to the defined form groups. In the incident recording, these form groups allow an easier selection of the required form. For example, if you want to send an inquiry, you can select only a form of the inquiry form group instead of all available forms in the system.

One form group can contain multiple forms. For an automatic selection, you can define one form of a group as a default form.

Requirements

In Customizing, you have defined the available forms.

- For *Environment, Health, and Safety* under Specify Forms
- For *Product Compliance for Discrete Industries* under Specify Forms

Standard settings

The standard system is delivered with examples.

Activities

1. Define a logical name and a description for the form group.
2. Assign a component for the form group.
3. Select a form group and choose *Assign Forms to Form Group*.
4. Assign the forms and select a default form, if necessary.

Define Inbound Processing for E-Mails

An e-mail inbound process is often required in the components *Environment, Health, and Safety* and *Product Safety and Stewardship*. For example, the recipient of an inquiry completes a form and sends it back to a defined e-mail address. When the e-mail is received in the system, the system calls an exit handler (functional class) that automatically reads the attached form, and then sends the information to the corresponding workflow. The system attaches the returned form to the relevant workflow and the business process continues.

In this Customizing activity, a system administrator can define an e-mail address that should receive the relevant form and then binds an exit handler to that e-mail address. Thus, the system administrator defines how the system processes such inbound e-mails.

Requirements

You have configured the inbound e-mail address for each form in the one of the following Customizing activities:

- For *Environment, Health, and Safety*: Specify Forms
- For *Product Safety and Stewardship*: Specify Forms
- Your company's e-mail system is set up in such a way that it forwards the e-mail to the components *Environment, Health, and Safety* and *Product Safety and Stewardship* based on the e-mail address that is configured for the form.
- You have assigned the e-mail recipient PFCG role to the user that processes incoming e-mails (default user is SAPCONNECT). This role contains the authorization profiles needed to receive

and process e-mails. You can find the user ID that is assigned as the user for processing incoming e-mails in the *SMTP Host* node in transaction *SICF*. E-mail recipient PFCG role for incident management: `SAP_EHSM_HSS_EML_REC` E-mail recipient PFCG role for health and safety management:

`SAP_EHSM_HSS_EML_REC`

Standard settings

There is a default exit handler that logs the e-mails that are received using the SAP Application Log. You can use transaction *SLG1* to view the log.

Incident Management

- Exit handler: `CL_EHHSS_INC_INB_PROC_BCS`
- Object: `EHHSS_BO_INC`
- Subobject: `EHHSS_AIF_INC_INBD`

Health and Safety Management

- Exit handler
- General: `CL_EHHSS_RAS_INB_PROC_BCS`
- Control Inspections: `CL_EHHSS_CINSP_INB_PROC_BCS`
- Object: `EHHSS_BO_RAS`
- Subobject: `EHHSS_AIF_RAS_INBD`

Activities

In this Customizing activity, you specify the following parameters:

- Communication Type: Internet Mail
- Recipient Address: Specify the e-mail address that you configured for the corresponding form in *Specify Forms*. If you use an asterisk (*) as the value, this inbound handler is called for each e-mail address. However, it is recommended that you use the e-mail address that you configured.
- Document Class: *
- Exit Name
- Incident Management: `CL_EHHSS_INC_INB_PROC_BCS`
- Health and Safety Management: `CL_EHHSS_RAS_INB_PROC_BCS` (general),
`CL_EHHSS_CINSP_INB_PROC_BCS` (control inspections)

If you want to change how the e-mail exit handler behaves, you can create your own implementation that inherits from the default class.

To do this:

1. Go to transaction `SE24`.

2. Create a new class that inherits from:
 - CL_EHHSS_INC_INB_PROC_BCS for incident management
 - CL_EHHSS_RAS_INB_PROC_BCS for health and safety management
 - CL_EHHSS_CINSP_INB_PROC_BCS for control inspections in health and safety management
3. Modify the HANDLE_FORMS method.

Integration

Specify Destinations for Integration

Use

In this Customizing activity, you can specify destinations for integrating other SAP components into the *Environment, Health, and Safety* component or into the *Product Compliance for Discrete Industries* component. You can access the data in those components directly on your local system or using an RFC connection to a remote system. Some data is available only on the local system.

Access to Data Available via a Remote System

If you want to use data that is stored in a remote system, you can specify the RFC destinations individually in this activity.

You can integrate the following components:

- *Business Partner*
- *Human Resource Management*
- *Plant Maintenance*
- *Extended Warehouse Management*
- *Inventory Management*
- *Accounting*
- *SAP EHS Management* as part of *SAP ERP*
- *SAP Management of Change*

Note: For *Product Compliance for Discrete Industries* it is sufficient to use only the available data via your local system.

Access to Data Available via the Local System Only

The system cannot read some data via remote access, such as data from Customizing, data from the *Materials Management (MM)* component, and specific data from components that you may have already integrated. You can access this data via the local system only. For more information about the data that you cannot access via remote access, see *Notes* below.

Requirements

You have defined RFC connections of connection type **3** (ABAP connection). To check and define RFC connections, on the *SAP Easy Access* screen, choose *Tools -> Administration -> Administration -> Network -> RFC Destinations* or open transaction SM59. You can specify a customer-specific name for the RFC destination.

Note: To maintain RFC connections, you require authorization object S_RFC_ADM and permissions for activities 01, 02, 03, and 06 (insert, modify, show, and delete). The user that needs to be able to read RFC connections at runtime, requires permissions for activity 03 (show).

You have ensured the following:

- You are using R/3 Enterprise 40 Extension Set 20 (Basis 620) or higher for the remote system of all other systems.

Standard settings

The standard system is delivered without RFC destinations. You can access data from the local system only.

Activities

To access data from a remote system, perform the following steps:

1. Choose the remote system for the destination type.
2. Enter an existing RFC destination (connection type 3) for the specified remote system. Note: The remote system for PM assets, PM notifications, and PM orders is always the same system.

If it is necessary to improve performance when integrating to a remote PM system, you can create customer-specific indices on the remote PM system. The following are example indices that you can create:

- Table EQUI: Create an extension index with fields EQUNR and EQART.
- Table IFLOT: Create an extension index with fields TPLNR and EQART.
- Table ILOA: Create an extension index with fields ILOAN and SWERK.

Notes

You must access certain data directly on a local system. To make this data available on the local system, you can distribute it, for example, using an Application Link Enabling (ALE) or by replicating data from Customizing. The following is a list of the data required on the local system and the table or object where it is located:

Data Required in Local System for Environment, Health, and Safety Processes

Table/Object

Business partner roles	Tables TB003, TB003T
Plants and plant descriptions	
Material and material description	Material number and material description from the material master
Currencies and exchange rates	
Notification types for PM	Table TQ80
Attendance and absence types	Table T554S and T554T
Marital status texts for HR persons	Table T502T
Marital status texts for business partners	Table TB027T
Attendance and absence types	

Shift group and shift planning of the organizational unit Info type 1039 and tables T77DB, T77DT, T77ED, T77ET

Organizational data, including organizational units and persons in PA-OS Table T554S

Positions in PA-OS Table HRP1000

Note that to make organizational data from PA-OS available in the local system, you can distribute the relevant HR master data between the PA-OS system and the *Environment, Health, and Safety* system. However, since the EHS applications only require specific PA-OS data, a distribution limited to the basic info types is sufficient. The distributed organizational data cannot be changed from the EHS applications as the system settings only allow read access.

The assignment of a user to employee (info type 0105) for workflows must be done in the HR system. The users must be maintained in the local system.

<u>Data Required in Local System for Product Compliance Processes</u>	<u>Table/Object</u>
Business partner roles	Tables TB003, TB003T
Plants and plant descriptions	Table T001W
Material and material description the material master	Material number and material description from material master
Suppliers and contact person details Services	Table KNVK and tables in Business Address
Purchase Info Records	Table EINA with referenced foreign tables
Approved manufacturer part list	Table AMPL
Source list	Table EORD
Bill of material TCGBA with referenced foreign tables	Tables MAST, STAS, STKO, STPO, STZU, and

File-Based Reporting

Configure General Settings

Use

In this Customizing activity, you can specify general settings for the file-based reporting.

You can define a limit for e-mail attachment size and the lifetime of reports for download in days for background generation of file-based reports.

Requirements

You have defined threshold for background exporting in the Customizing activity Define Export Profiles.

To use the download service for reports, you must activate the ICS service under `/sap/ehsm/file_download` in transaction SICF.

Standard settings

The standard system is delivered with examples. Default maximum e-mail size is one MB; default time until generated reports are deleted is five days.

Specify File Formats

Use

In this Customizing activity, you can specify the file formats, in which a report can be generated. The specified file formats are used in the Customizing activity Define Export Profiles to create export profiles for file-based reporting.

You can set the *Template* flag for each file format. This flag indicates that the file format supports template files.

Note: You can use the Customizing activity Define Export Profiles to upload a template file.

Requirements

For each specified file format, a BAdI implementation has to be available in the Customizing activity BAdI: Generate Export Files.

Standard settings

The standard system is delivered with examples.

Specify Data Selections

Use

In this Customizing activity, you can specify the data selections for file-based reporting.

The data selection is independent of any file format or export purpose and thus can be reused for different export profiles.

The business object nodes selected for a data selection specify a tree-like hierarchy. You have to select one lead business object whose topmost node, the ROOT node, represents the root of the hierarchy.

Based on the ROOT node of the lead business object, you can select associations with child nodes. For these child nodes, you can select associations with further child nodes. This first selected child node will become the parent node of further associated child nodes. This way, you can build up a node hierarchy.

For each associated node, you can select the fields from which you want to export data. The data extracted from these fields is combined in one data selection.

Note: To get a denormalized table in the generated report, only one node on each node level is allowed to have a 1:n child node.

Standard settings

The standard system is delivered with examples.

Activities

Check the existing examples and adapt them as required. If necessary, you can specify new data selections. Proceed as follows:

1. Enter a unique ID for the new data selection.
2. Enter a description for the new data selection.
Note: In the case of a Microsoft Excel 2007/2010 report, this description is used as the sheet name. In the case of a CSV report, this description acts as the CSV file name if more than one data selection is configured for one export profile.
3. Enter the lead business object for the data selection.
4. Flag whether you want to include admin fields in your report and save your entry.
5. Select the newly created data selection and specify the hierarchy of business objects nodes in the *Node Structure* view.
Note: By default, the root node of your lead business object is displayed in the first line. You can create the node hierarchy by selecting the accordant associations. Use the F4 help to get only the applicable associations.
6. For each line created in the Node Structure, select the *Node Fields* view to specify the single fields to be extracted for this node. Enter the field name and a description or use the F4 help to get all available fields for this node. You can enter a sort number to sort the columns according to your needs. Use the *Insert All Fields* view insert all the fields of the current node the table. You can remove or change the entries later. afterwards. **Note:** The field description is used as column header in thereport.

Specify Export Profiles

Use

In this Customizing activity, you can specify export profiles for file-based reporting.

Each export profile has a lead business object. This lead business object is used to select the data selections allowed for the export profile. Only data selections containing the same lead business object can be assigned to the export profile.

You can assign more than one data selection in one export profile. The assigned data selections specify the data to be extracted for the report.

In addition to the lead business object and the data selection, you have to specify the file format of the resulting file. If the file format XLSX (Microsoft Excel 2007/2010) is used, the export profile can contain an Excel template file that is used for the export. After the file upload, the name of the uploaded file is displayed as file name. This file name can be changed later.

Furthermore, you can enter a threshold for background exporting to configure whether a report is processed in foreground or in background.

Note: The EHFND_EXPP authorization object can be used to specify which user should be able to generate file-based reports based on the configured export profile.

Requirements

You have entered general settings in the Configure General Settings Customizing activity.

You have specified data selections in the Specify Data Selections Customizing activity.

You have specified file formats in the Specify File Formats Customizing activity.

Standard settings

The standard system is delivered without export profiles.

Activities

To use the functions of file-based reporting, you have to specify profiles. To create an export profile, proceed as follows:

1. Enter a unique ID for the new export profile.
2. Enter a description for the new export profile.
Note: This description is displayed in the export profile selection screen when you press the *Export* button on the UI.
3. Enter the lead business object.
4. Select a file format from the F4 help.
5. If you want to upload a template file, go to the detailed view and press the F4 help in the *Field Name* field. Note that the language of a template file has to match the system language when using file-based reporting.
6. You can enter a file name for the export file. If no file name is specified, the name of the export profile is used as the file name.
7. You can enter a threshold for background exporting.
8. You can decide if output conversions that are assigned to data elements of the fields contained in the export have to be executed or not. If you select the *Output Conversion* checkbox, codes stored in the database that reference entries in Customizing tables are automatically converted into the corresponding language-dependent texts.
9. Save your entries and select the newly created export profile. Go to the *Data Selections* view and use the F4 help to display all the data selections of the same lead business object that can be assigned in this export profile.
10. Enter data selections and save your entries.

Note: The adjustment of Customizing entries is not supported for this Customizing activity because it includes a file upload. If you need to set up Customizing in a different system or client, we recommend that you compare your Customizing entries, edit the entries manually, and then upload the required files again.

Alternatively, you can transport the entries via Customizing transport or use client copy (SCC1).

Business Add-Ins for File-Based Reporting

BAdI: Generate Export Files

Use

This Business Add-In (BAdI) is used in the components *Environment, Health, and Safety* and *Product Safety and Stewardship*. You can use this BAdI to export data from the application into different file formats.

Each BAdI implementation corresponds to one file format, given by the filter value of the BAdI.

The BAdI definition is called for one specific export profile.

You can assign one or more data selections to each export profile. The data from these data selections was exported in the selected file format and can be used for file-based reporting.

Requirements

You have made settings in the following Customizing activities:

- For *Environment, Health, and Safety*:
- Specify File Formats
- Define Data Selections
- Define Export Profiles
- For *Product Safety and Stewardship*:
- Specify File Formats
- Define Data Selections
- Define Export Profiles

Standard settings

The BAdI definition contains the following methods:

- INITIALIZE
This method is called once at the beginning of the export process. It initializes the file export.
- INITIALIZE_SECTION
This method is called once per data selection. It initializes a new data section within the export file.
- ADD_DATA_TO_SECTION
This method is called once for each data package that has been extracted. It adds the data package to the data section of the export file.
If necessary, this method converts the extracted data to a denormalized table before writing the data to the file.
- FINALIZE_SECTION
This method is called once per data selection after the last data package has been added to the data section of the export file. It finalizes the data section within the export file.
- FINALIZE
This method is called once at the end of the export process. It finalizes the export file.
- VALIDATE_TEMPLATE_FILE
This method is called in Customizing and during generation of the export file to check whether the uploaded template file is valid. The
- Customizing activity "Define Export Profiles" contains a check when saving the data which calls this method to ensure that no technical problem occurs during report generation based on the template file.

BAdI Implementations

- BADI_EHFND_EXP_CSV_GENERATOR
This implementation enables you to generate a CSV file with the extracted data.
If only one data selection is selected, the exported file is a CSV file.
If several data selections are selected, the exported file is a ZIP archive which includes one CSV file per data selection.
- BADI_EHFND_EXP_XSLX_GENERATOR

This implementation enables you to generate a Microsoft Excel 2007/2010 export file, with format XLSX, which contains the extracted data.

For each data selection, one sheet is created in the exported Excel file. **Note:** If you have entered an Excel file template in the export profile, this template is used for generating the export file.

Activities

If you want to generate files in further file formats, you have to create a BAdI implementation for the required file format, using the file format as filter setting.

General Configuration

Specify Number Range Intervals for Product Compliance

Use

A unique number is assigned to each record created in the component *Product Compliance for Discrete Industries*. The appropriate number range objects determine the number automatically.

In this Customizing activity, you can define number range intervals for the following number range objects that are used: **Product Compliance**

EHFNDLSUID	Listed Substance ID
EHPRCODID	Compliance Data ID

Product Safety

ESN_IMPEXP	Parameter transfer during import/export
ESN_PHRID	System-assigned phrase keys
ESN_RCNGRP	Unique key of a group management object
ESN_RECNUM	Assignment of record numbers
ESN_SESSID	Unique key for a session
ESN_SUBID	System-assigned specification keys

Document Management System

DOKUMENT	Number range of DMS documents
----------	-------------------------------

Classification System

SAP_CHARCR Compliance	Namespaces of classes for EHS and Product
SAP_CLASSR Compliance	Namespaces of classes for EHS and Product

Standard settings

No standard settings are shipped. Verify or create the number ranges and make sure that the number range intervals are defined as described:

Specify and Schedule Jobs for All Processes

Use

In this Customizing activity you can specify and schedule jobs for all processes.

The `R_EHPRC_RC1PHDEL` program removes deleted master data physically from the system. This program is an extended version of the `RC1PHDEL` program of PS&S (Product Safety) that meets the requirements for Product Compliance in Discrete Industries. Perform the activities.

Activities

Execute the following steps:

1. If you use Product Safety and you have scheduled a job for program `RC1PHDEL` to set the deletion indicator and to physically remove deleted data from the database, cancel this job.
2. Schedule a job for program `R_EHPRC_RC1PHDEL` instead.

For more information about the `R_EHPRC_RC1PHDEL` program, see the documentation for the report. Set Missing Deletion Indicator and Physically Delete Data.

Verify Unit of Measure for Product Compliance

Use

In this Customizing activity, you verify that the *unit of measurement* entries fulfill the needs of the component *Product Compliance for Discrete Industries*.

Check Customizing for Check Units of Measurement under SAP NetWeaver -> General settings.

Standard settings

The units of measure, listed below, describe the standard units that product compliance uses for standard data exchange formats.

UoM: These entries are internal units, you find them also in table T006.

Conversion: These entries you find on screens and they are converted into language depended size, but in the background, the internal UoMs are used.

UoM description: This description is language depended.

Note: Check in the general Customizing that all UoMs have the description in all needed languages. For this Customizing activity, we recommend to login in English and check the entries as follows:

<u>UoM</u>	<u>Conversion</u>	<u>UoM Description</u>
IN	"	Inch
IN2	"2	Square inch
IN3	"3	Cubic inch
%	%	Percentage

GC	°C	Degrees Celsius
CCM	CCM	Cubic centimeter
CM	CM	Centimeter
CM2	CM2	Square centimeter
FT	FT	Foot
FT2	FT2	Square foot
FT3	FT3	Cubic foot
G	G	Gram
GLL	GAL	US gallon
KG	KG	Kilogram
L	L	Liter
LB	LB	US pound
M	M	Meter
M2	M2	Square meter
M3	M3	Cubic meter
MG	MG	Milligram
MM	MM	Millimeter
MM2	MM2	Square millimeter
PPM	PPM	Parts per million
S	S	Second
ST	ST	items
TO	TO	Tonne
YD	YD	Yards
YD2	YD2	Square Yard
YD3	YD3	Cubic yard

Related Areas

Product Compliance also uses the defined units of measure for data exchange. The units of measure from imported data are mapped to units of measure of the ERP system. Similar to this, units of measure of the ERP system are mapped to units of measure for data export.

- Specify Incoming Templates, subtask *Unit Conversion*
- Specify Outgoing Templates, subtask *Specify Unit Conversion*

You find these activities in the Customizing for Product Compliance for Discrete Industries -> General Configuration ->Data Exchange.

Environment Parameters

Specify Environment Parameters for Back-End Processes

Use

In this Customizing activity, you can enter environment parameters to control back-end processes for managing *Product Compliance for Discrete Industries*.

Standard settings

The standard system is delivered with the following environment parameters:

- ADS_DESTINATION
- BASMAT_IS_HOMOGENEOUS_MAT
- COL_DISCLOSURE_LEVEL
- COL_EMAIL_FAILED_RECIPIENTS
- COL_EMAIL_REPLY_ADDRESS
- COL_EMAIL_REPLY_ADDRESS_CUS
- COL_NOTIFY_OVERDUE
- COMPANY_LOGO
- GEN_UNIT_PIECE_INTERNAL
- GEN_XML_SCHEMA_LOCATION
- IMDS_CHECK_COMPLETE
- IMDS_REG_LIST_IMDS_APPL
- IMDS_REG_LIST_REACH_SVHC
- IMDS_STREAMLINE_MATERIALS
- IMP_SAVE_WITH_HIERARCHY
- LEGAL_DECL_TYPE
- PDB_CALC_FILTER_BY_MATCAT
- PDB_CALC_WEIGHT_WITH_PACK
- PDB_CAS_NO_CONFIDENTIAL
- PDB_COMP_CALC_BASMAT_TOLERANCE
- PDB_COMP_CALC_PURE_TOLERANCE
- PDB_COMP_EXEPTION_RESIDUE
- PDB_COMP_TYPE_CONFIDENTIAL
- PDB_COMP_TYPE_IMPURITY
- PDB_MFR_ROLE_ACTIVE
- PDB_PURESUB_GENERIC_PERCENTAGE
- PRC_COMPANY_CODE

- PRC_PERSON_ID

Activities

1. Check the environment parameters and settings delivered in the standard system.
2. If necessary, change parameter values.

Phrases

Create Phrase Sets and Characteristic Assignments

Use

In this Customizing activity, you can create phrase sets, including language-dependent descriptions in English and German. A report creates missing phrase sets for phrase sets that are specified in system table EHPRCI_PHSET and are delivered as standard content. Existing phrase sets are not changed.

You can also check the assignment of phrase sets to characteristics in system table EHPRCI_PAWM, and you can make new assignments.

- If a specified assignment of a phrase set to a characteristic does not exist, the specified assignment is created.
- If an assignment already exists, but differs to the one specified in the system table, the system outputs a message only. The assignment is not changed.

After you execute this activity, the message log shows the following:

- All phrase sets that already exist and all new phrase sets that were created
- All assignments of a phrase set to a characteristic that already exist and all new assignments that were created
- All existing assignments of a phrase set to a characteristic that differ to the setting specified in the system table EHPRCI_PAWM

This activity allows you to perform a test run before you change the database. When you perform a test run, the message log shows the current status and the phrase sets and assignment of phrase sets to characteristics that the report would create.

Standard settings

The standard system is delivered with standard settings that you can use to create phrase sets and to check and create assignments of phrase sets to characteristics.

Map Phrases to Technical Phrase Keys

Use

In this Customizing activity, you can map phrases to technical phrase keys from the program logic in product compliance. This mapping is required if you want to replace standard phrases in phrase sets with customer-specific phrases.

Requirements

At least one phrase set in product compliance is customized.

Standard settings

This mapping table is empty in the standard system.

Activities

Create a new entry with the technical key and the phrase key of the customer-specific phrase. You must reset the cache for configuration and phrases to activate this change.

Example

You want to replace the default phrase *RCS_0000000001* with the customer-specific phrase *ZRCS_GLP_NO* in phrase set *SAP_RCS_GLP*. The technical key is: *RCS_0000000001*.

Based on this information, you must create the following new entry:

- Technical Key: *RCS_0000000001*
- Phrase Key: *ZRCS_GLP_NO*

Specify Phrase Libraries and Phrase Groups

Use

In this Customizing activity, you specify phrase libraries and phrase groups for product compliance processes.

Requirements

You have imported the CED and RCS phrase libraries. For more information, see also SAP Notes for the topic *PC: Phrases and Phrase Sets* for your product.

Standard settings

The standard system is delivered with examples.

Activities

Check the examples and change as required.

Activities

Check the standard settings and adapt, as necessary.

See also

For more information, see the documentation for the Specify Phrase Libraries and Phrase Groups Customizing activity under Basic, Data and Tools.

Data Exchange

Maintain Attachment Type Schema

Use

In this Customizing activity, you can learn about the topic "Attachment Type Schema" and the entries which are necessary for the product compliance topics.

Enter the data in Customizing activity Maintain Attachment Type Schema under *SAP Customizing Implementation Guide -> Cross-Application Components -> Processes and Tools for Enterprise Applications -> Reusable Objects and Functions for BOPF Environment -> Dependent Object Attachment Folder -> Maintain Attachment Type Schema.*

Requirements

You carefully read the Customizing activity document Specify Document Storage under *Product Safety and Stewardship -> Product Compliance for Discrete Industries -> Foundation for Product Compliance -> General Configuration.*

Standard settings

The system is delivered with the following product compliance default settings.

1. This *Attachment Type*

<u>Attachment Type</u>	<u>Description</u>
IBDOC	Inbound Document
OBDOC	Outbound Document

2. The corresponding *Attachment Schema*

<u>Category</u>	<u>Description</u>
BS_ATF_DB	Default Schema

3. The corresponding entries in the sub-activity *Assign Schema to BO Nodes*

<u>Business Object</u>	<u>Node</u>	<u>(Hint)</u>
EHPRC_COMPLIANCE_DATA	REQ_REVISION	(documents corresponding to one compliance requirement revision)
EHPRC_COMPLIANCE_DATA	ROOT	(documents corresponding to all compliance requirement revisions)

4. The corresponding *MIME Type depending on the BO and the Node*

<u>Node</u>	<u>MIME Type of a WEB Object</u>
REQ_REVISION	text/xml
REQ_REVISION	application/pdf
REQ_REVISION	application/msword
REQ_REVISION	application/vnd.ms-excel
REQ_REVISION	text/plain
REQ_REVISION	application/rtf
root	text/xml
root	application/pdf
root	application/msword
root	application/vnd.ms-excel

root	text/plain
root	application/rtf

Be aware

Due to security reasons, the user can use only these MIME types that are defined in the described Customizing activity.

Otherwise the system shows the message *Documents with Undetermined Import Type*

See also

For more information, see the documentation for the Customizing activity Maintain Attachment Type Schema.

Specify Outgoing and Incoming Templates

Use

In this Customizing activity, you can create incoming and outgoing templates. You can create new templates with descriptions and you can specify whether these templates are incoming or outgoing.

Standard settings

The system is delivered with default settings.

Activities

You can specify the attributes of incoming templates in Customizing for product compliance in the Customizing activity Specify Incoming Templates.

You can specify the attributes of outgoing templates in Customizing for product compliance in the Customizing activity Specify Outgoing Templates.

Specify Incoming Templates

Use

In this Customizing activity, you can specify the attributes of incoming templates.

Standard settings

The standard system is delivered with examples.

Activities

Check the standard settings and adapt them, if necessary.

If you want to use your own function modules, note that the following application flow is used for the import:

- Identification of the import type (using the first lines of the file)
- Preprocessing
- Processing
- Identification of objects within the import file (user exits), for example, identification of the following:
 - Business partner, supplier part, and listed substances in the case of an PRC XML import
 - Product, basic materials, and pure substances in the case of an IMDS Material Data Sheet import
- Mapping and saving
- Postprocessing
- Final processing
- Creation of application log entries
- Execution of checks

Specify Outgoing Templates

Use

In this Customizing activity, you can specify the templates that are used to collect data. Templates can be language-dependent and country-dependent. You can define different templates for your development, quality, and production systems.

As templates, you can use Interactive Forms or traditional documents from the document management system that are assigned to document IDs (transaction **EHPRC_RCST03**) to assign the document number. You can also use documents created using a generation variant and a raw report or ad hoc report.

Additionally, you can accept incomplete results from compliance checks. For more information, see [Accept Incomplete Data for Check Result](#).

For templates that are used in the customer MDS center, note the following:

- The report generation function specifies a function that generates the XML file that is uploaded to the International Material Data System (IMDS). You can specify a normalization variant instead of a generation variant. If the generation function permits, the specified normalization is used to create the product structure for the material data sheet.
- A standard function (*EHPRC_CP_IMDS_AI01_XML_GEN*) is delivered with the standard system. If you want to use another function instead, you must make sure that it has the same signature.
- You can define which compliance requirement check result is mandatory before a document can be exported. You can do so in the *Required Check Results* subview for an outgoing template. You can configure by compliance requirement whether warnings (*Warn.*) or errors (*Flg Error*) are accepted. This feature is currently only used for IMDS requirements (Base-Check and IMDS Check) and ensures that an IMDS material datasheet can be sent to IMDS.
- You can make use of mapping between internal (SAP) units of measure and external (ISO) units of measure. Unit conversion can be applied for the following templates:

- *PRC_XML*
- *IPC_XML*
- For the unit conversion if no mapping entry exists there is a fallback setting: the system exports either the configured ISO code or the internal Unit of Measure (UoM) if no ISO code exists.

Standard settings

The standard system is delivered with examples.

Specify Template Groups for Campaigns

Use

In this Customizing activity, you can define template groups.

Standard settings

The standard system is delivered with default settings.

Activities

Check the standard settings and change them, if necessary.

Note:

- If you delete a template group, you must also delete the assignment to the campaign and communication type.
- The customer MDS center uses a specific template group (IMDS). If you use the customer MDS center, you must make sure that a template group with this name exists. All outgoing templates in this group are available for outgoing material data sheets.

Specify Campaign and E-Mail Configuration

Use

In this Customizing activity, you can define the settings for campaign management, specifically e-mail texts, e-mail groups, campaign types, and e-mail communication.

Standard settings

The standard system is delivered with examples.

The following e-mails are provided as default for campaigns or e-mail configurations:

<u>E-mail No.</u>	<u>Description</u>
R02	Request product compliance data from suppliers

The following e-mails are required and permanently defined. They are used in specific functional parts and must be defined:

<u>E-Mail No.</u>	<u>Description</u>
P01	Send protocol of automated change processing to processor
P05	Send protocol of synchronization with SAP Prod. Stewardship Netw. to processor

Activities

Check the standard settings. You do not usually need to change the standard settings.

HINT: Please note that the used *Communication Definition IDs* from the standard settings will be referenced by the corresponding workflow template of the assigned process definition.

If you want to make new entries, do the following:

1. Define campaign types.
2. Assign partner roles to campaign types.
3. Define possible product levels for campaign types.
4. Define communication channels.
5. Assign phrase codes from the phrase catalog to the e-mail number.
6. Define one or more e-mails for e-mail groups.
7. Specify only one e-mail as the default e-mail for each group. The default e-mail is used when e-mails are sent by a background process.
8. To specify e-mail communication, assign a template group, an e-mail group, a document group and the process definition.
9. Define campaign type and communication channel for each communication definition to connect the campaign type to the e-mail, template, document and process definition.
10. Schedule jobs for sending e-mails and for campaigns. For more information, see *Scheduling Jobs for Sending E-Mails* and *Scheduling Jobs for Campaign Management*.

Example

You can use e-mails, for example, in campaigns to collect product compliance data from suppliers. During background processing, the system sends the specified default e-mail (based on the e-mail group) with the defined phrases for your campaign.

Define Inbound Processing for E-Mails

An e-mail inbound process is often required in the components *Environment, Health, and Safety* and *Product Safety and Stewardship*. For example, the recipient of an inquiry completes a form and sends it back to a defined e-mail address. When the e-mail is received in the system, the system calls an exit

handler (functional class) that automatically reads the attached form, and then sends the information to the corresponding workflow. The system attaches the returned form to the relevant workflow and the business process continues.

In this Customizing activity, a system administrator can define an e-mail address that should receive the relevant form and then binds an exit handler to that e-mail address. Thus, the system administrator defines how the system processes such inbound e-mails.

Requirements

You have configured the inbound e-mail address for each form in the one of the following Customizing activities:

- For *Environment, Health, and Safety*: Specify Forms
- For *Product Safety and Stewardship*: Specify Forms
- Your company's e-mail system is set up in such a way that it forwards the e-mail to the components *Environment, Health, and Safety* and *Product Safety and Stewardship* based on the e-mail address that is configured for the form.
- You have assigned the e-mail recipient PFCG role to the user that processes incoming e-mails (default user is SAPCONNECT). This role contains the authorization profiles needed to receive and process e-mails. You can find the user ID that is assigned as the user for processing incoming e-mails in the *SMTP Host* node in transaction SICF.

Standard settings

Standard settings are not delivered.

Activities

1. Enter the incoming e-mail address for supplier communication and the incoming e-mail address for customer communication. Each entry corresponds to a rule for processing all e-mails that are sent to one specific e-mail address. You must maintain at least two e-mail addresses.
2. Enter the following class **CL_EHPRC_SCC_INB_PROC** in the *Exit Name* field for each entry.
3. Enter a system user in the COL_EMAIL_FAILED_RECIPIENTS environment parameter in the Specify Environment Parameters for Back-End Processes Customizing activity. Any e-mails that the system cannot process are sent to this user. Note: E-mails are not stored in the Document Management System until after they are processed. To ensure that e-mails are not lost, this system user receives any e-mails that the system cannot process.

Example

Communication Type:	Internet Mail
Recipient Address:	srm@001.<system>.r3.sap-ag.de
Documentation Class:	*
Exit Name:	CL_EHPRC_SCC_INB_PROC
Call Sequence:	1

Specify Data Origin

Use

In this Customizing activity, you specify the data origin for product compliance processes. For more information, see Specify Data Origin.

Standard settings

The standard system is delivered with examples.

Activities

Check the examples and change as required.

Specify Logical File Names and File Paths

Use

In this Customizing activity, you maintain cross-client file names and paths for the Product Compliance processes. By defining the necessary logical file names, you can prevent potential directory traversal in Product Compliance. For security reasons, only files underneath the corresponding directories specified by the logical file names can be processed and imported into Product Compliance. The logical file names are used when importing data from application servers as, for example, in the IMDS processing.

Activities

1. Verify that the *EHPRC_HOME_PATH* logical file path is defined.
2. Make sure the *EHPRC_ARCHIVE_DIR*, *EHPRC_ERROR_DIR*, and *EHPRC_IMPORT_DIR* logical files are defined.
3. Create the download, archive, and error directories on the application server. We recommend that you use the following folder structure to import the IMDS All files
 - Download folder: \\Application_Server#\EHPRC_Files\Import\
 - Archive folder: \\Application_Server#\EHPRC_Files\Import\Archive\
 - Error folder: \\Application_Server#\EHPRC_Files\Import\Error\
4. If your SAP System consists of multiple App Servers, each server should use the same configuration of the respective shared directories.
5. Make sure that the corresponding physical directories exist on the application server.

Customizing Directories

To customize the directories, use the FILE transaction. If your ERP system consists of multiple application servers, make sure that the directory is a global directory that is reachable from each application server. As the length of the file path on the application

server is restricted, we recommend specifying a short root directory in the logical path EHPRC_HOME_PATH.

- a) Create the following logical path:
Logical File Path: EHPRC_HOME_PATH
Name: Product Compliance Home Path
Directory: Specify the root directory for Product Compliance on the Application Server
- b) Create the following logical file name definitions:

Logical file	Name	Physical FileData Format	Application Area	Logical Path
EHPRC_ARCHIVE_DIR EHPRC_HOME_PATH	Product Compliance Archive Directory			import\archive DIR
EHPRC_ERROR_DIR EHPRC_HOME_PATH	Product Compliance Error Directory			import\errorDIR
EHPRC_IMPORT_DIR EHPRC_HOME_PATH	Product Compliance Import Directory			import DIR

See also

For more information, see the documentation for the Customizing activity Cross-Client Maintenance of Filenames and Paths.

0 Define Workstation Application

Use

In this Customizing activity, you define workstation applications for the product compliance processes. For more information, see Define Workstation Applications.

Standard settings

The standard system is delivered with examples.

Activities

Check the examples and change as required.

Activities

1. Check whether you need any of the following file types for your processes:
 - DAT (IMDS files)
 - TXT (CSV, e-mail texts)
 - PDF (SAP Interactive Forms by Adobe)
 - XLS Discrete industry
 - XML

2. Make sure that the relevant file types are defined.

Additional Definitions

Specify Document Groups and Assign Documents

Use

In this Customizing activity, you can specify document groups and assign documents.

Standard settings

The standard system is delivered without examples.

Activities

Assign document groups to cover business processes, if required.

Specify PDM Systems

Use

In this Customizing activity, you specify connected product data management (PDM) systems. PDM systems are used to harmonize product numbers. The name of the PDM system is unique.

The following transactions are involved (under *Product Compliance -> Utilities -> Import -> Harmonization*):

EHPRC_CPH00 - *Global Product Number*

EHPRC_CPH01 - *Harmonization Manufacturer*

EHPRC_CPH02 - *Harmonization Customer*

EHPRC_CPH03 - *Harmonization Manufacturer Product Number*

A product from a PDM system is identified using the product number and the name of the PDM system.

Activities

Enter connected PDM systems, if required.

Business Add-Ins (BAdIs)

BAdI: Request and E-Mail Generation

Use

This Business Add-In (BAdI) is used in the Product Compliance For Discrete Industries. You can use this BAdI to enhance the generation of requests and e-mails. This BAdI provides the following methods:

- EML_DETERMIN_RECIPIENTS
You can use this method to determine the recipients for the request e-mails (To, CC, BCC).
- EML_DETERMIN_SENDER
You can use this method to determine the sender for request e-mails.
- EML_GENERATE_ATTACHMENTS
You can use this method to generate additional documents to be attached to e-mails.
- EML_GENERATE_EMAIL_TEXT
You can use this method to generate the subject and body text of request e-mails.

Requirements

In the Customizing activities Specify Campaign and E-Mail Configuration, you have made settings for e-mails, categories, and types.

Standard settings

This Business Add-In is filter dependent. You must specify filter criteria to activate a customer-specific BAdI implementation. You can specify, for example, the request ID. This allows you to create a BAdI implementation that applies only to requests according to the filter criteria.

In the standard system, the Business Add-In is activated. The default code is executed automatically.

For more information about the standard settings (filters, single or multiple uses), see the *Enhancement Spot Element Definitions* tab in the BAdI Builder (transaction SE).

BAdI Implementations

CL_DEF_IM_EHPRC_CP_BADI_005 (default implementation)

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.

3. If you choose the **Interface** tab, you will notice that the system has filled in the **Name of the Implementing Class** field automatically, by assigning a class name based on the name of your implementation.
4. Save your entries and assign the Add-In to a package.
5. To edit a method, double-click its name.
6. Enter your implementation code between the method `<Interface Name>~<Name of Method> . and endmethod .` statements.
7. Save and activate your code. Navigate back to the **Change Implementation** screen.
Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
8. Choose **Activate**.
When the application program is executed, the system carries out the code in the method you wrote.

BAdI: Supported File Formats for Import

Use

This Business Add-In (BAdI) is used in Product Compliance for Discrete Industries. You can use it to extend the supported file formats for importing material declaration data.

The BAdI provides the following methods:

- `GET_SUPPORTED_FILE_FORMATS`: This method returns a table, which describes the supported file formats. Each file format can also include a link to a documentation object that is visible on the UI to provide information before the import starts.
- `GET_IMPORT_HANDLER`: This method analyses the file content of the imported file and detects the corresponding file format. A format-specific file handler has to be returned (interface: `IF_EHPRC_IMPORT_HANDLER`).

Standard settings

The standard implementation supports the following file formats:

- IPC 1752A XML (Version 2)

Activities

Create a new BAdI implementation that replaces the default implementation.

We recommend to create the implementation as a subclass of the default class `CL_EHPRC_IMPORT_FACTORY_DEF` to ensure that the standard file formats are still supported.

If the additional file format is based on XML, you can override the method `IDENTIFY_XML_HANDLER` and detect the file format by its XML content. If your logic is not able to identify the file, call the `SUPER` method of `CL_EHPRC_IMPORT_FACTORY_DEF` to preserve the standard XML identification.

Example

The default implementation `CL_EHPRC_IMPORT_FACTORY_DEF` can also serve as example code for your implementation.

Refer to class `CL_EHPRC_IMPHDL_IPC_175X_20` for an example of a format-specific handler implementation.

BAdI: Matching for Import

Uses

This BAdI is used in the *Product Compliance for Discrete Industries* component. You can use this BAdI to search for and to assign system data and data from an external source automatically. You call this BAdI in the import process of supplier material declarations.

The following BAdI methods are provided:

- `MATCH_SUPPLIER` *Match Supplier from File to Supplier in the System*
- `MATCH_EXEMPTIONS` *Match Exemptions from File to Exemptions in the System*
- `MATCH_SUBSTANCES` *Match Substances from File to Listed Substances*
- `CONVERT_UNIT` *Convert Unit from File to Unit in the System*

Standard settings

For more information about the standard settings (filters, single or multiple uses), see the *Enhancement Spot Element Definitions* tab in the BAdI Builder (transaction `SE`).

BAdI Implementations

The BAdI implementation `CL_EHPRC_IMPORT_MATCH_DEF` is active with the standard delivery. The default code is processed automatically.

Activities

When you create a new implementation of this BAdI, execute the following steps:

1. Create a new implementation.
2. Optional: Copy the methods of the default implementation as a basis for your own implementation.
3. Adjust your own implementation.
4. Activate the methods and the BAdI implementation.

See also

BAdI: Validation for Import

1. Use

This BAdI is used in Product Compliance for Discrete Industries. You can use this BAdI to validate data in the import process of supplier material declarations.

The following BAdI methods are provided:

- Validate Data After Parsing
- Validate Substance Declaration
- Validate FMD
- Validate Data Before Import

Standard settings

For more information about the standard settings (filters, single or multiple uses), see the *Enhancement Spot Element Definitions* tab in the BAdI Builder (transaction SE).

BadI Implementations

The default BAdI implementation CL_EHPRC_IMPORT_VALIDATE_DEF is active with the standard delivery. The default code is processed automatically.

Activities

When you create a new implementation of this BAdI, execute the following steps:

2. Create a new implementation.
3. Optional: Copy the methods of the default implementation as a basis for your own implementation.
4. Adjust your own implementation.
5. Activate the methods and the BAdI implementation.

See also

For more information about the standard settings (filters, single or multiple uses), see the *Enhancement Spot Element Definitions* tab in the BAdI Builder (transaction SE).

Automated Change Processing

Schedule Jobs for Automated Change Processing

Use

In this Customizing activity, you can schedule background jobs that execute the automated change processing (ACP) for compliance information. The jobs ensure that the compliance information is kept up-to-date.

The automated change processing includes the following background jobs:

- R_EHPRC_ACP_WORKLIST_DETERMINE: *Determine ACP Entries from Change Initiators*
It determines the compliance information that is affected by a relevant change.
- R_EHPRC_ACP_WORKLIST_EXECUTE *Execute the ACP Worklist*
It processes the worklist of pending compliance information.
- R_EHPRC_ACP_WORKLIST_FUTUR_CHG *Execute Future Processing for ACP*

It processes such relevant changes that will have an impact at a specified date in the future.

For more information about the reports, see the documentation of the reports:

Execute the ACP Worklist

Determine ACP Entries from Change Initiators

Execute Future Processing for ACP Clear

ACP changes table

Requirements

Assign the role `SAP_EHSM_PRC_AUTO_CHANGE_PROC` to the system user to ensure the background-processing-user has sufficient authorization to access all compliance information in the system.

If you plan to migrate specifications from *SAP Product and REACH Compliance 2* or *Compliance for Products 2* to component extension 3 or higher for *SAP EHS Management*, carry out the data migration first, before you schedule the jobs. Follow the instructions in the *Migration Information Guide*.

Standard settings

You find the definition, which change is a relevant change of a compliance information in the ACP-related BAdIs under *Product Safety and Stewardship -> Product Compliance for Discrete Industries -> General Configuration -> Automated Change Processing -> Business Add-Ins (BAdIs)*

If necessary, adopt the standard implementation.

Activities

Schedule the jobs as follows (Define Background job)

1. An event triggered job for `R_EHPRC_ACP_WORKLIST_DETERMINE`
Start condition: After Event
Event: SAP_EHPRC_ACP_NEW_CHANGE

Parameter: <client> (your client ID such as 001).
2. An scheduled job for `R_EHPRC_ACP_WORKLIST_EXECUTE` *Start condition: Date / Time*
Period Values: 10 Minutes.
3. An scheduled job for `R_EHPRC_ACP_WORKLIST_FUTUR_CHG`
Start condition: Date / Time
Period Values: once a day, during the night, such as 00 AM Be

aware: Only all jobs together ensure that ACP works correctly.

Business Add-Ins (BAdIs)

BAdI: Collecting Relevant Changes from Specification

Use

The *Collect Relevant Changes from Specification* (BADI_EHPRC_ACP_COLLECT_SPEC) BAdI is used in the *Product Compliance* of SAP S/4HANA. You can use this BAdI to collect additional relevant changes of specification data that are provided to the automated change processing.

This BAdI provides the following methods:

- COLLECT_CHANGES
You can use this method to collect additional relevant changes from a specification.

Requirements

If the enhancement includes a new type of relevant change, you can create a fixed value append in the domain EHPRC_ACP_RELEVANT_CHANGE.

Standard settings

The standard implementation collects changes of the specification data, such as:

- Relevant changes of composition data
- Relevant changes of use data

Additionally, it collects changes that are relevant for IMDS regulation, such as:

- Relevant changes of material classification
- Relevant changes of applicable standards
- Relevant changes of recycling data
- Relevant changes of polymer data
- Changes of identifiers for basic material name, trade name, IMDS standard material number, and basic / material surface symbol

For more information about the standard settings and other details such as filters, single or multiple uses, see the implementation in the *BAdI Builder* (transaction SE), *Enhancement Spot Element Definitions* ES_EHPRC_ACP.

Activities

Create a new BAdI implementation that processes additional relevant changes. The BAdI is defined with *Multiple Use*. Do not replace the standard implementation, unless the standard logic is changed.

BAdI: Collecting Relevant Changes from Business Objects

Use

The *Collect Relevant Changes from Business Objects* (BADI_EHPRC_ACP_COLLECT_BOPF) BAdI is used for the functions in Product Compliance for Discrete Industries. You can use this BAdI to collect additional relevant changes for compliance data in the business objects that are provided to the automated change processing.

This BAdI provides the following method:

- COLLECT_CHANGES

You can use this method to collect additional relevant changes from a business object.

Requirements

A determination in a business object defined in BOPF (business object processing framework) has to call the BAdI. If the BAdI should process additional node changes, such as changes in customer nodes defined in a business object enhancement, add a determination to the affected node in /BOBF/CUST_UI transaction with the following settings:

- *Implementing Class:* CL_EHPRC_D_ACP_COLLECT
- *Determination Pattern:* Derive dependent data before saving.
- *Request Nodes:* For the node to be processed, select CREATE, or UPDATE, or DELETE, or any combination depending on which changes are relevant. All three can be processed by the BAdI.
- *Write Nodes:* None.

If the enhancement includes a new type of relevant change, you can create a fixed value append in the domain EHPRC_ACP_RELEVANT_CHANGE.

Standard settings

The standard delivers two implementations for the EHPRC_COMPLIANCE_DATA and EHPRC_SUPPLIER_RESPONSE business objects that are active in parallel and collect changes in the business object nodes as follows:

<u>Business Object</u>	<u>Node</u>	<u>Change</u>
EHPRC_COMPLIANCE_DATA mass or IMDS node ID	ROOT	Change of calculated or measured
	REQ_REVISION	Release a revision or revoke
	BASMAT_COMP	Change of basic material
	SUPPLIER_LIST	Change of supplier listing or
	DECL_SUBSTANCE	Change of declarable
EHPRC_SUPPLIER_RESPONSE	MATERIAL	Change of material number
	ROOT	New supplier response

For more information about the standard settings and other details such as filters, single or multiple uses, see the implementation in the *BAdI Builder* (transaction SE), *Enhancement Spot Element Definitions* ES_EHPRC_ACP.

Activities

Create a new BAdI implementation that processes additional relevant changes. The BAdI is defined with *Multiple Use*. Do not replace the standard implementation, unless the standard logic has been changed.

BAdI: Determination and Executing of Worklist Entries

Use

The *Determine and Execute Worklist Entries* (BADI_EHPRC_ACP_WORKLIST) BAdI is used in Product Compliance for Discrete Industries. You use this BAdI to enhance the way in which the automated change processing determines affected entries for a relevant change and executed worklist entries.

This BAdI provides the following methods:

- DETERMINE_CHANGE
You can use this method to alter the determination of affected compliance information, after a relevant change occurred.
- EXECUTE_ENTRY
You can use this method to modify the execution of worklist entries in *Automated Change Processing*.

Requirements

If the enhancement includes new types of relevant changes or new types of worklist actions, you can create a fixed value append in the domains:

- EHPRC_ACP_RELEVANT_CHANGE
- EHPRC_ACP_ACTION

Standard settings

The standard determination finds all indirect usages of compliance information, until a release-relevant level is reached.

The standard worklist execution supports all relevant changes and actions that come with the standard delivery.

For more information about the standard settings and other details such as filters, single or multiple uses, see the implementation in the *BAdI Builder* (transaction SE), *Enhancement Spot Element Definitions* ES_EHPRC_ACP.

Activities

Create a new BAdI implementation and either subclass the existing default implementation or replace it with a custom implementation.

Product and Specification Database

Adopt Specification Database Structure for Product Compliance

Use

In this Customizing activity, you transfer the classes and characteristics delivered in the standard system for Product Compliance from the SAP reference client to the current client.

Note that the value assignment types delivered in the standard system and the standard property tree are not transferred. You must transport these manually to the current client.

Recommendation

We recommend that you use the settings delivered in the standard system and that you only make enhancements to the existing database structure. If you do not use the settings in the standard system, you must set up the database structure manually.

Activities

To transfer the supplied database structure to the current client when you set up the *Product Compliance for Discrete Industries* system for the first time or when you upgrade to a newer release:

1. Execute this Customizing activity. Note that the system will overwrite any modifications that you have made to the standard SAP classes and characteristics of product compliance.
2. Copy the supplied value assignment types and property trees from the SAP reference client (000) to the current client by running a client matchup. Use the client matchup to delete the entries in the target client that no longer exist in the SAP reference client.
3. Repeat steps 1 and 2 for each system and client in which you require the standard SAP classes and characteristics of product compliance. Note that SAP classes and characteristics are not automatically transported to other systems and clients.

Further notes

- The names of the predefined SAP classes, characteristics, and value assignment types for product compliance begin with **SAP_RCS**. You cannot change these characteristics in the current client.
- To execute the required Customizing activities and match up the master data, the administrator for *Product Compliance for Discrete Industries* requires the following

authorizations:

- Authorization to edit client-independent objects
AUTHORITY-CHECK OBJECT 'S_TABU_CLI'
ID 'CLIIDMAINT' FIELD 'X'.
- Authorization CCCFLOW to change (2) or to display (3) AUTHORITY-CHECK OBJECT
'S_TABU_DIS'
ID 'ACTVT' FIELD '02' or '03' if not successful for '02' ID 'DICBERCLS' FIELD TDDAT-
CCLASS.
- Authorization to create authorization profiles
AUTHORITY-CHECK OBJECT 'S_USER_PRO' ID
'PROFILE' FIELD '*'
ID 'ACTVT' FIELD '01'.
- Authorization to edit user groups
AUTHORITY-CHECK OBJECT 'S_USER_GRP' ID
'CLASS' FIELD '*' ID 'ACTVT' FIELD '01'.

Define Material Classification for REACH related Attributes

Use

In this Customizing activity, you can activate the REACH-related attributes in the material master.

After the material classification is created, you execute the activity to activate phrase sets for the characteristics. This activity automatically assigns the characteristics phrases to the phrase sets. If the phrase sets do not exist, they are created.

Requirements

- You have copied the Product Compliance classes and characteristics into the client in the Customizing activity Adopt Specification Database Structure for Product Compliance.

Activities

1. Create the material class by completing the following steps:
 - a) Process the transaction CL02 (SAP class system) to create class ZRCS_REACH_REL that describes the REACH-specific attributes of a material.
 - b) Enter the characteristics of this class as follows:
CLASS ZRCS_REACH_REL
CLASS TYPE 001 (MATERIAL CLASS)
 - c) Assign the following characteristic:
SAP_RCS_MATBAS_MATNATURE
 - d) Specify the class name as a value for the environment parameter **SVT_MATERIAL_CLASS** in the Specify Environment Parameters Customizing activity under *Basic Data and Tools*. Phrasing is only possible for characteristics assigned to this class.
2. Complete the activities by executing a report within this Customizing activity. Afterwards you have defined the value check function module **EHPRC_RCS_LB26_MM_PHRCHK** for the characteristics that are to be phrase-enabled. If not, no phrasing is activated for the characteristics.

Note: Phrase sets that are to be assigned must have the same key as the characteristics.

Check Identification Listing

Use

In this Customizing activity, you specify the identification listings for your product compliance processes. For more information, see the documentation for the Customizing activity Check Identification Listing under *Basic Data and Tools*.

Standard settings

The following identification listings are delivered with the standard system: **Product Compliance**

<u>Identifier</u>	<u>Description</u>	<u>Use</u>
CP_STANDRD	Standard identifiers	Used as fallback if another identification listing does not exist.
CP_HITLIST	Identifiers for hitlist in the <i>Compliance Workbench</i>	Used to show identifiers on the hit list within the <i>Compliance Workbench</i> .
CP_PSTRUCT	Identifiers for the product structure in the <i>Compliance Workbench</i>	Used to show identifiers within the product structure in the <i>Compliance Workbench</i> .
CP_PROD	Identifiers for products and bulk materials	Used within the

Compliance Workbench and other dialogs to show identifiers for the material category `PRODUCT` and `BULK`. It is assigned to the material category in the corresponding `IMG` activity.

`CP_MAT` Identifiers for basic materials and surfaces Used in the same way as `CP_PROD`, but for the material category `MATERIAL` and `SURFACE`.

`CP_PURE` Identifiers for pure substances Used in the same way as `CP_PROD`, but for the material category `PURE`.

`CP_IMDSCUS` IMDS identification Used in the *IMDS Customer MDS Center* to show three identifiers in the hit list.

`CP_IMDSSUP` IMDS identification Used in the *IMDS Supplier MDS Center* to show three identifiers in the hit list.

Activities

Check the existing entries and adapt them if necessary.

Substitute Properties and Characteristics

Use

In this Customizing activity, you can substitute a standard class (value assignment type) and its characteristic for your own class and characteristic.

This allows you to store data from *Product Compliance for Discrete Industries* in another class or characteristic, for example, when other processes are running.

This substitution is valid for product compliance processes only. It is not considered for *Product Safety, Dangerous Goods or Global Label Management* processes, such as displaying the properties in the substance workbench.

Requirements

Your own class has the same characteristics as the standard class.

When ensuring that your class has the same characteristics as the standard class, note that you **cannot** do the following:

- Split the characteristics into two classes.
- Combine several characteristics into one characteristic.
- Combine several classes into one class.

Multiple-Use Characteristics

Characteristics which are used in multiple classes (value assignment types) can be mapped only for one class. This mapping is used for all classes.

If you have mapped a multiple-use characteristic for one class (value assignment type), you must ensure that the mapped characteristic is also valid for the other class (value assignment type): normally you must also map the other class to a class that contains the mapped characteristic.

Standard settings

The standard system contains the following property trees that are each assigned a default class with default characteristics:

PC_REAL Compliance Properties of Products
 PC_PURE Compliance Properties of Pure Substances PC_MAT
 Properties for Basic Materials/Surfaces

The standard assignment of specification types to property trees is as follows:

<u>Specification Type</u>	<u>Property Tree</u>
MAT_PART	PC_REAL
MAT_PART_E	PC_REAL
REAL_SUB	PC_REAL
REAL_SUB_E	PC_REAL
BASMAT	PC_MAT
BASMAT_E	PC_MAT
SURFACE	PC_MAT
SURFACE_E	PC_MAT
PURE_SUB	PC_PURE
PURE_GRP	PC_PURE

Product Compliance for Discrete Industries uses the classes and characteristics settings of the property trees listed above.

Activities

If you want to use customer-specific classes and characteristics, map your class and characteristic to the standard class.

The mapped class and, if mapped additionally, characteristic are used to read and write system data instead of the original class and characteristic.

If you want to maintain the mapped properties in the substance workbench, you can use your own property tree that is assigned to the mapped value assignment types/characteristics.

Note: To make the mapping visible in the Web portal, it is mandatory that you restart the application server.

Further information

For more information about property tree settings, see the documentations for the Customizing activity Set Up Property Trees.

For more information about default class settings and assigned characteristics, see transaction CL02. All product compliance classes use class type 100, with the exception of the material assessment that uses a customer-specific class with the class type 001.

Specify Normalization Variants

Use

In this Customizing activity, you define the normalizations that are used for analyses, for reporting, or for checks.

Standard settings

The following default settings are provided:

Normalization Variant	Normalization Name	Normalization Function	Module Key	Build Function
CP_ALLSUPP	Display All Suppliers	EHPRC_CP_NM01_ADD_ALL_SUPP		
				EHPRC_CP_NM02_SINGLE_INSTANCE
CP_IMDSFB	IMDS Flat BOM	EHPRC_CP_NM01_IMDS_FLATBOM		
				EHPRC_CP_NM02_SINGLE_INSTANCE
CP_ISSUES	Issues Only	EHPRC_CP_NM01_ISSUES_ONLY		
				EHPRC_CP_NM02_NORMVAR_REGLIST
CP_L2_DEC	Level 2 Parts	EHPRC_CP_NM01_IPC_LEVEL2		
				EHPRC_CP_NM02_NORMVAR_REGLIST
CP_PP_DEC	Lowest Internal Parts	EHPRC_CP_NM01_IPC_LAST_INTERN		
				EHPRC_CP_NM02_NORMVAR_REGLIST
CP_PREFER	Hide Alternatives	EHPRC_CP_NM01_ONLY_PREF_ACTIVE		
				EHPRC_CP_NM02_SINGLE_INSTANCE
CP_REL_REL	Next Release Relevant Level	EHPRC_CP_NM01_REL_REL		
				EHPRC_CP_NM02_SINGLE_INSTANCE

Activities

Check the standards settings and change them if necessary.

Example

You display the RoHS data of a product structure in the compliance workbench and you want to use IPC to report this product. Two normalizations that you use for IPC exist: *Lowest Internal Parts* and *Level 2 Parts*. You can use these normalizations in the workbench to display what is reported. They are also used for the export.

Specify Composition Groups and Product Variants

Use

In this Customizing activity, you can specify settings for composition groups and product variants and you can map them.

Composition Groups

Composition groups define the composition data model and specify how the system reads the data and displays the data for your industry and organization. You use composition groups as follows:

- All composition groups are used for explosions and normalizations in the workbench.
- Specified composition groups are used for checks.
- The standard composition is used for importing of non-EU supplier data.
- Using the import tool that is material category-dependent.
- Performing exports using explosions or normalizations.

Product Variants

Product variants allow a product to be treated in different ways depending on the assigned validity area categories. Product variants are displayed in the product structure after the bill of material (BOM) transfer. You use product variants for the following business cases:

- Multi BOM:
- A product or part has multiple BOMs with different usages (*Variant Usage*).
- A product or part has multiple alternatives for a BOM, all have the same usage (*Variant Alternative*).
- A product or part has BOMs in different plants (*Variant Plant*).
- Multi supplier: A part is purchased from multiple suppliers / manufacturers (*Variant Supplier*).
- Custom: Variants for customer-specific needs that require additional implementation in the BOM transfer interface (*Variant Custom*).

Prerequisites

- For the composition groups *Input Composition* and *Standard Composition*, you have assigned at least one Value Assignment Type in the subactivity *Specify Composition Groups*.
Caution: For the composition groups *Basic Material Composition* and *Supplier Specification Listing* never add value assignment types.
For the others, never use one composition in several groups.
- For product variants, you have configured the required validity area categories and the corresponding validity areas.
For more information, see the following Customizing activities:
- Set Up Table-Based Value Assignment
- Specify Validity Area Categories
- Specify Validity Area

Standard settings

The standard system is delivered with the following standard composition groups:

- @3M@ Input composition, Sequence 1
- @L9@ Supplier part listing, Sequence 2
- @3M@ Basic material composition, Sequence 3
- @3M@ Standard composition, Sequence 4

The standard system is delivered with the following standard product variants:

Variant	Active	Val. Area	Category	Priority	Icon	Variant Description
USAGE	X	BOMUSAGE1		@6E@	Usage	
ALTERNATE	X	BOMALT		2	@AP@	Alternative
PLANT	X	PLANT		3	@A8@	Plant
SUPPLIER	X	SUPPLIER		4	@L9@	Supplier
CUSTOM				5	@L4@	Custom

The standard system is delivered with the following assignment from composition groups to product variants:

Composition Group

INPUT
INPUT
INPUT
SUPPLIER
SUPPLIER

Activities

Variant

ALTERNATE
PLANT
USAGE
PLANT
SUPPLIER

Check the standard settings and adapt, if necessary. **Note:**

- If you want to use the CUSTOM product variant, specify a validity area category and an icon for this product variant.
- If you want to use the product variants BOMALT, BOMUSAGE, or PLANT, ensure that your logistic values match with the corresponding Customizing entries for logistic.
- Only product variants that are marked as active are displayed as phantom nodes in the product structure the compliance workbench.
- If necessary, add an additional customized variant for product variants:

Variant	Active	Val. Area	Category	Priority	Icon	Description
CUSTOM	X	CUSTOM	5	@A7@		Additional customized variant

Example

Example configuration for composition groups

Example configuration for product variants

Specify Reference Values for the Composition

Use

In this Customizing activity, you specify reference values for compositions for the product compliance processes. For more information, see *Specify Reference Values for the Composition* under *Basic Data and Tools*.

Standard settings

The standard system is delivered with examples.

Activities

Check the examples and change as required.

Save Additional Data in the Specification Database

Use

This enhancement (C1F20001) allows you to change or adapt data during the specification save process.

You must activate this enhancement in the following cases:

- You use the automated change processing.

Activities

To activate the enhancement, perform the following steps:

1. Create the enhancement using transaction **CMOD**.
 - Either create a new enhancement project, or use an existing one.
 - Save the enhancement project and select an appropriate development package.
2. Open the enhancement project again and choose *Enhancement Assignments*. Add the following enhancement:

Enhancement

C1F20001

Short Text

PS&S: Saving Additional Data in the Database

3. Choose *Components* and double-click the function EXIT_SAPLC1F2_001.
4. Double-click **ZXC1AU40** and create this include. To save, use the development package you used to save the enhancement project. Copy the following source code into the include:


```
CALL FUNCTION 'EHPRC_CP_CD01_CHKDOC_HANDLE'.
```
5. Activate include **ZXC1AU40** by choosing *Activate Project*.
6. Go back and activate function module **EXIT_SAPLC1F2_001**.
7. Go back and activate the enhancement project.

Specification Management

Specify Specification Types

Use

In this Customizing activity, you maintain specification types for *Product Compliance for Discrete Industries*. For more information about specification types, see *Specify Specification Types* under *Basic Data and Tools*.

Activities

1. Make the following settings for *Product Compliance for Discrete Industries*:

Spec. Type	Desc. Mat. Assignment	Object Name	Int. No.	Range	Ext. No.	Range
Property Tree	Default					
REAL_SUB	Real substance	x	ESN_SUBID	0I 0E	PC_MAT	x
REAL_SUB_E	Real substance external	x	ESN_SUBID	0I 0E	PC_PROD	x
PURE_SUB	Pure substance	x	ESN_SUBID	0I 0E	PC_PURE	x

2. Check that the following records exist for specification type *REAL_SUB*:
 - Specification Category for Specification Type: *SUBSTANCE*
 - Specification Type - Property Tree Assignment: *PC_MAT*
 - Referencing Between Specification Types: *REAL_SUB_E*
3. Check that the following records exist for specification type *REAL_SUB*:
 - Specification Category for Specification Type: *SUBSTANCE*
 - Specification Type - Property Tree Assignment: *PC_PROD*
4. Check that the following records exist for specification type *PURE_SUB*:
 - Specification Category for Specification Type: *SUBSTANCE*
 - Specification Type - Property Tree Assignment: *PC_PUR* Note:

Number Range and Pure Substances

Be aware that the systems provides content for listed substances. If you use one of these substances, pure substances will be linked to this listed substance.

These delivered listed substances have an ID in one of this number ranges:

- L00000000000 to L99999999999
- LG00000000000 to LG99999999999

The manually created listed substances have an ID in this number range: Y00000000000 to Y99999999999.

When using a listed substance as a declarable, a pure substance has to be linked to the listed substance. The system can create the specification pure substances and can use the same ID like the listed substance ID. Therefore, check that the following number ranges for external use are available for pure substances:

- L00000000000 to L99999999999
- LG00000000000 to LG99999999999
- Y00000000000 to Y99999999999

Recommendation entry for number range object is:

ESN_SUBID, range 0E from A to *ZZZZZZZZZZZZZ*, for external use.

Specify Value Assignment Types

Use

In this Customizing activity, you specify the compositions and properties that are used for the processes in *Product Compliance for Discrete Industries*.

For more information about value assignment types, see the documentation for the Customizing activity Specify Value Assignment Types under *Basic Data and Tools*.

Standard settings

The standard system is delivered with examples.

Activities

Check the standard settings and adapt, if necessary. Make sure that the following value assignment types are defined:

1. Entry

Val.Assmt.Type:	SAP_EHS_1012_003
Desct.:	Standard Composition
Value Assmt. Cat.:	C
Class:	SAP_EHS_1012_003
VA Copy Active:	x
Single Instance:	x
New VA Active:	x
Change Active:	
Usage Profile:	PROF001
Identification Listing:	CP_PURE

2. Entry

Val.Assmt.Type:	SAP_EHS_1012_025
Desct.:	Exact Comp. based on Starting Materials
Value Assmt. Cat.:	C
Class:	SAP_EHS_1012_025
VA Copy Active:	x
Single Instance:	x
New VA Active:	x
Change Active:	
Usage Profile:	PROF001
Identification Listing:	CP_PSTRUCT

Set Up Table-Based Value Assignment

Use

In this Customizing activity, you create entries for the value assignment types. For more information about setting up table-based value assignments, see Set Up Table-Based Value Assignment under *Basic Data and Tools*.

Activities

Create entries for the value assignment types that you entered in the Specify Value Assignment Types Customizing activity.

Set Up Property Trees

Use

In this Customizing you set up property trees for the product compliance processes. For more information, see Set Up Property Trees under *Basic, Data And Tools*.

Standard settings

The standard system is delivered with examples.

Activities

Check the examples and change as required.

Specify Sources

Use

In this Customizing activity, you specify sources for the product compliance processes. For more information, see Specify Sources under *Basic, Data and Tools*.

Standard settings

The standard system is delivered with examples.

Activities

Check the examples and change as required.

Specify User-Defined Text Types

Use

In this Customizing activity, you specify user-defined text types for the product compliance processes. For more information, see Specify User-Defined Text Types under *Basic Data and Tools*.

Standard settings

The standard system is delivered with examples.

Activities

Check the examples and change as required.

Specify Validity Area Categories

Use

In this Customizing activity, you specify validity area categories for the product compliance processes. For more information, see [Specify Validity Area Categories](#) under *Basic Data and Tools*.

Standard settings

The standard system is delivered with examples.

Activities

Check the examples and change as required.

Specify Validity Areas

Use

In this Customizing activity, you specify validity areas for the product compliance processes. For more information, see [Specify Validity Areas](#) under *Basic Data and Tools*.

Standard settings

The standard system is delivered with examples.

Activities

Check the examples and change as required.

0 Compliance Object

0 Integrate Compliance Data with Business Context Viewer

Use

This Customizing activity describes the possible integrations of compliance data with the Business Context Viewer (BCV). With BCV, you can integrate additional, typically context-related, information in the following ways:

- You can display several overviews in the side panel of the Web Dynpro application for compliance data.
- You can integrate query views for compliance data into the side panel of other Web Dynpro applications or SAP GUI transactions.
- You can integrate existing query views for, for example, PLM into the side panel of Web Dynpro applications for compliance data.
- You can create new search providers, queries, and query views to integrate any data into the side panel of Web Dynpro applications for compliance data.

Requirements

General

- You have activated the business functions /BCV/MAIN and if available /BCV/MAIN_1 using the transaction Switch Framework: Change Business Function Status (transaction code SFW5)
- To display the BCV side panel, the role SAP_BCV_USER is required. Additionally the following authorizations are required:
- BCV_QRYVW Query View:
BCV_QRYVW ACTVT 03
BCV_QRYVW ACTVT 16
BCV_QRYVW BCV_CTXKEY EHPRC_COMPL_DATA
BCV_QRYVW BCV_QRYVID *
- BCV_QUERY Query:
BCV_QUERY ACTVT 03
BCV_QUERY ACTVT 16
BCV_QUERY BCV_CTXKEY EHPRC_COMPL_DATA
BCV_QUERY BCV_QRY_ID *
- BCV_QUILST Overview:
BCV_QUILST ACTVT 03
BCV_QUILST ACTVT 16
BCV_QUILST BCV_CTXKEY EHPRC_COMPL_DATA
BCV_QUILST BCV_QUIKID *
- S_PB_CHIP ABAP Page Builder: CHIP
S_PB_CHIP ACTVT 03
S_PB_CHIP ACTVT 16
S_PB_CHIP CHIP_NAME X-SAP-WDY-CHIP:/BCV/CHIP*
S_PB_CHIP CHIP_NAME X-SAP-WDY-CHIP:EHPRC_CW_BCV_CHIP1
- S_PB_PAGE ABAP Page Builder: Page Configuration S_PB_PAGE ACTVT 03

S_PB_PAGE CONFIG_ID /BCV/SIDEPANEL
S_PB_PAGE PERS_SCOPE 1

- To create or adapt the BCV side panel, the role SAP_BCV_ADMIN is required.

For SAP GUI Integration

- Your system meets the following system requirements:
- NWBC 3 for Desktop
- SAP GUI version 70 patch level 9
- ERP 6 EHP 6 (mandatory for the side panel system)
- You have activated the business functions /BCV/MAIN and /BCV/MAIN_1 using the transaction Switch Framework: Change Business Function Status (transaction code SFW5).

For PLM Side Panel Integration

- You have installed the add-on for PLM Web UI.

Standard settings

The following BCV content is delivered using BC sets:

- Context Keys
The context key EHPRC_COMPL_DATA is used to show side panel data for the compliance UIs.
- BCV Overviews and Query Views
- BCV overview 1EHPRC_OVER_CDO for summarized display of compliance information with the following query views:
- 1EHPRC_QUERY_VIEW_CDO for released compliance information
- 1EHPRC_QUERY_VIEW_CDO_DOC for released and consumable documents
- 1EHPRC_QUERY_VIEW_CDO_EXM for exemptions of released revisions
- 1EHPRC_QUERY_VIEW_CDO_IW for compliance requirements in process
- BCV overview 1EHPRC_OVER_MAT for simple display of material data with the query view:
- 1EHPRC_QUERY_VIEW_MATERIAL for material information
- BCV overview 1EHPRC_OVER_SPBN for integration of SAP Product Stewardship Network
- Meanings

The following meanings are used for data transfer from applications like the compliance UI to the side panel overview for compliance data.

- Material number
- 1MATERIAL
- Key of the drawing document (Document Management System)
- 1EHPRC_DOKAR- 1EHPRC_DOKNR
- 1EHPRC_DOKTL
- 1EHPRC_DOKVR

- Substance ID
- 1EHPRC_SUBSTANCE

The following meanings are used for data transfer from applications like the compliance UI to the side panel overview for material data.

- Material number
- 1MATERIAL

The following meanings are used for data transfer from the compliance UI to the side panel overview for SAP Product Stewardship Network.

- Material number
- 1MATERIAL
- Material part number
- 1EHPRC_MPN
- Salable indicator
- 1EHPRC_SALABLE
- Purchased indicator
- 1EHPRC_PURCHASED
- Supplier ID
- 1EHPRC_SUPPLIER
- Supplier part indicator
- 1EHPRC_SUPPLIER_PART
- Compliance data object key
- 1EHPRC_CDO_KEY

For more information, see the BC set EHPRC_BCV_CONTENT.

Activities

- Define and manage BCV.

To define and manage BCV, you use the Configuration Center in the application under *Business Context Viewer -> Configuration Center*. The Customizing activities for BCV can be found under *Cross-Application Components -> Processes and Tools for Enterprise Applications -> Business Context Viewer*.

- To prevent the user from seeing outdated information, disable the query cache for the context key EHPRC_COMPL_DATA in the Maintain Query Cache Customizing activity under *Business Context Viewer*.
- Create the required BCV overviews.
Each BCV overview is linked to a context key that defines the area for which the overview is valid and usable.
- If you want to integrate existing BCV content into the compliance UIs, create an overview with the context key EHPRC_COMPL_DATA.
- If you want to integrate the BCV content for compliance data into other UIs, create an overview containing query views with the appropriate context key of your application or transaction.

- If you want to integrate the side panel for showing compliance information in a separate system, for example for sales and distribution or purchasing, you can copy the BCV content and the classes of the search connectors into your system. Adapt the classes to call the function modules for accessing compliance information with the RFC destination of the *Product Compliance for Discrete Industries* system.

Specify Compliance Views and Normalizations

Use

In this Customizing activity, you can specify the tab pages the users can see depending on the compliance requirement they work for.

In addition, you can specify the normalizations that users can choose depending on the compliance requirement they work for.

Prerequisites

Before specifying views in the workbench, ensure that you have defined the following:

- Defined checks in the Specify Checks and Single Criteria Customizing activity.
- Defined normalization variants in the Specify Normalization Variants Customizing activity.
- Set priorities for displaying different variants of the product structure in the Specify Composition Groups and Variants Customizing activity.

Example: A product structure that differs in multiple plants.

Standard settings

The standard system delivers the following compliance requirements (checks):

- BASE (Basic checks for product structure)
- CHINA-RoHs (Compliance check China RoHS)
- IMDS (International Material Data System check; including GADSL, Compliance check Global Automotive Declarable Substances List)
- JIG (Joint Industry Guide reporting)
- REACH-SVHC (Substances of Very High Concern)
- RoHS (Compliance check Restriction of use of Hazardous Substances)

The standard system delivers the following tab pages for compliance requirements:

Compliance Requirement

Available TAB pages

Basic	ADMIN DOC (Documents) MAT_INFO (Material Information) OVERVIEW WEIGHT_AND_COMPOSITION (Weight and
Composition) China RoHS	ADMIN DEC (Declarable Substances) DOC (Documents) MAT_INFO (Material Information) OVERVIEW WEIGHT_AND_COMPOSITION (Weight and
Composition) IMDS	ADMIN DEC (Declarable Substances) DOC (Documents) IMDS MAT_INFO (Material Information) OVERVIEW WEIGHT_AND_COMPOSITION (Weight and
Composition) JIG	ADMIN DEC (Declarable Substances) DOC (Documents) MAT_INFO (Material Information) OVERVIEW WEIGHT_AND_COMPOSITION (Weight and
Composition) REACH_SVHC	ADMIN DEC (Declarable Substances) DOC (Documents) MAT_ASSESSMENT (REACH Material
Assessment)	MAT_INFO (Material Information) OVERVIEW WEIGHT_AND_COMPOSITION (Weight and
Composition) EU RoHS	ADMIN DEC (Declarable Substances) DOC (Documents) MAT_INFO (Material Information) OVERVIEW WEIGHT_AND_COMPOSITION (Weight and
Composition)	

The standard system delivers the following normalization variants for compliance requirements:

Compliance Requirement

Normalization variant

Basic checks for product structure	Issues Only Next Release Relevant Level
Compliance check China RoHS	Issues Only Next Release Relevant Level
Checks for IMDS	IMDS Flat BOM Issues Only Hide Alternatives Next Release Relevant Level
JIG reporting	Issues Only Level 2 Parts Lowest Internal Parts Hide Alternatives Next Release Relevant Level
Check for REACH-SVHC	Issues Only Level 2 Parts Lowest Internal Parts Hide Alternatives Next Release Relevant Level
Compliance check RoHS	Next Release Relevant Level

For each compliance requirement you can select one normalization variant as default view for all user.

Activities

Check the standard settings and adapt them, if necessary.

Assign Material Category to Compliance Data

Use

In this Customizing activity, you can define the Compliance Data Category for each material category. You can also define the specification type for each material category. Specifications that are created or imported use specification types.

In this activity, you can make settings for discrete industry processes with the standard setup.

Standard settings

The standard system is delivered with the following material categories:

Material Category

BULK

MATERIAL

PACKAGING

PRODUCT

PURE_SUB

SURFACE

Activities

Determine which material categories are necessary for your organization and then perform the following activities:

- Check the standard setting and adapt them, if necessary.
Note: The value in the *Specification Type* field is an internal specification type and customer-specific. The value in the *External Specification Type* field is an imported specification from the supplier. The value in the *Substance Group* field can be customer-specific or imported.
- If you want to create supplier specification listings from a specification type other than the specification type assigned to material category **BULK**, enter this material category as the parameter value for the optional environment parameter **MATERIAL_CATEGORY**. For more information, see the documentation for the Customizing activity Specify Environment Parameters for Back-End Processes.

Example

You can use the following settings for discrete industry processes:

Material Category	Compliance Data Category	Specification Type	Examples
BULK		Bulk Material	BULK (internal) or
BULK_E (external)		solder paste, bonding wire	
MATERIAL		Basic Material	BASMAT (internal) or
BASMAT_E (external)		plastic of motherboard	
PACKAGING	Packaging	PACKAGING (internal and external)	cardboard box
PRODUCT		Product or Product Part	MAT_PART
(internal) or MAT_PART_E (external)		motherboard, capacitor, diode, IC	
PURE_SUB	PURE_SUB or PURE_GRP	lead,tin,silver,silicon	
SURFACE		Basic Material	SURFACE (internal) or
SURFACE_E (external)		protective finish	

Define Templates for the Compliance Object

Use

In this Customizing activity, you can define the Incoming / Outgoing templates for file Upload / Generate on a Compliance Product level.

Activities

Templates for Upload/Generate documents can be subscribed by the following selection criteria:

1. Salable Part, Supplier Part, Purchased Part, Designed Part, External Part, Release Relevant Level, Assembly -

Possible values are "yes", "no" and "all" (default).

2. Consumable - determines whether the document is relevant for consumers. Possible values are "yes" and "no" .

Define Rules for Release Relevant Levels

Use

In this Customizing activity, you can change the used descriptions for release relevant levels.

You can also assign to each release relevant level a process (workflow) to monitor the release.

Note:

A release relevant level defines whether a certain level in the product structure of the compliance object requires a release of the compliance requirement revision.

The compliance checks first start on the lowest level. They check the compliance data, set a compliance status, and if possible, they set the status of the product level automatically to *Released*. The next step is to transfer the compliance information to the next higher level in the product structure and to do the same as on the lower level: check the compliance data, set a compliance status, and if possible, set the status automatically to *Released*.

The release relevant level set a breakpoint for this ongoing work of the checks. The checks stop their work on a release relevant level. You can verify the results of the compliance check, and you can make any necessary changes. The checks start their compliance work not before you release the compliance status of the release relevant level.

Requirements

You have defined the relevant processes in the Customizing activity Specify Process Definition.

Standard settings

- **Delivered Rules**
- You find six rules that define release relevant levels. The relationship of these rules is a logical OR operation. Therefore, a product level has to fulfill only one of the rules to be release relevant.
- These rules define that one of the following product levels is release relevant:

<u>Rule</u>	<u>Description</u>
RL1	Salable Product
RL2	Purchased Component
RL3	Supplier Part
RL4	Internal Basic Material
RL5	Component without Composition (Part)
RL6	Component without Composition (Bulk)

- **Criteria in the Rules**
- A product level fulfills a rule, if it fulfills all criteria that define the rule. The relationship of the criteria in one rule is a logical AND operation. The following criteria need to have a specified value: salable part, supplier part, purchased part, designed part, and external part. The possible values are YES, No, All Values.
- As an example, how to use two defining criteria:

1. Criteria Salable Part = YES, Supplier Part = No

The rule says that a release relevant level is given if the component is a salable part AND if it is not a supplier part.

2. Criteria Salable Part = YES, Supplier Part = YES

The rule says that a release relevant level is given if the component is a salable part AND it is also a supplier part.

3. Criteria Salable Part = YES, Supplier Part = all Values

The rule says that a release relevant level is given if the component is a salable part AND it does not matter if it is a supplier part or not.

Activities

- You can change the description of the delivered rules.

Specify Tolerance Values for Weights

Use

In this Customizing activity, you specify tolerance ranges in % for weights. The ranges are used to determine the allowed deviations in measured weights and calculated weights, which base on the weights of components.

To complete this Customizing activity, process the report R_EHPRC_RECHECK_TOLERANCES Create ACP Entries After Tolerance Change. For more information, see the corresponding report documentation.

Standard settings

The ranges are automatically sorted in ascending order of the upper limit values. The first range started with an empty field that represents zero. Upper limits are given implicit by a value smaller than the lower limit of the previous range.

Activities

You can use the standard values or define your own standard values. In addition, you can overwrite a single tolerance value for any object in the application itself. Overwritten values are indicated by the chosen *Set Exceptional Tolerance Value (%)* select box on the *Edit*-screen for the *Allowed Tolerance*.

Example

1. You specify in the Customizing activity values as follows:

<u>Range</u>	<u>>=Limit</u>	<u>Mass Unit</u>	<u>Weight Tolerance (%)</u>
1		G	100
2	1	G	10
3	100	G	5
....
5	10	KG	1

- 6 100 KG 0
2. The same ranges are visible for the users as follows:

<u>Weight Range</u>	<u>Tolerance</u>
< 1 G	100%
< 100 G	10%
...
< 100 KG	1%
>= 100 KG	0%

3. Read the ranges as follows:

<u>Lower Limit</u>	<u>Measured Weight</u>	<u>Upper Limit</u>	<u>Tolerance</u>
0 G	<= x <	1 G	100%
1 G	<= x <	100 G	10%
....	<= x <	
10 KG	<= x <	100 KG	1%
100 KG	<= x		0%

BAdI: Auto Release of Compliance Requirement Revision

Use

This Business Add-In (BAdI) is valid for the component Product Compliance for Discrete Industries. You can use this BAdI to enable or disable execution of the auto-release logic for the compliance requirement revisions.

You can do so by using one of three following options for the returning parameter "RV_CRR_ACTION" of the method "GET_RELEASE_ACTION":

- option 1: choose "Auto Release" to set the release status of the component to "released"
- option 2: choose "Reset", so that in case a current component is "released", this released status is set to "historic" and a new compliance requirement revision "in work" is created.
- option 3: choose "Do Not Release" so that the system does not set any release status.

Be aware: This BAdI is valid whenever you execute a check and on each product structure level.

Standard settings

If the result of the compliance check is successful, the standard setting and fallback implementation uses for the returning parameter the option "Auto Release", so that the compliance requirement revisions gets the status "released".

For more information about the standard settings (filters, single or multiple uses), see the *Enhancement Spot Element Definitions* tab in the BAdI Builder (transaction SE).

Regulations and Compliance Requirements

Check List for a Regulatory List Configuration

Use

In this Customizing activity, you verify the configuration of your system for a specific regulated substance list. The European Union's Restriction of Hazardous Substances (EU RoHS) and China's Restriction of Hazardous Substances (China RoHS) regulations are used as examples.

Activities

1. Configure the product database as follows:
 - a) Enter the type *PACKAGING* in the Specify Specification Types Customizing activity.
 - b) Enter the following details in the Customizing activity Assign Material Category to Compliance Data: Assign the material category *PACKAGING* to compliance data category *PACKAGING*. Then specify the specification type *PACKAGING* for the compliance data *PACKAGING*.
2. Verify the settings for EU ROHS / CHINA RoHS:
 - a) Verify the user exit type *CP_COMPL/CP_CHINA* with category *CHECK* in the Manage User Exits Customizing activity.
 - b) Verify the regulatory/customer list *ROHS/CHINA-ROHS* in the Specify Regulatory Lists and Customer Lists Customizing activity.
 - c) For China RoHS, verify that the classes *A*, *B* and *C* in the Specify Classifications Customizing activity are available.
 - d) Verify the compliance requirement *ROHS* in the Specify Checks and Single Criteria Customizing activity.
 - e) Verify the corresponding workflow for the tasks of the compliance requirement ROHS in the Configure Process Definitions Customizing activity.
 - f) Verify the templates *COC*, *IPC_XML_C* and *PRC_XML_L1* in the Specify Incoming Templates Customizing activity.
 - g) Verify the templates *COC*, *DECLOFSUB*, *IPC_XML_C*, *PRC_CHX* and *PRC_XML_L1* in the Specify Outgoing Templates Customizing activity. In addition, verify the form configuration for the templates *COC* and *DECLOFSUB* in the Specify Forms Customizing activity.
 - h) Verify the allowed MIME types (file extensions) for possible compliance documents that are related to the compliance requirement ROHS in the Maintain Attachment Type Schema Customizing activity. Verify and assign the allowed MIME types to the nodes *ROOT* and *REQ_REVISION* for the business object *EHPRC_COMPLIANCE_DATA*.
 - i) Verify the possible and required incoming and outgoing compliance documents for compliance requirement ROHS that can be attached to the compliance object in the Specify incoming and outgoing documents for Compliance Object activity.
 - j) Verify the possible and required incoming and outgoing compliance documents that can be attached to a revision of compliance requirement ROHS in the Specify Checks and Single Criteria Customizing activity.

- k) Verify the compliance views of the compliance object for the compliance requirement *ROHS* in the Specify Compliance Views and Normalizations Customizing activity.
- l) Enter or import the EU ROHS regulated listed substances, exemptions, and assignment of exemptions to the listed substances as regulatory list revisions.

Schedule Jobs for Regulatory List Revision

Use

This Customizing activity describes all automatable jobs required to run periodically or when triggered by events in order to keep the regulatory change worklist running.

The following reports must be scheduled:

- **R_EHPRC_WL_REGCHG_GENERATE** - You set up an event-controlled job for the creation or update of a regulatory, change-based worklist. This program is then executed whenever a regulatory list revision is activated and whenever an updated active revision is saved. The program creates or updates the corresponding worklist and its entries based on the regulatory list data and the affected compliance objects.
- **R_EHPRC_WL_REGCHG_POST_PROC** - You set up the job for post processing all regulatory change worklists that do not have the status *completed*. The program tries to eliminate all worklist entries with technical issues, such as those caused by foreign locks. Secondly, the program updates the status of worklist entries, based on the status and data specified on the assigned compliance objects. We recommend scheduling the job on a daily basis.

Requirements

- At least one regulatory list is specified in the system.
- A product assessment has taken place and the corresponding requirements have been added to products.
- In your system, a background user exists that has all relevant authorizations for processing regulatory change worklists. With **SAP_EHSM_PRC_REG_CHG_WLIST_PRO**, a technical role is delivered that has all necessary authorization objects assigned. You can use this role and assign it to the background user.

Activities

- **R_EHPRC_WL_REGCHG_GENERATE:**
 1. Call the SAP system for the client you require and, from the menu, choose *System -> Services -> Jobs -> Define Job*.
 2. Enter a job name and choose the job class.
 3. Choose *Start condition*. In the following dialog box, choose *After Event* and enter the following data:
 - *Event: SAP_EHPRC_START_REG_WL_GENERATE*
 - *Parameter: <client>* (your client, such as 001)
 - Select the checkbox *Periodic Job*. Save and navigate back.

4. Choose *Edit -> Steps*.
The *Create Step 1* dialog box appears.
5. Choose ABAP program.
6. Enter R_EHPRC_WL_REGCHG_GENERATE as the name of the ABAP program.
7. Enter the name of the background user as *Background User Name for Authorization Check* when the ABAP program is executed.
8. Choose *Check and save*.
The step list appears.
9. Go back and then save.
- **R_EHPRC_WL_REGCHG_POST_PROC:**
1. Call the SAP system for the client you require and from the menu, choose *System -> Services -> Jobs -> Define Job*.
2. Enter a job name and choose the job class.
3. Choose *Edit -> Start condition* and choose the *Date/Time* function in the subsequent dialog box.
4. In the *Scheduled start* field, enter the start date and a suitable start time and select the *Execute job periodically* option.
5. Choose period values and select a suitable periodical value. We suggest scheduling this program daily.
6. Choose *Check and save*.
7. Choose *Edit -> Steps*.
The *Create Step 1* dialog box appears.
8. Choose ABAP program.
9. Enter R_EHPRC_WL_REGCHG_POST_PROC as the name of the ABAP program.
10. Enter the name of the background user as *Background User Name for Authorization Check* when the ABAP program is executed.
11. Choose *Check and save*.
The step list appears.
12. Go back and then save.

Specify Regulatory Lists and Customer Lists

Use

In this Customizing activity, you can specify regulatory lists or customer-specific lists of substances that have constraints for product compliance.

Requirements

You have created the appropriate regulatory lists in the Customizing activity Create Regulatory Lists and Customer Lists.

Standard settings

The standard system is delivered with examples.

Activities

Check the standard settings and adapt them, if necessary.

Example

The following substances with constraints are contained in the regulatory RoHS list:

- Lead
- Mercury
- Cadmium
- Hexavalent chromium
- Polybrominated biphenyls (PBB)
- Polybrominated diphenyl ethers (PBDE)

Enhance Worklist for Regulatory List Revisions

Use

In this Customizing activity, you can check and adapt the standard settings of the default class implementation CL_EHPRC_WL_REGL_EXIT_IMPL. This class implementation is used for communication with the regulatory list revision worklist.

Every change of a released regulatory list revision is communicated to the regulatory list revision worklist. The worklist then examines the compliance data objects that use the changed regulatory list revision and calculates the new compliance status for these compliance data objects.

Standard settings

The standard system is delivered with examples.

Activities

Adapt the examples and add new entries, if necessary.

Manage User Exits

Use

In this Customizing activity, you can extend the functions provided in the *Product Compliance for Discrete Industries* component.

Standard settings

The standard system is delivered with the following example user exit categories:

<u>User Exit Category</u>	<u>Description</u>	<u>Model Function Module</u>
CHECK	User exit category for check functions to be assigned to the check of a compliance requirement	EHPRC_CP_CK03_CHECK_FACTORY_TP
BB_CHGBOM	User exit category of the BOM transfer interface to change the bill of material	EHPRC_CP_BB20_CHGBOM_TEMPLATE
BB_SUBBOM	User exit category of the BOM transfer interface to change a sub bill of material	EHPRC_CP_BB20_SUBBOM_TEMPLATE
BB_USAGE	User exit category of the BOM transfer interface to adapt the usage for product variants	EHPRC_CP_BB20_USAGE_TEMPLATE
BB_MATJOIN	User exit category of the BOM transfer interface to get material substance assignments	EHPRC_CP_BB20_MATJOIN_TEMPLATE
BB_UNITCON	User exit category of the BOM transfer interface to calculate values and units of the composition	EHPRC_CP_BB20_UNITCON_TEMPLATE
BB_SECDATA	User exit category of the BOM transfer interface to add further data	EHPRC_CP_BB20_SECDATA_TEMPLATE
LB_CODUPD	User exit category is used for updating the compliance object data	EHPRC_CP_BB20_CODUPD_TEMPLATE
LB_SUBUPD	User exit category of the BOM transfer interface for editing data before it is saved in the database	EHPRC_CP_LB08_SUBUPD_TEMPLATE

Activities

If you need adaptations of the standard entries, copy the templates and adapt the examples and add new entries.

Note: The function of a user exit is processed according to the sequence field. The interface must match the interface of the function in the last column of the Customizing table.

Specify Checks for Compliance Requirement and Check Criteria

Short text

View standard checks for product structure

Use

In this Customizing activity, you find the standard checks that you can perform on the product structure.

You can use checks for the following tasks:

- To ensure that correct and complete specification data is available to meet regulatory and industry-specific obligations
- To perform the following functions:

- Check the data and data structure of a product (for example, "Consistency Check").
- Find out whether a product violates any regulations in your industry (for example, "RoHS Check").
- Ensure that data exchange works properly by using standardized data formats (for example, "IMDS Check").
- Define the incoming/outgoing templates for uploading/generating files for a check.

You can adopt the standard checks to your business requirements in this Customizing activity.

You can create your own checks, which must comply with the corresponding reference function module in the user exit management.

Standard settings

The following checks are provided for the discrete industry:

- Consistency Check (BASE)
- Restriction of Use of Hazardous Substances (ROHS)
- Compliance Check China RoHS (CHINA ROHS)
- International Material Data System (IMDS) including the Global Automotive Declarable Substance List (GADSL)
- Joint Industry Guide (JIG)
- Substances of Very High Concern (REACH-SVHC)

Activities

Determine the standard system checks that are required and appropriate for your industry. If necessary, perform the following steps to configure the checks:

1. In the step *Define Checks* you define compliance requirements by -
 - Setting a check as the default check.
 - Defining the corresponding regulatory list.
Be aware: A regulatory list can only be assigned to one compliance requirement.
 - Linking a corresponding normalization variant.
Be aware: Leave the entry empty so that the default normalization is used. If you enter a normalization, always choose only such normalization variants that are configured as possible ones for the UI in the Specify Compliance Views and Normalizations Customizing activity. Filling the entry in a wrong way **can lead to incomplete product structure trees in the compliance workbench.**
 - If you need to create a workflow, by defining the corresponding processes with entries in Component, Purpose, and Process Variant.
For more details about process definition, see the *Configure Process Definitions* Customizing activity under *Product Safety and Stewardship -> Product Compliance for Discrete Industries -> Process Configuration*. **Be aware** of the activities mentioned there in the Configure Process Definitions documentation.
 - Assigning the user exits that includes the check functionality.
Be aware: If you use the same user exit for more than one compliance requirement, enter a value in the *Regulatory List* field. This entry acts as a variable parameter for the check. The check result is written only for the entered regulation.

- Assigning business processes that are defined in Customizing under *Product Safety and Stewardship* -> *Product Compliance for Discrete Industries* -> *Foundation for Product Compliance* -> *Process Foundation* --> *Processes*.
2. For each compliance requirement, you specify in the sub dialog *Define Criteria for Compliance Requirements* the following details:
 - Which criteria you use
 - If it is active
 - Which kind of message is correlated
 3. For each compliance requirement, you specify in the sub dialog *Specify Material Types to Be Checked*
 - The Material Category for which the checks are executed
Be aware: If you want to use the check for other composition groups, exchange the user exit function of the check.
 4. For each compliance requirement, you specify in the sub dialogs *Define Incoming Documents templates* and *Define Outgoing Documents* the rule for which components the documents are uploaded/generated.

For defining this rule enter the corresponding values for the following criteria:

 - Required
 - Consumable
 - Salable Part
 - Supplier Part
 - Purchased Part
 - Designed Part

 - External Part
 - Release
 - Assembly

Be Aware: These criteria are logical AND operation. For more details see [here](#).

Further notes

See also the Manage User ExitsCustomizing activity

Specify Classifications

In this Customizing activity, you can define and create classifications You can also specify the material categories that the classifications can be used for.

Standard settings

The following settings are delivered with the standard system and the corresponding functions are implemented.

Classification

Description

A
Is the same as a homogeneous material

Material Categories

MATERIAL; SURFACE

B	MATERIAL; SURFACE	
Is defined for metallic coating		
C	BULK; PRODUCT	Is
defined for parts that have total volume of less than 4 mm ³		

We recommend that you only create new values if you cannot use the standard classifications in your process. New classifications must be implemented and/or modified, as required.

Activities

1. Select the classification that you want to edit. To create a new classification, choose *New Entries*.
2. Choose *Navigation -> MATCAT Assignment*.
3. Specify the material categories that can use the classification.

Example

China RoHS uses classifications A, B and C. The definition of these classifications (EIP classifications) within China RoHS is as follows:

A	Is defined for the homogeneous material Will be checked against the homogeneous material using the threshold specified in the content for regulation China RoHS
B	Is defined for metallic coating Almost identical to classification A since a surface is normally a homogeneous material. However, classification B is defined to use threshold 0 for regulated substances when they are added intentionally.
C	Is defined for parts that have a total volume of less than 4 mm ³ If a object above the homogeneous material (in the product structure) is classified as C, this object is given the new homogeneous material. The thresholds defined in the content are checked against this object.

Export and Import of Regulatory List Revisions

Use

You have a regulatory list revision in a source system and you want to bring this regulatory list revision with all details into another target system. Use the report

R_EHFND_REG_LIST_EXPORT to export the data from the source system and the report R_EHFND_REG_LIST_IMPORT to import the data in the target system.

Be aware:

- You can only import these kinds of XML files that an export process creates.
- The import report can create pure substances in the target system during the import process. The better option is, to have all pure substances of the source system also in the target system before starting the import process. Only in this case you can be sure that all details of the pure substances are also in the target system.

Hint

Using SAP Product Stewardship Network, you can use further options of downloading regulatory list revisions. See Customizing activity Specify SAP Product Stewardship Network Integration,

For IMDS- and GADSL exist specific import topics. See Customizing activity Set Up System with IMDS All Files

Requirements

- Source system and target system, both cover the product compliance area of the component extension 3 (or higher) for SAP EHS Management or the product compliance in SAP S/4HANA.
- **Source system:** You have a regulatory list revision, which includes all data as follows:
 - a list of listed substances for the regulatory/customer-specific list
 - a list of exemptions for the regulatory/customer-specific list
 - exemptions mapped to the related listed substance
 - mapped pure substances to the related listed substances -
- **Target system:** You have
 - executed the following Customizing activities: - in Product Compliance Specify Checks
 - for Compliance Requirement and Check Criteria
 - in Process Foundation Create Regulatory Lists and Customer Lists
- **Pure substances:** Transport pure substances if you want to avoid data inconsistencies for pure substances between the source and the target system.
- Export from the source system the pure substances that you need. Use transaction Substance Workbench (CG02).
- Import into the target system the pure substances that you need. Use transaction Import Specification: Specification List (CG33).

Note: In case you decide not to use your own pure substances, the system creates new pure substances during the import. These have limited details, which could be less than the details in the source system.

Activities

1. Export the regulatory list revision from the source system.
 - a) Define which regulatory list with which revision date you want to export
 - b) Execute the report R_EHFND_REG_LIST_EXPORT in ABAP: Program Execution (SA38).
 - c) Use the parameters *Regulatory List ID* and *Revision Date* to choose the one regulatory list revision you need.
 - d) Use the parameter *Export Regulatory List Revision to* to add the path, where you want to store the exported file in your local system.

For more information, see the documentations for the Report to Export Regulatory List Revisions and Report to Import Regulatory List Revisions.

2. Import the regulatory list revision into the target system.
 - a) Execute the report `R_EHFND_REG_LIST_IMPORT` in ABAP: Program Execution (SA38).
 - b) Use the parameter *Regulatory List XML file* to enter the path, where you have stored the file on your local system.
3. Check the result of both processes in the application log.
 - a) At the end of the reports, you see the application log with all created messages like success, warning and error.
 - b) You can also check the messages for each program later by executing the Evaluate Application Log (SLG1)

BAdI: Priorities in Worklist for Regulatory List Revisions

Use

This Business Add-In (BAdI) is used for *Product Compliance of Discrete Industries (PC)*. You can use it to adapt the determination of the priority of a Regulatory List Revision worklist entry.

The BAdI is called within the `EHPRC_WORKLIST_REG_CHG` BOPF business object whenever such a worklist entry is created or updated. A regulatory list revision worklist is generated whenever a regulatory list revision in PC has been activated or an active revision is updated. The changes are determined and worklist entries are created for the PC compliance data objects affected by the change.

This BAdI uses the method `DETERMINE_PRIORITY`, which imports data of a worklist entry and determines the priority value based on the data given in the worklist entry. The priority value is then passed to a changing parameter.

Requirements

This BAdI works with regulatory list-based worklists; therefore, PC regulatory list and compliance data objects must be available.

Standard settings

For more information about the standard settings (filters, single or multiple uses), see the *Enhancement Spot Element Definitions* tab in the BAdI Builder (transaction SE).

Activities

This BAdI determines the priority of a worklist entry based on the cause/reason of a worklist entry, for example, the legal change of a PC regulatory list revision.

Example

The fallback BAdI implementation determines the priority of a worklist entry based on the regulatory list change, the cause, and the proposed activity of a worklist entry.

Process Configuration

Adapt Workflows for Product Compliance

Use

In this Customizing activity, you can adapt workflows to suit your specific processes in the following ways:

- Change the workflow template.
- Add steps within a process.
- Call further logic from a workflow task (process step).

Requirements

You have specified processes for *Product Compliance for Discrete Industries* in the Configure Process Definitions Customizing activity.

You have checked the processes by carry out the List Configured Processes Customizing activity.

Standard settings

The standard system is delivered with examples.

The following workflow templates are delivered with the corresponding PCO class and event:

<u>WF Template PCO</u>	<u>Class Name and Event</u>
00800012 - EHPRC_BBPROT	CL_EHPRC_PCO_BOMBOS
00800014 - EHPRC_ASSIGN	CL_EHPRC_PCO_SCC_ASSIGNMAIL
00800013 - EHPRC_INQUIR	CL_EHPRC_PCO_SCC_INQUIRY
00800014 - EHPRC_ASSIGN	CL_EHPRC_PCO_SCC_ASSIGNMAIL

Activities

To adapt workflows, you can perform the following activities:

- You can change the process flow directly in the workflow template (in the *Workflow Builder*) or copy the delivered template to the customer-specific namespace.
- You can add additional steps within a process by performing the following steps:
 1. Change the workflow template (or copy the delivery to the customer-specific namespace).
 2. Create further steps and (if necessary) workflow tasks in the customer-specific namespace in the Define Tasks and Actions Customizing activity.
 3. Add the new tasks to the workflow inbox configuration in the Assign Task IDs to POWL Types Customizing activity.
 - Manage the new task for the following POWL application ID and POWL types:

<u>POWL Application ID</u>	<u>POWL Type</u>
<u>Optional</u>	
EHPRC_INBOX	EHPRC_INBOX_TYPE
-	
EHPRC_SCC_INBOX	EHPRC_SCC_MYWORK_INBOX_TYPE
X	

- | | | |
|---|---------------------|-------------------------|
| X | EHPRC_PRODUCT_INBOX | EHPRC_BOMBOS_INBOX_TYPE |
| X | EHPRC_COMP_INBOX | EHPRC_BOMBOS_INBOX_TYPE |
| X | EHPRC_BASMAT_INBOX | EHPRC_BOMBOS_INBOX_TYPE |
- If you are not sure for which POWL applications and types to do the configuration, refer to similar existing tasks (of the same workflow)

4. Activate the workflow template.

- You can add logic that can be called from a workflow task (process step) by performing the following steps:
 1. Create a PCO class that inherits further public methods from the delivered class of the process that is specified in the Configure Process Definitions Customizing activity. To include your business logic, use one of the following two options:
 - Implement the logic directly in the PCO method.
 - Implement the logic in a BOPF action of the corresponding process control business object (PCBO) that is the architecture of the *Product Compliance for Discrete Industries*.
 2. If you want a dialog to open and the workflow to wait for an event, use the standard event (WORKITEM_COMPLETED). If you want to use a more specific event, define the new event on the PCO class. For the dialog to trigger the new event to continue the workflow, you can use the static method RAISE_WF_EVENT of the root PCO CL_EHFND_WFF_ROOT_PCO.
 3. After you finish implementing and adapting the workflow template, configure the new PCO class in the process definition in the Configure Process Definitions Customizing activity.

Schedule Jobs for Supply Chain Collaboration Process

Use

In this Customizing activity, you schedule a job to run the report *Sending E-Mail Create During Supply Chain Collaboration Process* (R_EHPRC_SEND_EMAILS) periodically.

This job sends out e-mails to the business partner for the supply chain collaboration. (One recipient for one e-mail)

The program tries to bundle the e-mails for the same business partner. Only e-mails for the same communication type, for example article data request, are bundled together, because the e-mail text is nearly the same within one communication type.

Requirements

The system administrator has created a background user with the authorizations to send out the e-mails. This background user can be the same as the background user named *WF_BATCH*, which is defined for the workflow processing.

Recommendation

We recommend scheduling the job on a daily basis.

Activities

Define a job for the ABAP program *Sending E-Mail Create During Supply Chain Collaboration Process* (R_EHPRC_SEND_EMAILS).

- Schedule the job as a daily one.
- Note that the background user has the rights to send out the e-mails.

Configure Process Definitions

Use

In this Customizing activity, you can configure the processes used in the *Product Compliance for Discrete Industries* component.

Requirements

You have specified processes for Product Compliance under *Foundation for Product Compliance* in the Customizing activity *Specify Process Definitions*.

You have ensured that the linkage between PCO classes and the corresponding workflows of *SAP Business Workflow* is correct by implementing the Customizing activity *List Configured Processes*.

Standard settings

The standard system is delivered with examples.

Activities

1. Check the existing examples and adapt them as required. A unique key must be assigned to each entry.
2. If necessary, select the *Exclude* checkbox to exclude a process from process monitoring and analysis.

Note that entries you change in this activity are changed as well in the Customizing activity *Specify Process Definitions* under *Foundation for Product Compliance*.

Assign Default Roles to Workflow Tasks

Use

In this Customizing activity, you can assign default roles to workflow tasks that are used in the *Product Compliance for Discrete Industries* component. It is critical that you execute this activity if you want to use the process foundation to support your business processes.

Requirements

- You have set up the workflow system in the Customizing activity Perform Automatic Workflow Customizing for *Foundation for Product Compliance*.
- You have assigned the roles used in this activity to the required users in the transaction *PFCG*.
- You are authorized to edit roles for tasks in the workflows.

Standard settings

In the standard system, there are no agents assigned to the workflow tasks used in Product Compliance. The standard system is delivered with default roles.

Activities

To implement the standard setup and automatically assign the roles, execute the report R_EHPRC_CONFIG_TASK_ROLES. For more information about the tasks and the roles that are assigned by this activity, see the report documentation Automatic Configuration of Roles for Tasks.

You can also assign roles manually to tasks by opening each task in transaction *PFTC_CHG*.

Integration

Logistic Integration

Bill of Material Transfer

Prerequisites for Bill of Material Transfer

Use

In this Customizing activity, you check whether the prerequisites for the bill of material transfer are fulfilled.

Requirements

You have the required authorization to display and change compliance object and specification data.

The following functions are implemented:

- Creation of multiple instances if multiple compositions (variants) exist
- Support of the product variants: BOM Usage, BOM alternative, Plant and Supplier List as configured in the variant configuration "Specify Composition Groups and Variants"
- Support of AMPL and PIR as configured in the variant configuration *Specify Composition Groups and Variants*
- Support of the procurement types E, F, and X (E + F)
- Support of special procurement keys
- New user exit to create usages for compositions
- Environment parameter to control which alternative BOMs will be transferred if one is not specified (default)

- Environment parameter to control if the supplier data is transferred as plant-dependent or plant-independent

Standard settings

The default configured user exits for handling of product variants are:

BB_CHGBOM SUPPLIER 20 EHPRC_CP_BB20_CHGBOM_SUPPLIER BOMBOS: Supplier Logic
EHPRC_CP_BB20_CHGBOM_TEMPLATE

BB_SUBBOM PROCURE 1 EHPRC_CP_BB20_SUBBOM_PROCURE EHPRC_CP_BB20_SUBBOM_TEMPLATE

BB_UNITCON BASE_UOM 1 EHPRC_CP_BB20_UNITCON_MAT_UOM2 BomBos: Unit
Conversion EHPRC_CP_BB20_UNITCON_TEMPLATE

BB_USAGE PROD_VAR 1 EHPRC_CP_BB20_USAGE_STD_PV EHPRC_CP_BB20_USAG
E_TEMPLATE

LB_CODUPD SALEABLE 1 EHPRC_CP_BB20_CODUPD_SALEABLE User exit for
setting salable ind. in co EHPRC_CP_BB20_CODUPD_TEMPLATE

LB_CODUPD WEIGHT 2 EHPRC_CP_BB20_CODUPD_WEIGHT User exit for setting weight in co
EHPRC_CP_BB20_CODUPD_TEMPLATE

LB_SUBUPD MATJOIN 950 EHPRC_CP_BB20R_SUBUPD_MATJOIN BOMBOS:
Reset Material JoinEHPRC_CP_BB20R_SUBUPD_TEMPLATE

LB_SUBUPD PROD_NAM910 EHPRC_CP_BB20R_SUBUPD_IDENTS BOMBOS:
Creates Additional Identifiers EHPRC_CP_BB20R_SUBUPD_TEMPLATE

If you have customer-specific variants and variant settings, you must check if the functionality that is delivered in the standard system requires enhancement. The product variants functionality for BOM transfer is encapsulated in user exit implementations. This makes it easy to adapt them.

Activities

1. Configure the product variants in the variant configuration *Specify Composition Groups and Variants*.
2. Specify values for the variants for the environment parameters and, if required, define conditions in the Customizing activity *Specify Environment Parameters*.

Define Processing of Bill of Material Changes

Use

In this Customizing activity, you check the prerequisites for the BOM-BOS interface. Any change of a bill of material triggers an event. This event can be used to process follow up functions.

Requirements

To check the prerequisite entries:

1. Call transaction **FIBF**. The *SAP Business Framework: Business Transaction Event* screen appears.
2. Choose *Settings -> P/S Modules -> ...of an SAP appl.*
3. Make sure that the following data has been entered:

<u>Field</u>	<u>Value</u>
Event	CS000010
Country	
Applic.	CS
Func.mod.	EHPRC_CP_BB10_BOMCHG_TRACKER

Standard settings

The standard settings use function module `EHPRC_CP_BB10_BOMCHG_TRACKER` to create a workflow that transfers the bill of material change if the material fulfills the filter criteria defined in Customizing activity Specify Selection Criteria for Bill of Material Transfer. The workflow automatically starts the transfer.

Activities

You can replace the function module `EHPRC_CP_BB10_BOMCHG_TRACKER` with the function module `EHPRC_CP_BB10_BOMCHG_TRACK_WDT`. In this case, the workflow does not automatically start the transfer but rather creates a decision task to decide whether to execute the transfer or skip it.

Specify Environment Parameters

Use

In this Customizing activity, you specify the values of the environment parameters for the bill of material transfer (BOM-BOS) and substance volume tracking (SVT).

For the bill of material transfer, you use the environment parameters to control how a new composition is created for a specification. If required, you can specify several data records for an environment parameter, and you can specify conditions for each data record based on the data record that is to be used.

A data record can be uniquely identified using the environment parameter and sort sequence fields. You can use the sort sequences to specify the ascending order that is used to check the conditions.

Standard settings

- You can define the following environment parameters for the BOM-BOS transfer:

<u>Environment Parameter</u>	<u>Description</u>
BOMBOS_ALTERNATIVE_TRANSFER	Transfer of BOM alternatives
BOMBOS_AUTHGRP	Authorization group
BOMBOS_BOM_APPL	Standard BOM application for the BOM-BOS transfer
BOMBOS_BOM_USAGE	Standard BOM usage for the BOM-BOS transfer
BOMBOS_CMP_USAGE	Usage profile for composition
BOMBOS_COMP	Value assignment type for composition
BOMBOS_COMPCAT	Component type

BOMBOS_COMPREL	Dimensions for composition. Default is "ST"
BOMBOS_DEL_DATE	No. of days until logs deleted
BOMBOS_OWNNID	Data provider of the new data record
BOMBOS_PACKAGE_SIZE	Package size for save packages
BOMBOS_RECURSIVE	Recursive call of BOM interface
BOMBOS_SRSID	Data origin
BOMBOS_SUBCAT	Specification type
BOMBOS_SUPP_PLANT_DEPENDENCY	Supplier data plant dependency
BOMBOS_SUPP_BOM_CAT	BOM category for supplier BOMs. Default is "M"
BOMBOS_SUPP_BOM_ITEM_CAT_BULK	Type of items in supplier BOMs for bulks. Default is "L"
BOMBOS_SUPP_BOM_ITEM_CAT_PART	Type of items in supplier BOMs for parts. Default is "L"
BOMBOS_SUPP_BOM_USAGE	BOM usage for supplier BOMs. Default is "2"
BOMBOS_SUPP_ITEM_QUANT_BULK	Quantity of items in supplier BOM for bulks. Default is "100 %"
BOMBOS_SUPP_ITEM_QUANT_PART	Quantity of items in supplier BOM for parts. Default is "1 ST"
BOMBOS_UNIT_CONV	Unit conversion. Default is "G"
BOMBOS_WL_DIALOG	Indicator:Processing in Dialog. Default is "X"
-	You can define the following environment parameter for the SVT material classification: SVT_MATERIAL_CLASS Material class for assessment of materials Activities

1. Define Conditions

To define conditions for an environment parameter, select the environment parameter and choose *Selection Criteria for Environment Parameters*.

Note: To specify selection criteria, use transaction *SE11* to call the structure that is assigned to the corresponding combination of selection category and selection object. Select the field name from the structure that you want to specify selection criteria for. The following table shows the parameters and conditions that you can add to any environment parameter to enable you to react differently for different data.

<u>Selection Category</u>	<u>Selection Object</u>	<u>Structure</u>
Material	MATERIAL	RCGBOMMAT
Header	BOM	RCGBOMHEAD
Position	BOM_POS	RCGBOMPOS

2. Specify Selection Values

Specify the selection values for the field names. You can assign the same fields more than once to a combination of a selection category and a selection object. The final defined condition is determined from the single defined conditions. The including or excluding option is considered. The SAP system reads the data records in the sequence that you specify using the sort sequence.

Example

Three Examples of Customizing entries and the system response during the BOM transfer for environment parameter *Authorization Group (BOMBOS_AUTHGRP)*.

Manage User Exits

Use

In this Customizing activity, you can extend the functions provided in the *Product Compliance for Discrete Industries* component.

Standard settings

The standard system is delivered with the following example user exit categories:

<u>User Exit Category</u>	<u>Description</u>	<u>Model Function Module</u>
CHECK	User exit category for check functions to be assigned to the check of a compliance requirement	EHPRC_CP_CK03_CHECK_FACTORY_TP
BB_CHGBOM	User exit category of the BOM transfer interface to change the bill of material	EHPRC_CP_BB20_CHGBOM_TEMPLATE
BB_SUBBOM	User exit category of the BOM transfer interface to change a sub bill of material	EHPRC_CP_BB20_SUBBOM_TEMPLATE
BB_USAGE	User exit category of the BOM transfer interface to adapt the usage for product variants	EHPRC_CP_BB20_USAGE_TEMPLATE
BB_MATJOIN	User exit category of the BOM transfer interface to get material substance assignments	EHPRC_CP_BB20_MATJOIN_TEMPLATE
BB_UNITCON	User exit category of the BOM transfer interface to calculate values and units of the composition	EHPRC_CP_BB20_UNITCON_TEMPLATE
BB_SECDATA	User exit category of the BOM transfer interface to add further data	EHPRC_CP_BB20_SECDATA_TEMPLATE
LB_CODUPD	User exit category is used for updating the compliance object data	EHPRC_CP_BB20_CODUPD_TEMPLATE
LB_SUBUPD	User exit category of the BOM transfer interface for editing data before it is saved in the database	EHPRC_CP_LB08_SUBUPD_TEMPLATE

Activities

If you need adaptations of the standard entries, copy the templates and adapt the examples and add new entries.

Note: The function of a user exit is processed according to the sequence field. The interface must match the interface of the function in the last column of the Customizing table.

Specify Selection Criteria for Bill of Material Transfer

Use

In this Customizing activity, you specify the selection criteria used to transfer bills of material (BOM) and to transfer bill of material items to compositions.

Requirements

- If you want to specify conditions for an environment parameter, you have made the settings in Customizing activity Specify Environment Parameters.
- If you want to specify selection criteria, you used transaction **SE11** to call the structure assigned to the corresponding combination of selection category and selection object. You selected the field name from the structure that you want to define selection criteria for. The following table shows the structure for each selection category. It describes the criteria for the BOM:

<u>Selection Category</u>	<u>Selection Object</u>	<u>Structure</u>
BOM	MATERIAL	RCGBOMMAT
BOM	BOM	RCGBOMHEAD
BOM_POS	MATERIAL	RCGBOMMAT
BOM_POS	BOM_POS	RCGBOMPOS

Standard settings

The delivered default uses the BOM status "1" to trigger compliance processing for a new or changed BOM. The BOM status is defined in Cutomizing activity Define BOM Status

Activities

- Specify the required selection criteria.
You can assign the same fields more than once to a combination of a selection category and a selection object. The final defined condition is determined from the single defined conditions. The including/excluding option is considered. The SAP system reads the data records in the sequence that you specify using the sort sequence.
Note: If you do not specify any selection criteria, all material BOMs created in the system are transferred.

Example

Use the following settings to select all materials that have a material number that starts with 'B' :

<u>Field</u>	<u>Value</u>
<i>Selection Cat.</i>	BOM
<i>Sort.</i>	10
<i>Sel. Object</i>	MATERIAL
<i>Field Name</i>	MATNR
<i>I/E</i>	I
<i>Sel. Opt.</i>	CP
<i>Lower Limit</i>	B*
<i>Upper Limit</i>	-

BAdI: Compliance Request Creation

Use

This Business Add-In (BAdI) is used in *Product Compliance for Discrete Industries*. You can use this BAdI to adapt and enhance the standard BOM transfer workflow.

This BAdI provides the following methods:

- CREATE_COMPL_REQUEST_REMARK

Use this method to create a default remark for compliance requirement requests. This remark is used whenever a request is created without user interaction (for example, release of new BOM).

- IS_DOCUMENT_COMPONENT
Use this method to determine if a released document corresponds to a component or not.

Standard settings

BAdI Implementations

- BADI_EHPRC_BOMBOS_WF_DEF
For the method CREATE_COMPL_REQUEST_REMARK, this standard implementation creates a simple remark, which is only a concatenation of the incoming parameters.
For the method IS_DOCUMENT_COMPONENT, this standard implementation always returns true. This means, all documents of the corresponding type are considered to correspond to components.

For more information about the standard settings (filters, single or multiple uses), see the *Enhancement Spot Element Definitions* tab in the BAdI Builder (transaction SE).

Activities

If you want to adapt the the standard functionality, create a new BAdI implementation. The BAdI is single use and there can only be one active implementation at a time.

Note: The remark for the compliance requirement request is generated when the request is created and isn't changed when the work item is executed. In particular it is not translated into the operators log on language at runtime. Keep in mind to either don't use text in the remark which needs translation or use text in a language which all possible operators understand.

Document Management

Define Processing of Component Document Changes

Use

In this Customizing activity, you define the integration of component compliance processing into document management. The goal of this integration is to start an assessment process for a component when an associated document, such as a technical drawing, reaches a certain status.

Requirements

You have specified the necessary document types and status network in the Customizing activity Check Document Types and Document Status.

Activities

To start a component assessment automatically when a document status changes, define a trigger function for the appropriate status in the document status network in the Customizing activity Check Document Types and Document Status.

To define this trigger function:

1. Select the document type which is relevant for compliance.
2. Select the document status which shall trigger the compliance assessment.
3. Specify the form routine and program exit.

Example

The system is delivered with a form routine L_DOC_STATUS_CHANGE in program SAPLEHPRC_PBB_REQUEST. This routine will create a request for a component assessment for the according document.

Integrate Compliance Information into Document Management

Use

In this Customizing activity, you integrate compliance information into document management. By integrating this information, you can do the following:

- Display compliance information from within document management - Edit basic material composition from within document management - Display compliance information in a Business Context Viewer side panel.

Requirements

For displaying compliance information or editing a basic material composition from within document management, you have implemented the customer exit as described below.

For the integration of the Business Context Viewer side panel, you have completed the Customizing activity Integrate Compliance Data with Business Context Viewer.

Standard settings

In the standard system, compliance information is not integrated.

Activities

Implement customer exit CV110001

To activate the integration of compliance information into document management, you need to implement customer exit CV110001 and integrate the corresponding functionality.

1. **Create enhancement project**
 - a) Create a new enhancement project in transaction CMOD. Provide a name and short text.
 - b) Navigate to the 'Enhancement Assignments' section. Assign the enhancement CV110001 (DMS: Enhancements for DMS Dialog (FB: CV110)) to the project and save.

- c) Navigate to the 'Components' section.

2. Implement Screen Exit

- a) Double-click on the screen exit SAPLCV110 0200 of enhancement CV110001 to enter the screen maintenance.
- b) Enter a short description.
- c) Set screen type to 'subscreen'.
- d) Edit the screen layout.
- e) Add an new button for the 'Show Compliance Information' function.
Set the Name property to 'SHOW_CI' (element name).
Set the Text property to 'Show Compliance Information' (button text).
Set the FctCode property to 'SHOW_CI' (function code).
- f) Add an new button for the 'Edit Basic Material Composition' function.
Set the Name property to 'EDIT_BM' (element name).
Set the Text property to 'Edit Basic Material Composition' (button text).
Set the FctCode property to 'EDIT_BM' (function code).
- g) Activate and save the screen.
Note: If you want to provide only one of the two functions in document management add only the required button to the screen.

3. Implement Function Exit 001

- a) On the 'Components' screen of the enhancement CV110001 double-click on the function exit EXIT_SAPLCV110_001.
- b) Double click on the name of the include in this function module. Create the include, if the system asks you to.
- c) Add the following function call in the include:

```
CALL FUNCTION 'EHPRC_CV110_001_SCREEN_ACTIVE '  
EXPORTING  
IS_DRAW = ps_draw  
IMPORTING  
EV_NAME_TAB1= pfx_tab1.
```

- d) Save and activate the include.

4. Implement Function Exit 002

- a) On the 'Components' screen of the enhancement CV110001 double-click on the function exit EXIT_SAPLCV110_002.
- b) Double click on the name of the include in this function module. Create the include, if the system asks you to.
- c) Add the following function call in the include:


```
CALL FUNCTION
'EHPRC_CV110_002_SET_DATA' EXPORTING
iv_tcode = pf_tcode is_draw = ps_draw.
```

d) Save and activate the include.

5. Implement Function Exit 004

- a) On the 'Components' screen of the enhancement CV110001 double-click on the function exit EXIT_SAPLCV110_004.
- b) Double click on the name of the include in this function module. Create the include, if the system asks you to.
- c) Add the following function call in the include:

```
CALL FUNCTION
'EHPRC_CV110_004_OKCODE' CHANGING
xv_okcode = PFX_OKCODE.
```

d) Save and activate the include.

Note: The exit function 003 is not needed, since this integration function does not change any document data.

6. Activate the Enhancement

- a) On the 'Components' screen of the enhancement CV110001 activate the enhancement
- b) Leave transaction CMOD

Check Document Types and Document Status

Use

In this Customizing activity, you can check the standard settings that are delivered for the document management system for managing Product Compliance. These settings include:

- Document types
- Language-dependent descriptions of the document types
- Document statuses
- Language-dependent descriptions of the document statuses

For more information, see the Customizing activity [Define Document Types](#).

Requirements

You have specified the file types that you require for your processes in the Customizing activity [Define Workstation Application](#).

Standard settings

The standard system is delivered with examples. The following examples are delivered for managing Product Compliance:

1. Document types:
CPT Inbound Documents

Recommendation

We recommend that you do not change the standard settings, if possible.

Activities

1. Check the standard settings.
2. Specify language-dependent descriptions for document statuses and document types in all the languages that you require.

In order to start a component assessment automatically when a document status changes, specify a trigger function for the according status in the document status network.

3. Select the document type that is relevant for compliance.
4. Select the document status which shall trigger the compliance assessment.
5. Specify the form routine and program exit.

The system is delivered with a form routine `L_DOC_STATUS_CHANGE` in the program `SAPLEHPRC_PBB_REQUEST`. This routine creates a request for a component assessment for the corresponding document.

Note

For each step, you can display online documentation directly from the screen in which you enter the data.

BAdI: Compliance Request Creation

Use

This Business Add-In (BAdI) is used in *Product Compliance for Discrete Industries*. You can use this BAdI to adapt and enhance the standard BOM transfer workflow.

This BAdI provides the following methods:

- `CREATE_COMPL_REQUEST_REMARK`
Use this method to create a default remark for compliance requirement requests. This remark is used whenever a request is created without user interaction (for example, release of new BOM).
- `IS_DOCUMENT_COMPONENT`
Use this method to determine if a released document corresponds to a component or not.

Standard settings

BAdI Implementations

- `BADI_EHPRC_BOMBOS_WF_DEF`

For the method CREATE_COMPL_REQUEST_REMARK, this standard implementation creates a simple remark, which is only a concatenation of the incoming parameters. For the method IS_DOCUMENT_COMPONENT, this standard implementation always returns true. This means, all documents of the corresponding type are considered to correspond to components.

For more information about the standard settings (filters, single or multiple uses), see the *Enhancement Spot Element Definitions* tab in the BAdI Builder (transaction SE).

Activities

If you want to adapt the the standard functionality, create a new BAdI implementation. The BAdI is single use and there can only be one active implementation at a time.

Note: The remark for the compliance requirement request is generated when the request is created and isn't changed when the work item is executed. In particular it is not translated into the operators log on language at runtime. Keep in mind to either don't use text in the remark which needs translation or use text in a language which all possible operators understand.

Supplier and Purchasing

Supplier/Manufacturer Material Information

Schedule Job for Changes in Supplier and Manufacturer Material Information

Use

In this Customizing activity, you can schedule background jobs for the automated Bill of Material transfer.

The Bill of Material transfer provides a job that monitors changes to material-supplier assignments. This job determines which assignments have changed and triggers the update of the according compliance information.

Requirements

The user that you use for background processing has sufficient authorization to access all compliance information in the system. To do so, assign the role SAP_EHSM_PRC_SUPPL_CHNG_PROC to the system user.

Activities

1. Execute the report R_EHPRC_PBB_SUPPL_CHNG_MON once and provide a date for the parameter *Include Changes Since*. In this run, all changes since the specified date are included. Choose a date that is not too far in the past, or you might encounter memory problems. This first run initializes the system for later scheduled executions.

2. Use the job wizard to schedule the report R_EHPRC_PBB_SUPPL_CHNG_MON. Schedule this job as a periodic job with a frequency of at least twice a day.

BAdI: Access to Customer and Supplier Material Data

Use

This Business Add-In (BAdI) is used in *Product Compliance* of *SAP S/4HANA* and it enables you to read customer and supplier logistics data.

Standard settings

In the standard system, the BAdI is activated. The default code is executed automatically.

For more information about the standard settings such as filters, and single or multiple uses, see the *Enhancement Spot Element Definitions* tab in the BAdI Builder in transaction *SE*.

See also

For more information, see the following BAdI method documentations:

- READ LOGISTIC DATA FROM CUSTOMER
- READ LOGISTIC DATA FROM SUPPLIER
- CHECK IF A MATERIAL IS A SOLD OR PURCHASED MATERIAL
- CHECK IF MATERIALS ARE SOLD OR PURCHASED
- READ LOGISTIC DATA FOR EACH CUSTOMER
- READ LOGISTIC DATA FOR EACH SUPPLIER

Supplier/Manufacturer and Contacts

Define Contact Person Functions

Use

In this Customizing activity, you can specify the contact functions that the system uses to determine the contact person for any compliance topics.

Standard settings

The standard system is delivered with examples.

Activities

Check the standard settings and change them, if necessary.

Specify Determination for Business Partners and Contacts

Use

In this Customizing activity, you can specify the priorities used to determine business partners and personal contacts. Priorities are handled in an ascending sequence; the highest priority is the one with the smallest priority number.

Product Compliance for Discrete Industries uses partner functions and contact functions to find contacts for supply chain collaboration. These partner functions and contact functions are delivered in the standard system. If you want to reuse your existing business partners (such as suppliers and customers) and existing contacts with their address data, change the partner and contact functions to your own functions.

Standard settings

The standard system is delivered with examples.

Activities

Check the standard settings and change them, if necessary.

You can set the following function priorities:

- For business partners: You can set different function priorities for the *Customer* and *Supplier* partner types. The business partner is determined according to the priority of the partner function. The determined business partner is the business partner assigned to the partner function that has the highest priority.
- For contact persons: Contact persons are determined according to the priority of the contact function. The determined contact person is the contact person assigned to the contact function that has the highest priority.

Business Add-Ins (BAdIs)

BAdI: Functions to Handle Business Partner Contacts

Use

This Business Add-In (BAdI) is used in the Product Compliance for Discrete Industries. You can use this BAdI to specify the functions to determine business partner data.

This BAdI provides the following methods for determining address and contact data:

- ADDR_READ:
You can use this method to read business partner data and personal address data according to various selection criteria.
- COUNTRY_READ:
You can use this method to read the country and determine whether the business partner is located within the regulation area.

This BAdI provides the following methods to update contact person data:

- CONTACT_CUSTOMER_WRITE:
You can use this method to add customer contact persons or to update the existing data of customer contact persons.
Depending on the number of the contact person (CS_CONTACT-PARNR), either a new customer contact person is created (no value), or the data of the specified customer contact person is updated.
- CONTACT_VENDOR_WRITE:
You can use this method to add vendor contact persons or to update the existing data of vendor contact persons.
Depending on the number of the contact person (CS_CONTACT-PARNR), either a new vendor contact person is created (no value), or the data of specified given vendor contact person is updated.

Standard settings

The Business Add-In is activated in the standard system. The default code is executed automatically. If you activate your own implementation, the default code is automatically deactivated.

BAdI Implementations

- CL_DEF_IM_EHPRC_CP_BADI_006
This BAdI contains a default implementation that supports the additional attributes for the discrete industry such as the DUNS number, which otherwise cannot be stored in the vendor master in the standard system. The default implementation has the following settings:
 - Address data is read from the vendor master (supplier data).
 - Address and personal data is handled by the vendor master (read/write) and business partner (read only).
 - Personal contact data is handled by the customer or vendor master (create/update).
- CL_EXM_IM_EHPRC_CP_BADI_006
The standard system contains an example implementation that reads address data from the extended address maintenance (transaction **EHPRC_CPO00**) only.
- Except for method ADDR_READ, the default and example implementations of all methods are identical.

Prerequisite for the delivered default and example implementation:

The following Business Functions must be activated in the Switch Framework (transaction SFW5):

- LOG_ESOA_OPS_2
- ESOA_OPS01

The delivered default and example implementations call customer or vendor API functions (classes CMD_EI_API and VMD_EI_API) in methods CONTACT_CUSTOMER_WRITE and CONTACT_VENDOR_WRITE. These do not process data correctly if one or more Business Functions are deactivated.

For more information about the standard settings (filters, single or multiple uses), see the *Enhancement Spot Element Definitions* tab in the BAdI Builder (transaction SE).

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
4. Save your entries and assign the Add-In to a package.
5. To edit a method, double-click its name.
6. Enter your implementation code between the method `<Interface Name>~<Name of Method>.` and `endmethod.` statements.
7. Save and activate your code. Navigate back to the *Change Implementation* screen.
Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
8. Choose *Activate*.
When the application program is executed, the system carries out the code in the method you wrote.

BAdI: Decoupling of Vendor Master

Use

This Business Add-In (BAdI) is used in the *Product Compliance for Discrete Industries*. This BAdI enables you to determine which table to use for saving vendor data. Since the standard system uses the SAP vendor master to store the vendor data, the purpose of the BAdI is to maintain the vendors outside of the vendor master.

This BAdI provides the following methods:

- GET_SUPPL_TAB_INFO
You can use this method to get the name of the vendor table. It can be used internally to determine the active implementation.
- CREATE_SUPPL
You can use this method to create a new vendor master record.
- VALIDATE_SUPPL_BY_ID
You can use this method to check if there is an existing supplier with this ID.
- GET_SUPPL_ID_BY_NAME
You can use this method to determine a vendor ID by the vendor name.
- GET_SUPPL_DATA_BY_ID
You can use this method to read vendor details for a vendor ID.
- GET_SUPPL_DATA_BY_ID_LIST
You can use this method to read vendor details for multiple vendor IDs.
- GET_SUPPL_DATA_BY_DIV
You can use this method to get vendor details using various criteria, for example, supplier ID and supplier name.

- CALL_SUPPL_HOTSPOT_NAV

You can use this method to specify how the vendor management is called. You can, for example, program the system to display a dialog box from an external system when you select a supplier with data in that external system.

Standard settings

In the standard system, the Business Add-In is activated. The default code is executed automatically. If you activate your own implementation, the default code is automatically deactivated.

For more information about the standard settings (filters, single or multiple uses), see the *Enhancement Spot Element Definitions* tab in the BAdI Builder (transaction SE).

BAdI Implementations

CL_DEF_IM_EHPRC_CP_BADI_003 (default implementation)

CL_EXM_IM_EHPRC_CP_BADI_003 (example implementation)

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
2. On this screen, enter a short description for your implementation in the *Implementation Short Text* field.
3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
4. Save your entries and assign the Add-In to a package.
5. To edit a method, double-click its name.
6. Enter your implementation code between the method `<Interface Name>~<Name of Method> . and endmethod . statements.`
7. Save and activate your code. Navigate back to the *Change Implementation* screen.
Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
8. Choose *Activate*.
When the application program is executed, the system carries out the code in the method you wrote.

Example

The example implementation references vendors from the SAP address management.

Integrate Compliance Information into Purchase Order

Use

In this Customizing activity, you integrate compliance information into purchase orders. By integrating compliance information, you can do the following:

- Perform a compliance check for purchase order items.
A message is shown if the purchase order item is not compliant with a compliance requirement or if no compliance information exists for a compliance requirement.
- Display compliance information from within the purchase order.
- Display compliance information in a Business Context Viewer side panel.

Requirements

For the integration of compliance checks and for displaying compliance information from within the purchase order, you have implemented the SAP enhancement methods as described below.

For the integration of the Business Context Viewer side panel, you have completed the Customizing activity Integrate Compliance Data with Business Context Viewer.

Standard settings

In the standard system, compliance information is not integrated into purchase orders.

Activities

Integrating Compliance Checks

If you want to integrate compliance checks into purchase orders, implement BAdI: Enhance Purchase Order Processing (Single-Screen Transaction) as follows:

- Implement method CHECK:

```
DATA: ls_header_data      TYPE mepoheader,          lt_item
TYPE purchase_order_items,      ls_item          LIKE LINE OF
lt_item,          lo_item          TYPE REF TO
if_purchase_order_item_mm,      ls_item_data      TYPE
mepoitem,          lt_item_data      TYPE tab_mepoitem. *-----
-----
--*
* get purchase order header IF NOT im_header IS INITIAL.
  ls_header_data = im_header->get_data( ).
ELSE.
  RETURN.
ENDIF.

* get purchase order items
  CALL METHOD im_header-
>get_items      RECEIVING
re_items = lt_item.

  LOOP AT lt_item INTO ls_item.
lo_item = ls_item-item.      CALL METHOD
lo_item->get_data      RECEIVING
re_data = ls_item_data.      APPEND
ls_item_data TO lt_item_data.
  ENDLLOOP.
```

```

* check compliance of purchase order
  CALL FUNCTION
  'EHPRC_PUR_ORD_CHECK'      EXPORTING
  is_header = ls_header_data
  it_item   = lt_item_data.

```

- If you want to call the compliance check from a separate system for purchasing, call function module EHPRC_PUR_ORD_CHECK with the RFC destination of the **Product Compliance for Discrete Industries** system.
- Users can lock positions manually to block subsequent processes of the purchase order.

Displaying Compliance Information from Within Purchase Orders

If you want to integrate a custom tab for purchase order items from which you can open compliance information, implement BAdI: Customer Screens in Purchase Order (Single-Screen Transaction) as follows:

1. Add type group MMMFD in the properties of your class.
2. Add the following attribute to your class:
 - Attribute: SUBSCREEN1
 - Level: Constant
 - Visibility: Public
 - Typing: Type
 - Associated Type: MEPO_NAME
 - Initial Value: 'ITEMSCREEN1'
3. Implement method EXECUTE:

```

      DATA: lo_item          TYPE REF TO if_purchase_order_item_mm,
            lo_header        TYPE REF TO if_purchase_order_mm,      ls_item
            TYPE mepoitem,    ls_header        TYPE mepoheader. *-----
            -----
--*   CASE
im_name.
      WHEN subscreen1.

*           is it an item? im_model can be header or
            item.          mmpur_dynamic_cast lo_item
            im_model.      CHECK NOT lo_item IS
            INITIAL.

            ls_item = lo_item->get_data( ).
            lo_header = lo_item->get_header( ).
            ls_header = lo_header->get_data( ).

      CASE im_fcode.
        WHEN 'SHOW_COMPLIANCE_INFO'.
          CHECK NOT ls_item-ematn IS INITIAL.
          CHECK NOT ls_header-lifnr IS INITIAL.

```

```

*          show web dynpro for compliance
          information
          CALL FUNCTION
'EHPRC_SHOW_COMPL_INFO'          EXPORTING
iv_material_id = ls_item-ematn
iv_supplier_id = ls_header-lifnr.

          WHEN OTHERS.
          ENDCASE.
          WHEN OTHERS.

          ENDCASE.

```

If you want to open the user interface for showing compliance information from a separate system for purchasing, call function module EHPRC_SHOW_COMPL_INFO with the RFC destination of the *Product Compliance for Discrete Industries* system.

4. Implement method MAP_DYNPRO_FIELDS:

```

          FIELD-SYMBOLS: <mapping> LIKE LINE OF ch_mapping.
*-----
-
--*   LOOP AT ch_mapping ASSIGNING
<mapping>.
          CASE <mapping>-fieldname.
* dummy mapping needed to show tab          WHEN 'LIFNR'.
          <mapping>-metafield = mmmfd_cust_01.
          ENDCASE.
          ENDLOOP.

```

5. Implement method SUBSCRIBE:

```

          DATA: ls_subscriber LIKE LINE OF re_subscribers.
*-----
-
--*
* we want to add a customer subscreen on the item detail tab
          CHECK im_application = 'PO'.
          CHECK im_element      = 'ITEM'.
* each line in re_subscribers generates a subscreen.
          CLEAR re_subscribers[]. * the name is a unique identifier for
the subscreen and defined in this class definition
          ls_subscriber-name = subscreen1. * the dynpro number to use
          ls_subscriber-dynpro = '0001'. * the program where the dynpro can
be found          ls_subscriber-program = 'SAPLEHPRC_PUR_ORD'. * each
subscreen needs his own DDIC-Structure; dummy structure because no
data needs to be transported          ls_subscriber-struct_name =
'EHPRC_LIFNR'. * a label can be defined          ls_subscriber-label =
text-001. * the position within the tabstrib can be defined
          ls_subscriber-position = 5. * the height of the screen can be
defined here. Currently we suport two screen sizes: * value <= 7 a
sevel line subscreen * value > 7 a 16 line subscreen

```

```
ls_subscriber-height = 7.    APPEND ls_subscriber TO
re_subscribers.
```

If you want to open the user interface for showing compliance information from a separate system for purchasing, create a custom customer function group with a dynpro by copying the function group MEPOBADIEX.

Modify your dynpro for example by using transaction SE51, remove the fields from the example screen and add a pushbutton with the name SHOW_COMPLIANCE_INFO, text "Show Compliance Information", and function code SHOW_COMPLIANCE_INFO to the screen layout.

Adapt the SUBSCRIBE method so that it uses your dynpro. Also replace the value of field struct_name with an existing structure, for example LFA1_KEY.

6. Create text symbol 001 with text "Compliance Information".

If you want to display the tab for compliance information in edit mode, you can implement the method FIELDSELECTION_ITEM of BAdI: Enhance Purchase Order Processing (Single-Screen Transaction) as follows:

```
- DATA: l_persistent TYPE mmpur_bool.    FIELD-SYMBOLS:
      <fs> LIKE LINE OF ch_fieldselection.    l_persistent
      = im_item->is_persistent( ).

      IF l_persistent EQ mmpur_yes.        READ TABLE
ch_fieldselection ASSIGNING <fs> WITH TABLE KEY metafield =
mmmfd_cust_01.        IF sy-subrc IS INITIAL.
          <fs>-fieldstatus = '*'. " Display
      ENDIF.
      ENDIF.
```

Additionally add type group MMMFD in the properties of your class.

Displaying Compliance Information in a Business Context Viewer Side Panel

For more information, see the documentation for the Customizing activity Integrate Compliance Data with Business Context Viewer.

Customer and Sales

Customer Material Information

BAdI: Access to Customer and Supplier Material Data

Use

This Business Add-In (BAdI) is used in *Product Compliance* of *SAP S/4HANA* and it enables you to read customer and supplier logistics data.

Standard settings

In the standard system, the BAdI is activated. The default code is executed automatically.

For more information about the standard settings such as filters, and single or multiple uses, see the *Enhancement Spot Element Definitions* tab in the BAdI Builder in transaction *SE*.

See also

For more information, see the following BAdI method documentations:

- READ LOGISTIC DATA FROM CUSTOMER
- READ LOGISTIC DATA FROM SUPPLIER
- CHECK IF A MATERIAL IS A SOLD OR PURCHASED MATERIAL
- CHECK IF MATERIALS ARE SOLD OR PURCHASED
- READ LOGISTIC DATA FOR EACH CUSTOMER - READ LOGISTIC DATA FOR EACH SUPPLIER

Customer and Contacts

Define Contact Person Functions

Use

In this Customizing activity, you can specify the contact functions that the system uses to determine the contact person for any compliance topics.

Standard settings

The standard system is delivered with examples.

Activities

Check the standard settings and change them, if necessary.

Specify Determination for Business Partners and Contacts

Use

In this Customizing activity, you can specify the priorities used to determine business partners and personal contacts. Priorities are handled in an ascending sequence; the highest priority is the one with the smallest priority number.

Product Compliance for Discrete Industries uses partner functions and contact functions to find contacts for supply chain collaboration. These partner functions and contact functions are delivered in the standard system. If you want to reuse your existing business partners (such as suppliers and customers) and existing contacts with their address data, change the partner and contact functions to your own functions.

Standard settings

The standard system is delivered with examples.

Activities

Check the standard settings and change them, if necessary.

You can set the following function priorities:

- For business partners: You can set different function priorities for the *Customer* and *Supplier* partner types. The business partner is determined according to the priority of the partner function. The determined business partner is the business partner assigned to the partner function that has the highest priority.
- For contact persons: Contact persons are determined according to the priority of the contact function. The determined contact person is the contact person assigned to the contact function that has the highest priority.

BAdI: Functions to Handle Business Partner Contacts

Use

This Business Add-In (BAdI) is used in the Product Compliance for Discrete Industries. You can use this BAdI to specify the functions to determine business partner data.

This BAdI provides the following methods for determining address and contact data:

- ADDR_READ:
You can use this method to read business partner data and personal address data according to various selection criteria.
- COUNTRY_READ:
You can use this method to read the country and determine whether the business partner is located within the regulation area.

This BAdI provides the following methods to update contact person data:

- CONTACT_CUSTOMER_WRITE:
You can use this method to add customer contact persons or to update the existing data of customer contact persons.
Depending on the number of the contact person (CS_CONTACT-PARNR), either a new customer contact person is created (no value), or the data of the specified customer contact person is updated.
- CONTACT_VENDOR_WRITE:
You can use this method to add vendor contact persons or to update the existing data of vendor contact persons.
Depending on the number of the contact person (CS_CONTACT-PARNR), either a new vendor contact person is created (no value), or the data of specified given vendor contact person is updated.

Standard settings

The Business Add-In is activated in the standard system. The default code is executed automatically. If you activate your own implementation, the default code is automatically deactivated.

BAdI Implementations

- CL_DEF_IM_EHPRC_CP_BADI_006
This BAdI contains a default implementation that supports the additional attributes for the discrete industry such as the DUNS number, which otherwise cannot be stored in the vendor master in the standard system. The default implementation has the following settings:
 - Address data is read from the vendor master (supplier data).
 - Address and personal data is handled by the vendor master (read/write) and business partner (read only).
 - Personal contact data is handled by the customer or vendor master (create/update).
- CL_EXM_IM_EHPRC_CP_BADI_006
The standard system contains an example implementation that reads address data from the extended address maintenance (transaction **EHPRC_CPO00**) only.
 - Except for method ADDR_READ, the default and example implementations of all methods are identical.

Prerequisite for the delivered default and example implementation:

The following Business Functions must be activated in the Switch Framework (transaction SFW5):

- LOG_ESOA_OPS_2
- ESOA_OPS01

The delivered default and example implementations call customer or vendor API functions (classes CMD_EI_API and VMD_EI_API) in methods CONTACT_CUSTOMER_WRITE and CONTACT_VENDOR_WRITE. These do not process data correctly if one or more Business Functions are deactivated.

For more information about the standard settings (filters, single or multiple uses), see the *Enhancement Spot Element Definitions* tab in the BAdI Builder (transaction SE).

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
2. On this screen, enter a short description for your implementation in the *Implementation Short Text* field.
3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
4. Save your entries and assign the Add-In to a package.
5. To edit a method, double-click its name.
6. Enter your implementation code between the method `<Interface Name>~<Name of Method>.` and `endmethod.` statements.
7. Save and activate your code. Navigate back to the *Change Implementation* screen.

Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:

8. Choose *Activate*.
When the application program is executed, the system carries out the code in the method you wrote.

Integrate Compliance Information into Sales Orders

Use

In this Customizing activity, you integrate compliance information into sales orders. By integrating this information, you can do the following:

- Perform a compliance check for products of sales order items.
A message is shown if the product of a sales order item is not compliant with a compliance requirement.
- Display compliance information from within the sales order.
- Display compliance information in a Business Context Viewer side panel.

Requirements

For the integration of compliance checks and for displaying compliance information from within the sales order, you have implemented the SAP enhancement methods as described below.

The country of customers is used to determine relevant regulatory lists, for which you have had defined compliance requirements and related compliance checks. Adapt the mentioned countries in the Customizing activity Create Regulatory Lists and Customer Lists.

For the integration of the Business Context Viewer side panel, you have completed the Customizing activity Integrate Compliance Data with Business Context Viewer.

Standard settings

In the standard system, compliance information is not integrated.

Activities

Integrating Compliance Checks

If you want to integrate the compliance check in a system where *Product Compliance for Discrete Industries* is installed, follow the instructions given in BAdI: Integration of Compliance Checks into Sales Order.

If you want to integrate the compliance check in a separate system for sales and distribution, use the subroutine USEREXIT_SAVE_DOCUMENT_PREPARE in include MV45AFZZ to do so. For further information on the exit see User Exits In Sales Document Processing. Call the RFC enabled function module EHPRC_SALES_ORD_CHECK with the RFC destination of the *Product Compliance for Discrete Industries* system to perform the compliance check:

```
DATA: lt_vbap TYPE va_vbapvb_t,  
      lt_vbpa TYPE va_vbpavb_t,  
      lt_vbuk TYPE va_vbukvb_t,  
      lt_vbup TYPE va_vbupvb_t.  
  
APPEND LINES OF xvbap TO lt_vbap.
```



```

APPEND LINES OF xvbpa TO lt_vbpa.
APPEND LINES OF xvbup TO lt_vbup.
APPEND LINES OF xvbuk TO lt_vbuk.

CALL FUNCTION 'EHPRC_SALES_ORD_CHECK'
EXPORTING      fvbak = vbak      fxvbap
= lt_vbap      fxvbpa = lt_vbpa
fxvbuk = lt_vbuk      fxvbup = lt_vbup.

```

You can use status profiles if you want to enhance the compliance check so that it blocks subsequent processes of the sales order.

Displaying Compliance Information from Within Sales Orders

If you want to open compliance information on the *Additional Data 2* tab of sales order items, perform a screen modification as described in the Customizing activity User Exits In Sales Document Processing.

- Modify the dynpro 8459 of function group SAPMV45A (Sales Order Processing) using transaction SE51:
- Add a pushbutton with the name SHOW_COMPLIANCE_INFO, text "Show Compliance Information", and function code SHOW_COMPLIANCE_INFO to the screen layout.
- Adapt the flow logic of dynpro 8459:

```

PROCESS AFTER INPUT.
module zz_okcode_8459.

```

- Adapt the source code of include MV45AIZZ for PBO / PAI processing using transaction SE38:

```

MODULE zz_okcode_8459 INPUT.

  IF sy-ucomm = 'SHOW_COMPLIANCE_INFO'.
*   show web dynpro for
  compliance information
  CALL FUNCTION
  'EHPRC_SHOW_COMPL_INFO'      EXPORTING
  iv_material_id = vbap-matnr.

*   stay on screen in sales
  order      fcode = 'PZKU'.
  ENDIF.
ENDMODULE.                                "zz_okcode_8459 INPUT

```

If you want to open the user interface for displaying compliance information from a separate system for sales and distribution, call function module EHPRC_SHOW_COMPL_INFO with the RFC destination of the *Product Compliance for Discrete Industries* system.

Displaying Compliance Information in a Business Context Viewer Side Panel

For more information, see the documentation for the Customizing activity Integrate Compliance Data with Business Context Viewer.

BAdI: Integration of Compliance Checks into Sales Order

Use

This Business Add-In (BAdI) is used in the *Product Compliance for Discrete Industries* component. You can use this BAdI to activate and enhance the compliance check within sales orders.

This BAdI provides the method CHECK_COMPLIANCE for checking the compliance of sales orders.

Standard settings

The BAdI is not active in the standard system.

For more information about the standard settings (filters, single or multiple uses), see the *Enhancement Spot Element Definitions* tab in the BAdI Builder (transaction SE).

Example

You can find example implementations in the BAdI Builder on the *Enhancement Spot Element Definitions* tab in the *Implementation Example Classes* section.

The following example implementations are available:

- BADI_EHPRC_SALES_ORDER
This implementation shows a message if the product of a sales order item is not compliant with a compliance requirement.
You can use status profiles if you want to enhance the compliance check so that it blocks subsequent processes of the sales order.

Material Master Integrate Compliance Info and Basic Materials into Material

Master

Use

In this Customizing activity, you integrate compliance information into the material master. By integrating this information, you can do the following:

- Display compliance information from within material master - Edit basic material composition from within material master - Display compliance information in a Business Context Viewer side panel.

Requirements

For displaying compliance information or editing a basic material composition from within the material master, you have implemented the customer exit as described below.

For the integration of the Business Context Viewer side panel, you have completed the Customizing activity Integrate Compliance Data with Business Context Viewer.

Standard settings

In the standard system, compliance information is not integrated.

Activities

Create a backup of the current configuration by doing the following:

1. Select the screen sequences that you want to enhance.
2. In the *Table View* menu, select *Transport* to create a Customizing transport. Ensure that the current screen sequence and dependent data are stored in the transport.
3. Release the transport.

To integrate your view of the material, modify the settings of a screen sequence by doing the following:

1. Select the screen sequence that you want to enhance with the compliance information and basic material composition. Use for example screen sequence 21 or a screen sequence specified in the Customizing activity Assign Screen Sequences to User/Material Type/Transaction/Industry Sector.
2. If you want to integrate the compliance information and basic material composition into an own tab:

- a) In the *Data Screens* maintenance view, create an entry with the following parameters:

<u>Field Name</u>	<u>Value</u>
Screen Sequence:	21
Logical Screen:	91
Screen Description:	Compliance / Basic Materials
Screen Type:	1
Number of Screen Container:	4000
Maintenance Status:	K
GUI Status:	DATE
Title Type:	2
Alternative Screen Description:	Compl. / Basic Mat.

- b) In the *Subscreens* maintenance view, enter the values for the first two subscreens as described in the table below:

<u>SSq</u>	<u>Scr</u>	<u>Ss</u>	<u>Program</u>	<u>Scr.</u>
21	91	1	SAPLMGD1	1002
21	91	2	SAPLEHPRC_CP_MM01	8030
21	91	3	SAPLMGD1	0001
21	91	4	SAPLMGD1	0001
21	91	5	SAPLMGD1	0001
21	91	6	SAPLMGD1	0001

3. If you want to integrate the compliance information and basic material composition into an existing tab:

- a) In the *Data Screens* maintenance view, select the subscreen you want to enhance, for example the logical screen 08 for *Basic Data 2*.
- b) In the *Subscreens* maintenance view, enter the values for the subscreen in the first unused line. For logical screen 08, this results in the table below:

<u>SSq</u>	<u>Scr</u>	<u>Ss</u>	<u>Program</u>	<u>Scr.</u>
21	08	1	SAPLMGD1	1002

21	08	2	SAPLMGD1	2002
21	08	3	SAPLMGD1	2010
21	08	4	SAPLMGD1	2003
21	08	5	SAPLMGD1	2004
21	08	6	SAPLMGD1	2499
21	08	7	SAPLMGD1	2012
21	08	8	SAPLEHPRC_CP_MM01	8030
21	08	9	SAPLMGD1	0001
21	08	10	SAPLMGD1	0001

4. Create and release a transport for this configuration.
5. If you want to open the user interfaces for displaying compliance information and basic material compositions from a separate system for master data, copy function group EHPRC_CP_MM01 and adapt the subroutine l_okcode_ts so that the function modules EHPRC_SHOW_COMPL_INFO and EHPRC_EDIT_BASMAT_COMP are called with the RFC destination of the *Product Compliance for Discrete Industries'* system.

SAP Product Stewardship Network

Specify SAP Product Stewardship Network Integration

Use

In this Customizing activity, you get details that describe how to integrate SAP Product Stewardship Network into Product Compliance using Web Services.

All users work with one single SAP Product Stewardship Network user, so that the credentials can be configured in the logical port of the Web Service.

In the *Activities* section of this document, it is defined how to configure the available Web Services for the integration of the following functionalities:

- **Side panel functionality**
- **Supplier collaboration**
- **Regulatory list content load**

Hint

For further import and export options of regulatory list revisions see Customizing activity Export and Import of Regulatory List Revisions

For IMDS specific import topics see Customizing activity Set Up System with IMDS All Files

Requirements

- You have registered an enterprise account on SAP Product Stewardship Network
- For the integration of the **side panel functionality**, either you have the WSDL file (web service definition language file) or you know the URL to the WSDL file of the Product Declaration Web Service.

Hint:

To complete the Web Service configuration for the **regulatory list content load** you do not need to setup the configuration for the **side panel functionality** because there is no dependency between the two configurations.

Be aware:

Before you can use the Web Service, you need to import the related certificates from SAP Product Stewardship Network. For more details, see SAP Note 1766375.

Standard settings

SAP Product Stewardship Network is integrated into the compliance interfaces in a Business Context Viewer side panel. For more information, see the documentation for the Customizing activity Integrate Compliance Data with Business Context Viewer.

Activities

Configure the necessary Web Service consumer proxies. You have to perform the following steps twice, once for each proxy. The step description indicates whether specific data for a proxy has to be entered.

1. Start the transaction SOA Manager and navigate to *Web Service Configuration* in *Service Administration View*. Search for the consumer proxy and manually create the logical port for the following Web Service proxies:
 - A for the integration of the side panel functionality. Compare step 6A. :
CO_EHFND_OD_PRODUCT_DECLARAT
 - B for the integration of the regulatory list content load and of the supplier collaboration. Compare step 6B. : CO_EHFND_OD_PRODUCT_STEWARDSHI
2. Select the service proxy and choose *Apply Selection*. Create or edit the logical port EHSM_OD_PORT in the detail table view *Configurations*.
3. Select the Logical Port is Default checkbox.
4. Enter a Description for the logical port.
5. Select Configuration Type WSDL Based Configuration
6. Select the option *Via HTTP Access* and specify the corresponding WSDL URLs from SAP Product Stewardship Network:
 - A for the integration of the side panel functionality. Compare step 1A.: `https://< name of the system>/services/ProductDeclaration?wsdl`
 - B for the integration of the regulatory list content load and of the supplier collaboration. Compare step 1B.: `https://< name of the system>/services/ProductStewardshipNetwork?wsdl` **Hint:**
You need to make sure that the WSDL file can be accessed successfully. Depending on your network configuration, it can be necessary to specify an HTTP proxy server using the *Show/Hide Proxy Settings* button. Alternatively you can manually download the WSDL files from the URLs specified above and use the option *Via File* instead. If you choose this option, you need to ensure a valid proxy server configuration under *Transport Settings* in the following screen.
7. Enter a user ID and password in the authentication settings of your logical port under *Consumer Security*. Use your registered user on the SAP Product Stewardship Network.

Extract Supplier and Contact Information

Use

In this Customizing activity, you collect contact information for your supplier's product-compliance-contacts. You can export the contact information to a local spreadsheet file with the file extension **.CSV** and import the information into the SAP Product Stewardship Network.

Requirements

You defined the prioritization of contact functions in the Customizing activity Specify

Determination for Business Partners and Contacts.

This prioritization defines, which of the suppliers and contacts are shown.

Activities

To display supplier and contact information, start this Customizing activity by entering the following information:

- Field: *Supplier*
Enter a single ID or a range of IDs for those suppliers for which you want to get contact details.
- Check box: *Only suppliers with assessed supplier parts* Mark it to filter and get the suppliers with assessed supplier parts.
- Check box: *Only not yet uploaded suppliers*
Mark it to filter and get the suppliers that are not yet uploaded to *SAP Product Stewardship Network*.

Output

The default output contains the data fields that are required for the import into *SAP Product Stewardship Network*. You can add additional data fields by changing the layout of the output screen.

Ensure that the output of this activity matches to the data format of *SAP Product Stewardship Network*. For a detailed description of the data fields, see <http://help.sap.com/PSN> under *SAP Product Stewardship Network -> Application Help -> Inviting and Connecting with Suppliers and Customers -> Filling Out the Template for Uploading and Updating Companies*.

Schedule Job for Initial Synchronization and Re-Synchron.

Use

In this Customizing activity, you schedule a background job to process the initial synchronization or re-synchronisation of suppliers and supplier parts with the SAP Product Stewardship Network.

Use transaction SLG1 to view the application log for this background job:

Object EHPRC_SCC

Subobject OD_PSN_INTEGRATION

Requirements

Ensure that the user, which you use for background processing, has sufficient authorizations to update compliance data. Therefore, assign the role `SAP_EHSM_PRC_COMPONENT_ENG` to the system user.

Activities

Use the job wizard to schedule the report `R_EHPRC_SCC_OD_STATUS_SYNC`.

The report offers the following two options:

- Synchronization: Using Change Events
Choose this option and the synchronization starts whenever a relevant change event arise in the SAP Product Stewardship Network,
- Synchronization: Full Synchronization
Choose this option for an initial synchronization or re-synchronization with the SAP Product Stewardship Network independent from a change event.

Create a variant for report `R_EHPRC_SCC_OD_STATUS_SYNC` with option Synchronization: *Full Synchronization*

Use this variant to schedule the report for the initial synchronization with the SAP Product Stewardship Network.

You can also use this variant to schedule the report for a re-synchronization with the SAP Product Stewardship Network. The recommended interval for a re-synchronization is once per week at the beginning and later every 4 weeks.

Use the option *Sync. with Declaration Import* to synchronize and import existing declarations from the SAP Product Stewardship Network.

Use the parameter *Users to Inform* to add users which will be informed by SAPmail in case of an synchronization issue.

Schedule Job for Processing Change Events

Use

In this Customizing activity, you schedule a background job that automatically retrieves and processes updates done in SAP Product Stewardship Network.

The background job collects relevant updates such as updates of declarations that are assigned to a supplier part, and such as status updates of suppliers.

Use transaction `SLG1` to view the application log for this background job:

Object	EHPRC_SCC
Subobject	OD_PSN_INTEGRATION

Requirements

Ensure that the user, which you use for background processing, has sufficient authorizations to update compliance data. Therefore, assign the role `SAP_EHSM_PRC_COMPONENT_ENG` to the system user.

Activities

Use the job wizard to schedule the report `R_EHPRC_SCC_OD_STATUS_SYNC`.

The report offers the following two options:

- Synchronization: *Using Change Events*
Choose this option and the synchronization starts whenever a relevant change event arise in the SAP Product Stewardship Network,
- Synchronization: *Full Synchronization*
Choose this option for an initial synchronization or re-synchronization with the SAP Product Stewardship Network independent from a change event.

Create a variant for report `R_EHPRC_SCC_OD_STATUS_SYNC` with option Synchronization: *Using Change Events*. Use this variant to schedule the report on a periodic basis. The recommended interval is once per hour.

Use the option *Sync. with Declaration Import* to synchronize and import existing declarations from the SAP Product Stewardship Network.

Use the parameter *Users to Inform* to add users which will be informed by SAPmail in case of an issue.

Note:

For more details, such as change events and their remaining time, see details in the *Web Service Guide* on the SAP Service Marketplace - SAP Product Stewardship Network.

Business Add-Ins (BAdIs) for Network Integration

BAdI: Automatic Release of Imported Declaration Data

Use

This Business Add-In (BAdI) is valid for *Product Compliance in Discrete Industries*. You can use this BAdI to determine whether declaration data that was imported from *SAP Product Stewardship Network* shall be automatically released.

The BAdI uses the method `CHECK_DATA_FOR_RELEASE` for this determination:

- The importing parameter `IT_REQR_KEY` contains a table of all compliance requirement revisions that were created during the import. While implementing the BAdI, you can load and check the declaration data.
- Set the returning parameter `RV_AUTO_RELEASE` to `abap_true` if you want to release the data automatically. If you set the parameter to `abap_false`, the declaration data will not be saved in the database. The user has the chance to perform the import later manually.

Standard settings

In the standard delivery, an automatic release is only performed when, after executing the corresponding compliance checks, all imported compliance requirement revisions have the compliance status *Compliant*.

This means that any substances above threshold or exempted substances will prevent the auto-release.

Example

Check the fallback implementation in class `CL_EHPRC_IMPORT_DECLARATION_FB`.

BAdI: Supply Chain On-Demand Integration

Use

This Business Add-In (BAdI) is used in *Product Compliance for Discrete Industries*. You can use this BAdI to exchange data with the *SAP Product Stewardship Network*. You have to decide how this BAdI deals with manufacturer part numbers.

Requirements

1. You have checked if you use multiple manufacturer parts (MPN) for one material.
2. You have configured and activated the Web service for the communication with the SAP Product Stewardship Network, as described in the Specify SAP Product Stewardship Network Integration Customizing activity.

Standard settings

This BAdI definition is not active in the standard system. It contains the following methods:

- `GET_SUPPLIER_CONNECTION_STATUS`
Use this method to determine the status of the connection between your company and one or more suppliers. It shows whether each supplier has already been invited or not. If a supplier has been invited (yes), it shows whether the supplier has accepted or rejected the invitation.
- `GET_SUPPLIER_PART_STATUS`
Use this method to determine detailed status information about one or more supplier parts. If an assigned declaration exists, you also can view the status of this declaration for each supplier part.
- `GET_EXTERNAL_PAGE_URL`
Use this method when you want to process a supplier part in the SAP Product Stewardship Network to get an external URL to this network.
- `INTEGRATION_ENABLED`
Use this method to verify if the integration of the SAP Product Stewardship Network is available.
- `GET_DECLARATION`
Use this method to get declaration data for a component from the SAP Product Stewardship Network for one supplier part.
- `PROCESS_COMPONENTS`
Use this method to navigate to the SAP Product Stewardship Network and process one or more selected supplier parts.
- `GET_STATUS_CHANGES`
Use this method to synchronize all suppliers and supplier parts that have been changed on the SAP Product Stewardship Network.
- `ACKNOWLEDGE_STATUS_CHANGES`
Use this method to send an acknowledgement to the SAP Product Stewardship Network for each supplier, for each supplier part, or for either that have been successfully synchronized using the method `GET_STATUS_CHANGES`. This causes the SAP Product Stewardship Network to remove the supplier or supplier part from the list of changed objects accordingly.
- `ACKNOWLEDGE_ALL_STATUS_CHANGES`

Use this method to send an acknowledgement to the SAP Product Stewardship Network after a successful full synchronization. This causes the SAP Product Stewardship Network to remove all suppliers and supplier parts from the list of changed objects.

- `CONVERT_PRCDATA_TO_PSN_COMP_ID`

Use this method to create a unique identifier for the supplier part on the SAP Product Stewardship Network. This identifier is used and displayed as a product identifier in the SAP Product Stewardship Network. By default, it contains the material number and, only in case there are multiple manufacturer parts for one material, the MPN. For more information about the standard settings, such as filters, single use, or multiple uses, see the *Enhancement Spot Element Definitions* tab in the `BadI Builder (SE)`.

BAdI Implementations

- You need the default implementation `BADI_EHPRC_SCC_OD_MPN`, if you use multiple manufacturer parts for one material and you want to use the supply chain on-demand integration with MPN handling.
- You need the fallback class `CL_EHPRC_SCC_OD_INTEGRATION_FB`, if you do not use multiple manufacturer parts.

Activities

3. Decide how the `BADI_EHPRC_SCC_OD_INTEGRATION` BAdI should work:
 - If you use multiple MPNs, activate the default implementation `BADI_EHPRC_SCC_OD_MPN`.
 - If you do not use multiple MPNs, leave the standard implementation as deactivated. The system uses the fallback class `CL_EHPRC_SCC_OD_INTEGRATION_FB`.
4. If you activate the default implementation, run a full synchronization by using the `R_EHPRC_SCC_OD_STATUS_SYN` report.
5. If you want to adapt the standard functionality, create a new BAdI implementation. This BAdI is not "multiple use" and for this reason, only one implementation can be active at the same time.

Product Lifecycle Management Integration

Integrate Compliance Information into CAD Environment

Use

In this Customizing activity, you integrate compliance information into the CAD environment. By integrating this information, you can do the following:

- Integrate compliance information into Autodesk Inventor
- Display compliance information in a Business Context Viewer side panel from within CAD Desktop.

Requirements

For integrating compliance information into Autodesk Inventor, **SAP Note 36010** must be implemented in your system.

For the integration of the Business Context Viewer side panel, you have completed the Customizing activity Integrate Compliance Data with Business Context Viewer.

Standard settings

In the standard system, compliance information is not integrated.

Activities

For further details about the integration into Autodesk Inventor, see **SAP Note 36010**.

IMDS Compliance

Install IMDS Batch Client

Use

In this Customizing activity, you can check all necessary steps for the installation of the IMDS Batch Client.

Requirements

The IMDS batch client is a 32-bit application for Microsoft Windows operating systems.

You can only install it on servers of a Microsoft Windows operating system that support these 32-bit applications. It communicates with the SAP S/4HANA back-end system via the same RFC configuration as WWI. If you already use a WWI installation you can install the IMDS batch client on the same server.

- Install the IMDS batch client software as a windows service, to ensure that it starts automatically at each server startup.
Additionally, the IMDS batch client communicates via `https` with the IMDS servers. This communication occurs via the Internet.
- Ensure that the necessary firewall configurations have been made.
The IMDS batch client uses a Java library (`JSSL.zip`) for the communication with the IMDS. You can download the Java Library separately from IMDS. It is part of the IMDS batch client download from IMDS.
- Ensure that a Java runtime environment of release 1_16 or higher is properly installed. In order to run the IMDS batch client, you require an *IMDS Advanced Interface* contract for your company and users with **Advanced Interface** profiles.
- See the *Technical Preconditions* chapter in the batch client documentation from IMDS
- Technical user accounts are used for authorization between the systems. To ensure a certain level of security it is strongly recommended to use `https` protocol or SNC (Secure Network Communication) mechanisms for the communication between the systems.

Activities

Installation

1. Preparing Batch Client

Download the installation package for IMDS batch client.

2. Install IMDS Batch Client Files

Install the IMDS batch client installation archive according the description in SAP Note

1712603 to your local disk on the server, for example **c:\imds_interface**. After you have extracted the archive to your local disk, the root folder `imds_interface` has the following directory structure: `<imds_interface>` (Root folder for the IMDS batch client installation)

```
| +-- JavaClient (Extract batch client from IMDS including JSSL.zip file here)
+-- imdsbatchclient.exe
+-- download.bat
+-- upload.bat
+-- further files
```

The `imds_interface` folder contains the required files, such as `imdsbatchclient.exe`.

3. Get the latest downloads from IMDS

Before you continue, make sure that you download the latest batch client together with the upload and download manual from the IMDS production server at <https://www.mdsystem.com>.

- a) Login to IMDS (with AI User) and navigate to the download section underneath the administration menu item. Download the requested zip files containing the batch client, the upload manual and the download manual.
- b) Extract the IMDS batch client (*.zip file) to the **<IMDS Interface>\IMDSJavaClient** folder for your local server installation. In particular, the JSSL.zip file must be stored in this folder.

4. Adjust the .bat files for the IMDS Batch Client

The root folder `<imds_interface>` contains the following three batch files:

```
upload.bat download.bat result.bat
```

Program `imdsbatchclient.exe` uses these batch files to communicate with the IMDS. Edit each `.bat` file from this folder to use the current folder names. Make sure that the `.bat` files point to the correct location of the JSSL.zip file.

In each batch job file, you find a drive letter after the block of each statement. Change this drive letter to the drive on which you installed the IMDS batch client. In the subsequent line, you find a `cd`-statement followed by a path. Change the path so that the drive letter and the path together match the path to the JSSL.zip file.

For example:

Full path of JSSL.zip is **c:\imds_interface\imds\JavaClient\JSSL.zip** Content of the batch job files is:

```
... echo ... c: cd
\imds_interface\imds\JavaClient
...
```

5. Adjust the SAPRFC.INI file

Before you can start the IMDS batch client, you must adjust or create a RFC destination that points to the SAP S/4HANA back-end system in the `SAPRFC.INI` file. If the environment variable `RFC_INI` is set on the WWI server, do not edit the local `SAPRFC.INI` of the IMDS batch client. Instead, edit the global `SAPRFC.INI` indicated by the environment variable. Best practice is to have only one `SAPRFC.ini` on one device.

```
DEST    =    IMDS_BATCH_CLIENT_XXX
PROGID =    IMDS_BATCH_CLIENT_XXX
TYPE   =    R
```

GWHOST = <your gateway host
GWSERV = <your gateway service
RFC_TRACE = 0

Replace **XXX** with the system ID of your back-end system. The TCP/IP program ID (value of PROGID) must exactly match the TCP/IP program ID of the corresponding RFC destination in the SAP S/4HANA back-end system.

The file `SAPRFC.INI` is located in the installation directory of the IMDS batch client on the WWI server, for example **C:\IMDS**). In this file, you must maintain the parameters `GWHOST`, `GWSERV` and `PROGID` according to the settings in transaction `SM59`.

<u>Parameter</u>	<u>Description</u>
<code>GWHOST</code>	Enter the application server on which your generation server is to be registered. Enter the complete router string including the application server, for example, <code>GWHOST=/H/mum/H/hstd01</code> .
	You trigger the application server and the router string by selecting your system in the SAP logon screen and then choosing <i>Edit</i> .
<code>GWSERV</code>	Enter the name of the gateway service provided on the <code>GWHOST</code> .
	You trigger the gateway service by selecting your system in the SAP logon screen and then choosing <i>Edit</i> . The name consists of the text <code>sapgw</code> and the system number, for example, <code>GWSERV=sapgw02</code> .

6. Starting Batch Client with RFC Destination

Install a Windows service that on the system start automatically starts the `IMDSBATCHCLIENT.EXE` from the IMDS batch client installation folder (such as **C:\IMDS_INTERFACE\IMDSBATCHCLIENT.EXE**) with the following settings:

<i>Name</i>	<i>IMDS Batch Client</i>
<i>Target</i>	<IMDS Batch Client installation folder>\imdsbatchclient.exe #D<RFC Destination Name>
	<i>Example:</i>
	<code>c:\imds_interface\imdsbatchclient.exe #DIMDS_BATCH_CLIENT_XXX</code>
<i>Start in</i>	<IMDS Batch Client installation folder> <i>Example:</i> <code>c:\imds_interface\</code>

Be aware

- Use the value of <RFC Program ID> for setting up the RFC destination in the SAP S/4HANA back-end system while processing the Configuration Guide IMDS.
- Refer to file `PARAMETERS.TXT` in the IMDS batch client installation folder for a complete list of supported call parameters of `IMDSBATCHCLIENT.EXE`.
- To install the IMDS Batch Client application as a service - depending on the Microsoft Windows operating system version - you can use the programs **Srvany.exe** (Applications as Services Utility) and **Instsrv.exe** (Service Installer) from the Microsoft® Windows® Resource Kit Tools.

Setup RFC Connection

1. RFC Destination in R/3 System

In transaction `SM59`, create the following RFC destination:

Parameter	Value
Type T	<i>TCP/IP Connection</i>
RFC Destination	<i>IMDS_BATCH_CLIENT</i>
Description	<i>Interface to IMDS database</i>
Activation Type	<i>Registered Server Program</i>
Program ID	<i><RFC Program ID> (as described in "Installation - point 5 in this document)</i>

Example:

IMDS_BATCH_CLIENT_XXX Replace XXX with the system ID of your ERP system

2. IMDS Connection Parameters

Configure the IMDS connection parameters in the Customizing activity Specify IMDS System.

Set up directory structure for IMDS

Use

In this Customizing activity you set-up a directory structure for IMDS.

Activities

Set-up directory structure for IMDS

Create the download, archive and error directories on the application server. We recommend that you use the following folder structure to import the IMDS All files:

- Download folder: \\Application_Server\#\EHPRC_Files\Import\
- Archive folder: \\Application_Server\#\EHPRC_Files\Archive\
- Error folder: \\Application_Server\#\EHPRC_Files\Error\ Create logical path and file name definitions for the IMDS directories

Create the following logical path in transaction FILE:

Logical File Path	EHPRC_HOME_PATH
Name	Product Compliance Home Path

Create the following logical file name definitions in transaction FILE:

Logical fileName	Physical File	Data Format	Application Area
Logical Path			
EHPRC_ARCHIVE_DIR	Product Compliance Archive Directory	import\archive\	DIR
EHPRC_HOME_PATH			
EHPRC_ERROR_DIR	Product Compliance Error Directory	import\error\	DIR
EHPRC_HOME_PATH			
EHPRC_IMPORT_DIR	Product Compliance Import Directory	import\	DIR
EHPRC_HOME_PATH			

Specify IMDS System

Use

In this Customizing activity, you configure the IMDS connection parameters.

Standard settings

In the standard system, all settings that are not customer-specific are already specified. You can, however, specify the following customer-specific settings:

Company Org. ID	Your own IMDS company ID
Download URL	URL from IMDS system
Upload URL	URL from IMDS system
U.User-ID	User ID for data upload using the IMDS
Advanced Interface	
U.User-Pass	Password for data upload using the IMDS
Advanced Interface	
D.User-ID	User ID for data download using the IMDS
Advanced Interface	
D.User-Pass	Password for data download using the IMDS
Advanced Interface	
RFC Destination	RFC destination of the IMDS batch client
Proxy Host	
Proxy Port	
Proxy User	
Proxy Password	Proxy settings for connecting the IMDS (used by the IMDS batch-client interface)
Status Upload	Indicates if the IMDS status upload functionality is enabled via IMDS Advanced Interface for your company.

Activities

Changing the configuration for IMDS test and productive system

Different connection parameters exist for the IMDS test system (IMDS Model Office) and the IMDS productive system. The IMDS productive system should not be used for testing purposes. For that reason it is recommended to connect the SAP development and test system with the IMDS Model Office.

To change the connection parameters for IMDS in, for example, a productive environment, start report R_EHPRC_WWI_IMDS_CUST_SET in transaction SA38. Executing this report allows you to change the connection parameters for IMDS without creating a customizing request. Thus you are able to change the RFC destination of the productive IMDS batch client by editing the parameter RFC destination.

Note

The passwords are stored client specific. It is therefore not possible to transport passwords between systems and clients. You need to create passwords on each client.

Verify IMDS default customizing

Use

In this Customizing activity, you verify the default customizing for the IMDS.

Activities

Basic Material Management

Enter one of the following values for the parameter `IMDS_STREAMLINE_MATERIALS_Enable_Product_Upload_with_New_Materials` in the Customizing activity Specify Environment Parameters for Back-End .

- 'X': If the parameter is set to true, unknown basic materials that are contained in a product are uploaded (created) and released as a module in the IMDS automatically.
- Space: Parameter is not set and unknown basic materials are not registered automatically at IMDS without releasing the basic material (default option).

Units of measure

SAP S/4HANA provides for *Product Compliance for Discrete Industries* the environment parameter `GEN_UNIT_PIECE_INTERNAL` *Internal Unit of Measurement for Piece* for the Piece unit of measure in the Customizing activity Specify Environment Parameters for Back-End .

If you use a unit of measure different than ST (piece), you must make sure that the import mapping contains the correct unit of measure in the UnitConversion view.

Confidential Substances

The confidential component type is defined by the environment parameter `PDB_COMP_TYPE_CONFIDENTIAL` *Component Type for Confidential Comp.* in the Customizing activity Specify Environment Parameters for Back-End .
The default component type for confidential substances is CONFIDENT.

IMDS identification listings

Configure the identification listings:

- `CP_IMDSSUP` *Identifiers in the hitlist in IMDS Supplier MDS Center* to show the identifiers in the hit list of the IMDS supplier center
- `CP_IMDSCUS` *Identifiers in the hitlist in IMDS Customer MDS Center* to show the identifiers in the hit list of the IMDS customer center under Check Identification Listing.

Set Up System with IMDS All Files

Use

In this Customizing activity, you enter master data and company-specific data from the International Material Data System (IMDS) into the system, to use *SAP S/4HANA* as an IMDS in-house solution. The IMDS provides the data (IMDS initial files and IMDS all files). You can download this data by using the IMDS Advanced Interface and then import the data into your system.

When importing the files as described below the system does the following in the background:

- It creates or updates the pure substances imported from the IMDS `SBALL` file.
- It creates a new regulatory list revision for `GADSL` with status *In Process* or updates the existing `GADSL` revision.

- If the SBAll file contains entries for substances listed by REACH-SVHC, a new regulatory list revision for REACH-SVHC is created with status *In Process* or the existing REACH-SVHC revision is updated.
- It checks, by using the CAS number, for each pure substance from IMDS, whether the corresponding listed substance exists in the GADSL list.
- If yes: everything is ok.
- If no, the system checks, if the corresponding listed substance is there in the delivered content.
 - Is there the corresponding listed substance, then the system uses this one to create the new listed substance.
 - Is there no corresponding listed substance, then the system creates a new listed substance without a relation to the content list.
- It checks the mapping between pure substance and listed substance and adds necessary entries.

At the end of the import process, the user only has to release the new regulatory list revision of GADSL in the regulatory list management.

Hint

For further import and export options of other regulatory list revisions, see the Customizing activity *Export and Import of Regulatory List Revisions*. For updating regulatory list revisions from SAP Product Stewardship Network, see the Customizing activity *Specify SAP Product Stewardship Network Integration*.

Requirements

Download Files

- You have requested the company-specific IMDS all files. For more information about requesting company-specific IMDS all files, see the IMDS download manual.

Import Files

- You have completed the Customizing activity *Specify Logical File Names and File Paths*.

Standard settings

Download and import the *company-specific IMDS all files* and the *common IMDS all files*.

- *Company-specific IMDS all files*
These files include all company-specific data up to a specified key date. The following files are required:

IMDS File

CMSAll
to the company up to the key date

MODAll

REQAll
to the key date

Note: These files are company-specific; request them for your company at the IMDS host for a specific date.

Description

All complete material data sheets (MDSs) specific

Modules released up to the key date

All complete requests specific to the company up

- *Common IMDS all files*

These files include common data such as substance groups, pure substances, and contact data. The following files are required:

IMDS File

CCAll

MPAll

Description

All company and contact data up to the key date

All MDSs published up to the key date

MPSA11	All IMDS committee MDSs published up to the
key date	
SAA11	Substance Applications IDs up to key date
SARA11	Substance Application Relations up to key date
SBA11	All pure substances up to the key date
SGA11	All pure substance groups

Activities

Download Files

1. Download CMSA11 and MODA11 . If you want to use the request function, download REQA11, too.
2. Download the following common files directly from the IMDS: CCA11, MPA11, MPSA11, SBA11, SGA11, SAA11, and SARA11.
You can download these files and directly store them in the download folder on the application server using the transactionDownload from IMDS (EHPRC_CPI02).
 - a) Select the download type to specify the file type that you want to download.
 - b) Select the download date. This field is prefilled with the previous day, so always the newest file is available.
 - c) Set *Target Server Directory* as the download folder.

Import Files

You can import the files using the transaction Import from Application Server (EHPRC_CPI03) or you can perform the import in the background (F9). Import the files in the following order:

1. SBA11
Select the SBA11 file and choose *Create Import Job* (F9). All substance data is imported. Select the file again and choose *Move File to Archive Directory*.
2. SGA11
Select the SGA11 file and choose *Import*. Groups are imported. (Here, you find a list of imported groups). Select the file again and choose *Move File to Archive Directory*.
3. CCA11
Select the CCA11 file and choose *Import*. All company and contact person data is imported. Select the file again and choose *Move File to Archive Directory*.
4. SAA11
To import the substance application IDs, select the SAA11 file, and choose *Import*. Select the file again and choose *Move File to Archive Directory*.
5. SARA11
Select the SARA11 file and choose *Create Import Job* (F9). All substance relations for application IDs are imported. Select the file again and choose *Move File to Archive Directory*.
Be aware: In the application log, you find errors, such as: *A listed substance assigned to IMDS node ID...does not exist*. You can ignore them, in case these errors occur when entries in the SARA11 file correspond to substances in the SBA11 file that are not regulated.
6. REQA11
This file is optional. Import it if you want to use the IMDS request function. Select the REQA11 file and choose *Import*. Request data is imported. Select the file again and choose *Move File to Archive Directory*.
7. MPA11 or MPSA11

Split the MPAll/MPSAll file before performing the import. To filter and split the file, choose *Filter* (Ctrl+F2). You can also use the *Filter and Split report* (R_EHPRC_IMP_FILE_FILTER). Enter the following values:

- *File Name*
- *Split Size (MB)*
- *Target File Prefix:* MPAll.dat/MPSAll.dat
Each of the split files receives a numeric extension, for example, MPAll_0001.dat/MPSAll_0001.dat, MPAll_0002.dat/MPSAll_0002.dat, MPAll_0003.dat/MPSAll_0003.dat.
- *Final delete of source file: Yes*
When processing the MPAll/MPSAll file, specify filter criteria due to the large amount of data. The data in the MPAll file results of published data sheets from IMDS committee, from suppliers, and from your own published data sheets. The published are identified by the sender organization ID.
The MPSAll file instead only includes the published data sheets from IMDS committee. Use the same filter criteria that are later used for processing the MPDaily/MPSDaily file.
The split files are stored automatically in the download folder of your application server.
You can start the import for all parts of the MPAll/MPSAll file by selecting all MPAll/MPSAll files and choosing *Create Import Job* (F9). After the import, select the files and choose *Move File to Archive Directory*.
Note: If you only want to import the IMDS committee MDSs, use the MPSAll file. If you want to import all MDSs that have been published including the IMDS committee MDSs, import the MPAll file and filter out the relevant MDSs.

8. CMSAll

If the file is larger than 10 MB, split the file. You can use the *Filter and Split report* (R_EHPRC_IMP_FILE_FILTER) to split the file. Select the CMSAll file and choose *Create Import Job* (F9). All MDS data is imported. Select the file again and choose *Move File to Archive Directory*.

9. MODAll

This file is optional. If the file is too large, you can use the *Filter and Split report* (R_EHPRC_IMP_FILE_FILTER) to split it. Select the MODAll file and choose *Import*. All module data is imported. Select the file and choose *Move File to Archive Directory*.

Set Up Daily Synchronization with IMDS

Use

In this Customizing activity, you set up a daily job to import the daily files from the International Material Data System (IMDS) to update the local IMDS data and keep it synchronized with the IMDS.

The response time of the IMDS after an IMDS upload can vary. Therefore, the result file cannot be imported immediately by the upload process. You can schedule a background job to import and process the result file at a later date automatically.

Requirements

- You have completed the Customizing activity *Specify Logical File Names and File Paths*.

Activities

IMDS Daily File Processing

1. Specify the following variants that are used for the download and import:

- **Variants for Download from IMDS report (R_EHPRC_IMDS_DOWNLOAD):**

Variant	Type of Download
SBDaily	SBDaily
CCDaily	CCDaily
REQDaily	REQDaily
MPDaily	MPDaily
MPSDaily	MPSDaily
CMSDaily	CMSDaily
MODDaily	MODDaily

Note: When saving the variants for R_EHPRC_IMDS_DOWNLOAD select in the *Objects for selection screen* section the *Save field without values* checkbox.

- **Variants for the Import from Application Server report (R_EHPRC_IMP_APPL_BATCH_JOB):**

Variant	Import Type	Source Directory	Archive Directory	Directory Error Files	Only Error/Warning Messages
IMDS_PURE	IMDS_PURE	\\application_server\...\EHPRC_Files\Import\IMDSDaily\	\\application_server\...\EHPRC_Files\Import\Archive\IMDSDaily\	\\application_server\...\EHPRC_Files\Import\Error\IMDSDaily\	Yes
IMDS_ORG	IMDS_ORG	\\application_server\...\EHPRC_Files\Import\IMDSDaily\	\\application_server\...\EHPRC_Files\Import\Archive\IMDSDaily\	\\application_server\...\EHPRC_Files\Import\Error\IMDSDaily\	Yes
IMDS_REQ	IMDS_REQ	\\application_server\...\EHPRC_Files\Import\IMDSDaily\	\\application_server\...\EHPRC_Files\Import\Archive\IMDSDaily\	\\application_server\...\EHPRC_Files\Import\Error\IMDSDaily\	Yes
IMDS_MDS_I	IMDS_MDS_I	\\application_server\...\EHPRC_Files\Import\IMDSDaily\	\\application_server\...\EHPRC_Files\Import\Archive\IMDSDaily\	\\application_server\...\EHPRC_Files\Import\Error\IMDSDaily\	Yes

- **Variants for the Filter and Split (report R_EHPRC_IMP_FILE_FILTER):**
MPDaily/MPSDaily

- Source File:
\\application_server\...\EHPRC_Files\Import\IMDSDaily\mpdaily*.dat/\\application_server\...\EHPRC_Files\Import\IMDSDaily\mpsdaily*.dat

- Split Size: 7 MB

- Target File Prefix:

- Move Source File to Archive: Yes

Specify filter criteria when processing the MPDaily/MPSDaily file due to the large amount of data. This large amount of data can result from, for example, published data sheets from the IMDS Committee that are also contained in the MPSAll file, from selected suppliers. Use the same filter criteria that you previously used for processing the MPAll/MPSAll file.

Note: If you only want to import the IMDS committee MDSs, use the MPSDaily file. If you want to import all MDSs that have been published including the IMDS committee MDSs, import the MPDaily file and filter out the relevant MDSs.

MODDaily (optional, only needed if MODDaily file processing is performed)

- Source File: \\application_server\...\EHPRC_Files\Import\IMDSDaily\moddaily*.dat
 - Split Size: 7 MB
 - Target File Prefix:
 - Delete Source File After Processing: Yes Specify filter criteria if necessary
2. Create a job under Schedule Jobs with the following conditions:
- Job Name: Download IMDS daily files
 - Job Class: C
 - Start Condition: Periodic job, Daily at 5:00 a.m. (GMT+1) (IMDS recommendation is not to download before 5:00 a.m. (GMT+1))

3. Define the following steps in the following order: **Substance data import** (mandatory steps)

Step	Description Name	Variant	Language
1	ABAP Program Download SBDaily file	R_EHPRC_IMDS_DOWNLOAD	SBDaily EN
2	ABAP Program Import SBDaily file	R_EHPRC_IMP_APPL_BATCH_JOB	IMDS_PURE EN

Company and contact data import (mandatory steps)

Step	Description Name	Variant	Language
3	ABAP Program Download CCDaily file	R_EHPRC_IMDS_DOWNLOAD	CCDaily EN
4	ABAP Program Import CCDaily file	R_EHPRC_IMP_APPL_BATCH_JOB	IMDS_ORG EN

Request data import (optional steps - only necessary if you use the IMDS request function)

Step	Description Name	Variant	Language
5	ABAP Program Download REQDaily file	R_EHPRC_IMDS_DOWNLOAD	REQDaily EN
6	ABAP Program Import REQDaily file	R_EHPRC_IMP_APPL_BATCH_JOB	IMDS_REQ EN

MPDaily file: Published data sheet import (optional steps for the MPDaily file)

Step	Description Name	Variant	Language
7	ABAP Program Download MPDaily file	R_EHPRC_IMDS_DOWNLOAD	MPDaily EN
8	ABAP Program Filter and split MPDaily file	R_EHPRC_IMP_FILE_FILTER	MPDaily EN
9	ABAP Program Import MPDaily file	R_EHPRC_IMP_APPL_BATCH_JOB	IMDS_MDS_I EN

MDS specific data import (mandatory steps)

Step	Description Name	Variant	Language
10	ABAP Program Download CMSDaily file	R_EHPRC_IMDS_DOWNLOAD	CMSDaily EN
11	ABAP Program Import CMSDaily file	R_EHPRC_IMP_APPL_BATCH_JOB	

IMDS_MDS_I EN

Module import (optional steps)

Step	Description Name	Variant	Language
------	------------------	---------	----------

12	ABAP Program Download MODDaily file		R_EHPRC_IMDS_DOWNLOAD
	MODDaily	EN	

13	optional - ABAP Program Filter and split MODDaily file		
	R_EHPRC_IMP_FILE_FILTER	MODDaily	EN

14	ABAP Program Import MODDaily file	R_EHPRC_IMP_APPL_BATCH_JOB	
	IMDS_MDS_I		EN

IMDS Result File Processing

The IMDS result file includes information and results of user activities. This file must be imported periodically to update the communication status and results.

1. Create a job under Schedule Jobs with the following conditions:

<u>Job Name</u>	<u>Job Class</u>	<u>Start Condition</u>
Download IMDS result files	C	Periodic job, every 10 minutes

2. Define the following step:

<u>Name</u>	<u>Variant</u>	<u>Language</u>
R_EHPRC_IMDS_RESULT_DWNLOAD		EN

You can use the alert monitor to monitor your jobs.

Specify IMDS Download Types

Use

In this Customizing activity, you can specify the type of download with the source (production system or test system).

Standard settings

The standard system is delivered with examples.

Activities

- Check the standard settings and adapt them, if necessary.
- Add additional entries, as required.

Specify MDS Import Restrictions

Use

In this Customizing activity, you specify when MDS structure data can be imported using the IMDS supplier MDS center. You define restrictions based on the Recipient Status

Activities

For each recipient status for a supplier MDS, specify whether the import of MDS data is allowed, not allowed, or only allowed after user confirmation.

If no configuration is defined for a specific recipient status, the default behavior for this status is that the MDS is not allowed to be imported.

Example

<u>Recipient Status</u>	<u>Import Allowed</u>	<u>Description of Effect</u>
Accepted accepted, the MDS can be imported directly	Allowed	If the MDS recipient status is
Rejected rejected, the MDS cannot be imported	Not Allowed	If the MDS recipient status is
Browsed Allowed After Confirmation can be imported after confirmation	Allowed After Confirmation	If the MDS recipient status is browsed, the MDS

Specify IMDS Material Data Sheet Variables

Use

In this Customizing activity, you can specify variables to influence the International Material Database System (IMDS) export.

Standard settings

The following settings are delivered with the standard system. You can change these parameters if you want to use another identifier or property.

<u>Parameter</u>	<u>Description</u>
ABORT_ON_ERROR	Abort on Error
ATTR_COMP_ARTNR	Component Product Number
ATTR_COMP_NAME	Component Name
ATTR_IMDSNODE_ID	IMDS NODE
ATTR_IMDS_ID	IMDS ID
ATTR_IMDS_VERSION	IMDS Version
ATTR_MATERIAL_CATEGORY	Material Category
ATTR_MATERIAL_MATNR	Material Number
ATTR_MATERIAL_NAME	Material Name
ATTR_MATERIAL_REMARK_DE	Material Remark DE
ATTR_MATERIAL_REMARK_EN	Material Remark EN
ATTR_MATERIAL_STD_MATNR	Material Number
ATTR_MATERIAL_SUPPLIER	Material Supplier
ATTR_MATERIAL_SYMBOL	Material Symbol
ATTR_MATERIAL_TRADE	Material Trade Name
ATTR_SEMICOMP_ARTNR	Semi Component Product Number

ATTR_SEMICOMP_NAME

Semi Component Name

Activities

Check the standards settings and adapt them, if necessary.

Example

Identifier

Parameter

ATTR_COMP_ARTNR

Value

NUM;MATNR

Material Number from Material Master

Parameter

ATTR_COMP_ARTNR

Value

MARA;MATNR

Parameter

ATTR_COMP_NAME

Value

MARA;MAKTX

Property with Characteristic

Parameter

ATTR_MATERIAL_CATEGORY

DA_CLASS

Value

M:PC;SAP_RCS_1028_005;SAP_RCS_1028_005_V

Specify Material Classification Check

Use

In this Customizing activity, you specify the rules for the *Material Substance Checks* (SC 90) as defined by IMDS. Based on the pure substance composition, the IMDS check uses these rules to verify or propose an appropriate material classification code for basic materials or surfaces.

The system supports the following three types of checks:

1. **Required:** A check that a minimum concentration level of a main substance or substance group exists. The basic material with a specific material classification must contain a defined concentration of defined substances.
The check uses a worst-case scenario, to calculate the percent value of a substance. In this way, either the fixed or rest value, or the minimum of a range is used for pure substances. For a substance group, the sum of all substances within the material that belong to the group is calculated in the same way.
2. **Prohibited:** A check that a maximum concentration level of a main substance or substance group is not exceeded. The basic material with a specific material classification must not contain a defined concentration of defined substances.
The check uses a worst-case scenario to calculate the percent value of a substance. In this way, either the fixed or rest value, or the maximum of a range is used for pure substances. For a substance group, the sum of all substances within the material that belong to the group is calculated the same way.
3. **Propose:** A check for material classifications. If the material classification does not match the rules, defined in Customizing, the system provides appropriate material classifications based on the concentration levels of a main substance or substance group. The check uses a worst-case scenario to calculate the percent value of a substance. In this way, either the fixed or rest value, or the maximum of a range is used for pure substances. For a substance group, the sum of all substances

within the material that belong to the group is calculated the same way. This rule covers the following cases:

- Liquids and Gases: If a liquid or gas is contained in more than 1% and the material is not classified 9.x, a warning message is generated. An exception for this rule is water (7732--5), which can be contained without a limit in a material classified 7.
- Reactive Substances: If a reactive substance is contained in more than 1%, a warning message is generated.
- Ions: If ions are contained in more than 1%, a warning message is generated.

Note:

If a content check fails, a warning message is generated. The checks exclude materials supplied by the IMDS Steering Committee as well as semi-components published by ZVEI-Rec019 (**Company ID 102677**).

Requirements

Carry out the following Customizing activities:

- Set Up System with ALL Files
- Specify Incoming Templates (Specify IMDS_GRP and IMDS_PURE)
- Specify Checks for Compliance Requirement and Check Criteria

Standard settings

The sample configuration, delivered in the standard, might not represent the current version of IMDS rules.

Activities

Update, change, or enhance this list of rules depending on changes by IMDS.

You define each rule by editing the following entries:

- Material Classification
- IMDS Node ID or IMDS Group ID
- IMDS Mass Concentration
- Option for the material classification check
- IMDS Description text

Example

The following provides examples of the different entries and the corresponding rules:

- Example of a required rule
Material classification 1, IMDS Node ID 1762, Concentration 50, Material Classification Check Option Required, Description Fe >= 50%.
This means, a basic material with the material classification 1. must contain the pure substance iron with the minimum concentration level of 50%; IMDS says *Fe >= 50%*.
- Example of a prohibited rule

Material classification 1, IMDS Group 35, Concentration 1, Material Classification Check Option Prohibited, Description Liquids and Gases. This means, if a basic material with material classification 1. contains any pure substance of the *liquid and gases* pure substance group, the sum of these substances must not exceed the concentration level of 1%; IMDS says *Liquids and Gases*.

- Example of a propose rule
Material classification 1, IMDS Node ID 1762, Concentration 50, Material Classification Check Option Propose, Description Fe >= 50%.

This means, if your basic material with material classification 1 contains the *iron* pure substance with a concentration of 42%, the material classification 1 is not correct. Proposals for a correct material classification are: 1, and 1.

Component Settings

Specify Component Types for Compositions

Use

In this Customizing activity, you specify the component types that are valid for value assignment types with the *Composition* category. For more information about component types for compositions, see the documentation for the Customizing activity Specify Component Types for Compositions.

Activities

Make sure that the following component types are defined for *Product Compliance for Discrete Industries*:

- *CONFIDENT*
Used to mark pure substances in composition as confidential.
- *Impurity (IMPURITY)*
Used to mark pure substances in compositions as an impurity.
- *Intended Use (INTADDED)*
Used to mark pure substances in compositions that are intentionally added.
- *Reaction Residue (REACTION)*
Used to mark pure substances in compositions that result from a reaction.

Specify Context-Specific Component Types

Use

In this Customizing activity, you specify the context-sensitive component types that are valid for value assignment types with the *Composition* category. For more information about context-specific component types, see the Specify Context-Specific Component Types and Exception Values Customizing activity under Basic, Data and Tools.

Activities

Make sure that the following component types are maintained:

- Confidential (*CONFIDENT*)
Used within the automotive industry for exchanging information with the International Material Data System (IMDS).
- Impurity (*IMPURITY*)
Used within the automotive industry for exchanging information with the IMDS and in the electronic industry for substance lists.
- Intended Use (*INTADDED*)
Used within the automotive industry for exchanging information with the IMDS.
- Reaction Residue (*REACTION*)
Used within the automotive industry for exchanging information with the IMDS.

Specify Exception Values for a Component

Use

In this Customizing activity, you specify required exception values.

For more information about exception values, see the documentation for the Customizing activity Specify Exception Values for a Component.

Activities

Make sure that **RE** (*Residue*) is defined for *Product Compliance for Discrete Industries*. This exception value is used within the automotive industry for exchanging information with the International Material Data System (IMDS) and in the electronic industry for substance lists.

Specify Context-Specific Exception Values

Use

In this Customizing activity, you specify context-specific exception values. For more information, see the Specify Context-Specific Exception Values Customizing activity under Basic Data and Tools.

Activities

Make sure that **RE** (*Residue*) is maintained. This exception value is used within the automotive industry for exchanging information with the International Material Data System and in the electronic industry for substance lists.

Industry-Specific Settings

Specify Basic Material Industry Standards

Use

In this Customizing activity, you specify basic material industry standards. You can specify origins and definitions for these standards.

Standard settings

The standard system is delivered with the following origins:

- Generally applicable standards
- Company-specific standards

Example

Industry Standard:

Origin:

Description:

Global Industry Standard:

DIN
GENERAL
STANDARD
DIN Standard
X

3 Business Add-Ins (BAdIs)

3 BAdI: Validation of the Product Structure

Use

This Business Add-In (BAdI) is used for *Product Compliance in Discrete Industries*. This BAdI enables you to adapt the integration of the product structure validation. This BAdI is called when you choose the *Display* pushbutton in the supplier MDS center.

Standard settings

In the standard system, the Business Add-In is activated. The default code is executed automatically. If you activate your own implementation, the default code is deactivated automatically. The BAdI is not filter-dependent.

BAdI Implementations

CL_DEF_IM_EHPRC_CP_IMDS_BADI_1 (Default implementation)

A default implementation is supplied for the following `OPEN_VALID` method. This method shows the source file, which you alternatively can view by clicking the *Source File* button. Additionally, the BAdI default implementation changed the recipient status to *Browsed*, if the starting status has been *Not yet Browsed*.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
4. Save your entries and assign the Add-In to a package.
5. To edit a method, double-click its name.
6. Enter your implementation code between the method `<Interface Name>~<Name of Method>.` and `endmethod.` statements.
7. Save and activate your code. Navigate back to the *Change Implementation* screen.
Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
8. Choose *Activate*.
When the application program is executed, the system carries out the code in the method you wrote.

BAdI: Supplier IMDS Communication

Use

This Business Add-In (BAdI) is used for *Product Compliance in Discrete Industries*. This BAdI enables you to adapt the IMDS communication for the supplier MDS center. It is called when IMDS communication is triggered within the supplier MDS center.

Standard settings

In the standard system, the Business Add-In is activated. The default code is executed automatically. If you activate your own implementation, the default code is deactivated automatically. The BAdI is not filter-dependent.

BAdI Implementations

CL_DEF_IM_EHPRC_CP_IMDS_BADI_4 (Default implementation)

A default implementation is supplied for the `ACCEPT_REJECT_MDS` method. This method encompasses the implementation for accepting or rejecting a supplier material data sheet (MDS). The user is prompted to confirm the acceptance or rejection in the following cases:

- Accept - Confirmation always required
- Reject - Confirmation required if no rejection reason is maintained

The rejection reason is calculated based on the results of the checks that were potentially previously executed.

This method also comprises a parameter that distinguishes execution in the dialog mode from the background execution.

This method comprises "only" the upload via the IMDS Advanced Interface and not the download of the result file.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
4. Save your entries and assign the Add-In to a package.
5. To edit a method, double-click its name.
6. Enter your implementation code between the method `<Interface Name>~<Name of Method>.` and `endmethod.` statements.
7. Save and activate your code. Navigate back to the *Change Implementation* screen.
Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
8. Choose *Activate*.
When the application program is executed, the system carries out the code in the method you wrote.

BAdI: Customer IMDS Communication

Use

This Business Add-In (BAdI) is used for *Product Compliance in Discrete Industries*. This BAdI enables you to adapt the IMDS communication for the customer MDS center. It is called when IMDS communication is triggered within the customer MDS center.

Standard settings

In the standard system, the Business Add-In is activated. The default code is executed automatically. If you activate your own implementation, the default code is deactivated automatically. The BAdI is not filter-dependent.

BAdI Implementations

CL_DEF_IM_EHPRC_CP_IMDS_BADI_2 (Default implementation)

A default implementation is supplied for the following methods. In all cases, these methods comprise "only" the upload using the IMDS Advanced Interface and not the download of the result file:

PROPOSE

Encompasses the implementation for proposing a material data sheet (MDS) to a customer.

PUBLISH

Encompasses the implementation for publishing an MDS.

SEND_EDIT

Encompasses the implementation for sending an MDS to a customer in edit mode.

SEND_CUSTOMER

Encompasses the implementation for sending an MDS to a customer.

INTERNAL_RELEASE

Encompasses the implementation for releasing an MDS internally.

DELETE_RECIPIENT

Encompasses the implementation for removing one or more recipients from an MDS.

Each of these methods has a parameter that distinguishes the execution in dialog mode from the background execution.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
2. On this screen, enter a short description for your implementation in the *Implementation Short Text* field.
3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
4. Save your entries and assign the Add-In to a package.
5. To edit a method, double-click its name.
6. Enter your implementation code between the `method <Interface Name>~<Name of Method> . and endmethod .` statements.
7. Save and activate your code. Navigate back to the *Change Implementation* screen.
Note: You can also create an implementation for an Add-In and not activate it until later.

If you want to do this, do not carry out the following step:

8. Choose *Activate*.
When the application program is executed, the system carries out the code in the method you wrote.

BAdI: Post Activities for Customer IMDS Communication

Use

This Business Add-In (BAdI) is used for *Product Compliance in Discrete Industries*. This BAdI enables you to adapt the activities that are to be executed after customer IMDS communication is

successful. This BAdI is called when a refresh is triggered within the customer MDS center, or when background job R_EHPRC_IMDS_RESULT_DOWNLOAD is executed.

Standard settings

In the standard system, the Business Add-In is activated. The default code is executed automatically. If you activate your own implementation, the default code is deactivated automatically. The BAdI is not filter-dependent.

BAdI Implementations

CL_DEF_IM_EHPRC_CP_IMDS_BADI_3 (Default implementation)

A default implementation is supplied for the POST_IMDS_COMM method. This method downloads and imports customer result file(s) from the IMDS and updates the corresponding customer material data sheet (MDS) and chapter 4 records. The import result is written to the application log. The method also comprises a parameter that distinguishes the execution in dialog mode from the background execution.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
4. Save your entries and assign the Add-In to a package.
5. To edit a method, double-click its name.
6. Enter your implementation code between the method `<Interface Name>~<Name of Method>.` and `endmethod.` statements.
7. Save and activate your code. Navigate back to the *Change Implementation* screen.
Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
8. Choose *Activate*.
When the application program is executed, the system carries out the code in the method you wrote.

3 BAdI: Post Activities for Supplier IMDS Communication

Use

This Business Add-In (BAdI) is used for *Product Compliance in Discrete Industries*. This BAdI enables you to adapt the activities that are to be executed after successful supplier IMDS communication.

This BAdI is called when a refresh is triggered within the supplier MDS center or when background job R_EHPRC_IMDS_RESULT_DOWNLOAD is executed.

Standard settings

In the standard system, the Business Add-In is activated. The default code is executed automatically. If you activate your own implementation, the default code is deactivated automatically. The BAdI is not filter-dependent.

BAdI Implementations

CL_DEF_IM_EHPRC_CP_IMDS_BADI_5 (Default implementation)

A default implementation is supplied for the POST_IMDS_COMM method. This method downloads and imports supplier result files from the IMDS and updates the corresponding supplier MDS and Chapter 4 records. The result of the import is written to the application log. The method also comprises a parameter that distinguishes the execution in the dialog mode from the background execution.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
2. On this screen, enter a short description for your implementation in the *Implementation Short Text* field.
3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
4. Save your entries and assign the Add-In to a package.
5. To edit a method, double-click its name.
6. Enter your implementation code between the method <Interface Name>~<Name of Method>. and endmethod. statements.
7. Save and activate your code. Navigate back to the *Change Implementation* screen.
Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
8. Choose *Activate*.
When the application program is executed, the system carries out the code in the method you wrote.

BAdI: Supplier Request Processing

Use

This Business Add-In (BAI) is used for *Product Compliance in Discrete Industries*.

This BAI enables you to adapt the way that requests in the supplier MDS center are processed. It enables you to adapt the data that is automatically written to the customer data of a new supplier material data sheet (MDS) request.

This BAI is called when the creation of a new supplier MDS request is triggered (in the context menu in the compliance workbench under *Create Supplier Request* or by choosing *Create MDS* on the supplier MDS search screen), when a supplier request is to be sent or deleted, and to pre-fill the recipient data when a request is created.

Standard settings

In the standard system, the Business Add-In is activated. The default code is executed automatically. If you activate your own implementation, the default code is deactivated automatically. The BAI is not filter-dependent.

BAI Implementations

CL_DEF_IM_EHPRC_CP_IMDS_BAI_6 (default implementation)

A default implementation is supplied for the following methods.

- SEND_REQUEST
- DELETE_REQUEST
- PREFILL_REQ_CH4 - Pre-fills the part/item number, article name, and supplier number in the recipient data for the newly created request.

The following methods are provided:

<u>Method</u>	<u>Description</u>
SEND_REQUEST	This method can handle two scenarios: 1) The request does not exist in IMDS yet. It is uploaded to IMDS and then sent to the supplier. 2)The request already exists in IMDS. It is updated and then sent to the supplier.
DELETE_REQUEST	This method deletes a request locally in the IMDS. The request is not deleted physically; it is given the request status <i>Deleted</i> .
PREFILL_REQ_CH4	This method prefills the default chapter four data of a request.

These methods comprise only the upload via IMDS Advanced Interface and not the download of the result file.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing *Create*, and continue as follows:

1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.

3. If you choose the **Interface** tab, you will notice that the system has filled in the **Name of the Implementing Class** field automatically, by assigning a class name based on the name of your implementation.
4. Save your entries and assign the Add-In to a package.
5. To edit a method, double-click its name.
6. Enter your implementation code between the method `<Interface Name>~<Name of Method> . and endmethod .` statements.
7. Save and activate your code. Navigate back to the **Change Implementation** screen.
Note: You can also create an implementation for an Add-In and not activate it until later.

If you want to do this, do not carry out the following step:

8. Choose **Activate**.
When the application program is executed, the system carries out the code in the method you wrote.

BAdI: Customer Request Processing

Use

This Business Add-In (BAdI) is used for *Product Compliance in Discrete Industries*. This BAdI enables you to adapt the way that requests are processed in the customer MDS center. This BAdI is called when a customer request is to be rejected or when a material data sheet (MDS) is to be assigned to a customer request.

Standard settings

In the standard system, the Business Add-In is activated. The default code is executed automatically. If you activate your own implementation, the default code is deactivated automatically. The BAdI is not filter-dependent.

BAdI Implementations

CL_DEF_IM_EHPRC_CP_IMDS_BADI_7 (default implementation)

A default implementation is supplied for the REJECT_REQUEST and DETERM_REQUEST_ASSIGN methods.

The following methods are provided:

<u>Method</u>	<u>Use</u>
REJECT_REQUEST	Rejects a customer request
DETERM_REQUEST_ASSIGN	Determines the assignment of an MDS to a customer request

These methods comprise only the upload via IMDS Advanced Interface not the download of the result file.

Activities

After you call the IMG activity, the system displays a dialog box where you enter a name for the implementation.

If implementations of this Business Add-In have already been created, the system displays them in a dialog box. You then choose one of them by choosing **Create**, and continue as follows:

1. In the dialog box, enter a name for the implementation of the Add-In and choose *Create*. The system displays the initial screen for creating Business Add-In implementations.
2. On this screen, enter a short description for you implementation in the *Implementation Short Text* field.
3. If you choose the *Interface* tab, you will notice that the system has filled in the *Name of the Implementing Class* field automatically, by assigning a class name based on the name of your implementation.
4. Save your entries and assign the Add-In to a package.
5. To edit a method, double-click its name.
6. Enter your implementation code between the method `<Interface Name>~<Name of Method>.` and `endmethod.` statements.
7. Save and activate your code. Navigate back to the *Change Implementation* screen.
Note: You can also create an implementation for an Add-In and not activate it until later. If you want to do this, do not carry out the following step:
8. Choose *Activate*.
When the application program is executed, the system carries out the code in the method you wrote.

