



Mercury IT Governance Center™
Mercury Change Management Extension
for SAP® Solutions™ Guide

Version: 6.0.0



MERCURY™

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Chapter 1 Introduction

In This Chapter:

- *About This Document*
 - *Who Should Read This Document*
 - *Prerequisite Documents*
 - *Related Documents*
 - *Overview of the Extension*
 - *General Overview of Extension for SAP® Solutions*
 - *What's New in Release 6.0.0*
 - *Prerequisite Knowledge and Experience*
-

About This Document

This document provides information about installing or upgrading to release 6.0.0 of Mercury Change Management Extension for SAP® Solutions™ (often referred to hereafter as “the Extension”), and it provides conceptual, procedural, and reference information about the product.

You can access this document from the Mercury IT Governance Center™ Documentation home page and elsewhere, as described in the *Guide to Documentation*.

This document is organized as follows:

- [Chapter 1, Introduction, on page 11](#) (this chapter) describes who should read this document, includes information about prerequisite and related documents, and provides an overview of the Extension for this release.
- [Chapter 2, Installing or Upgrading the Extension, on page 17](#) provides overview and detailed information about installing and upgrading the Extension.
- [Chapter 3, Configuring the Extension, on page 33](#) provides information related to defining the Extension environments.
- [Chapter 4, Extension Entities, on page 39](#) provides information about the object types, request types, workflows, report types, validations, and tokens that are unique to the Extension.

Who Should Read This Document

This document is intended for the following audiences:

- People responsible for installing, upgrading, configuring, and maintaining the system and database environments where Mercury Change Management Extension for SAP® Solutions resides, and setting up and maintaining the Mercury IT Governance schema
- People responsible for maintaining access and security for, or supporting use of, Mercury Change Management Extension for SAP® Solutions

For More Information

For more information about audience types as defined for Mercury IT Governance Center, see the *Guide to Documentation*.

Prerequisite Documents

You should be familiar with the information in the following documents:

- *What's New in Release 6.0*
- *Release Notes*
- *Key Concepts*
- *Getting Started*
- *System Administration Guide and Reference*
- *Mercury Change Management: Configuring a Deployment System*
- *Mercury Change Management User's Guide*
- *Security Model Guide and Reference*

Before performing an installation or upgrade, check the latest version of the *Release Notes* for release 6.0 on the Mercury IT Governance Download Center for any last-minute information or issues you need to understand.

Related Documents

See the *Guide to Documentation* for:

- Descriptions of all of the Mercury documents for Mercury IT Governance Center and Mercury Change Management Extensions, and how to access each document
- Definitions of audience types, reflecting the roles played by various personnel in using Mercury IT Governance Center and Mercury Change Management Extensions
- Descriptions of typographical conventions used in the documentation set
- Additional resources for support in using Mercury IT Governance Center and Mercury Change Management Extensions

Overview of the Extension

Mercury offers prepackaged change management products to automate migrations, upgrades, and other changes in a variety of leading database, system, and application environments. These products are called Mercury Change Management Extensions.

Extensions are installed on the Mercury IT Governance Server.

General Overview of Extension for SAP® Solutions

Mercury Change Management Extension for SAP® Solutions helps to automate change management in the SAP® environment.

The Extension enhances the functionality of Mercury Change Management™ by providing predefined entities that are unique to SAP® Solutions environments, such as specialized object types, request types, workflows, report types, and tokens.

This manual documents release 6.0.0 of Mercury Change Management Extension for SAP® Solutions.

Before using Mercury IT Governance Center release 6.0 or the Extension at release 6.0.0 for productive work, you must do one of the following:

- Install Mercury IT Governance Center release 6.0, then install Extension release 6.0.0
- Upgrade Mercury IT Governance Center to release 6.0, then upgrade the Extension to release 6.0.0

What's New in Release 6.0.0

Release 6.0.0 of the Extension introduces the Extension functionality described in the following sections.

For More Information

For more information about Mercury IT Governance Center release 6.0, see the *What's New in Release 6.0* document.

For descriptions of supported upgrade paths, see [Installing or Upgrading to Release 6.0.0 on page 18](#). For general information about the impacts of upgrading from any release to release 6.0.0, see [General Upgrade Impacts and Guidelines on page 19](#). For specific information about the impacts of

upgrading from release 5.0.0, see [Impacts of Upgrading from Release 5.0.0 on page 20](#). There are no specific impacts of upgrading from release 5.5.0.

Support for SAP® Release 4.7

Object types and other entities have been revised as necessary to support SAP® Release 4.7.

New Object Type and Workflows

Release 6.0.0 introduces the following object type and workflows that facilitate migrations to Prod environments and migrations of multiple packages:

- SAP - Transport Migration with Release Management object type
- SAP - Distribute to Prod workflow
- SAP - Transport Packages to Prod subworkflow
- SAP - Transport Migration with Release Management workflow

Reports Accessible Only from Standard Interface

As with Mercury IT Governance Center release 6.0, Extension-related reports are accessible only from the standard interface.

Licensing

Extension licensing has been updated, consistent with the new Mercury IT Governance Center release 6.0 licensing strategy. For more information, see the *Security Model Guide and Reference*.

Prerequisite Knowledge and Experience

To install, upgrade, configure, maintain, or use release 6.0.0 of the Extension, you need to understand the following:

- Particular key concepts described in the *Key Concepts* document
 - Change management
 - Environments
 - Mercury IT Governance Workbench

- Object types
- Packages
- Software deployment
- Tokens
- Workflows and workflow steps
- Request types
- Report types
- The Mercury IT Governance Center entities installed by the Extension

In addition, you must have practical experience installing, upgrading, configuring, and using Mercury IT Governance Center, if you are responsible for configuring the Extension.

You should have experience using SAP® Solutions.

For More Information

For more information about documents and resources that help you gain the required knowledge and experience, see the *Guide to Documentation*.

Installing or Upgrading the Extension

In This Chapter:

- *Overview of Installation*
 - *System Requirements*
 - *Installing or Upgrading to Release 6.0.0*
 - *General Upgrade Impacts and Guidelines*
 - *Impacts of Upgrading from Release 5.0.0*
 - *No Specific Impacts of Upgrading from Release 5.5.0*
 - *Preparing for Installation*
 - *Downloading and Installing the Extension*
 - *Downloading the Installation Files*
 - *Installation Procedure*
 - *Logs Generated During Installation*
 - *Post-Installation Procedures*
 - *SAP® Function Modules*
 - *Installing the Function Modules*
 - *Using the Function Modules*
 - *Configuring TMS on an SAP® 4.6C or 4.7 System*
 - *Authorizing Users to Use RFCs and TMS*
-

Overview of Installation

This section discusses the following overview subjects:

- System requirements
- Installing or upgrading to release 6.0.0
- General upgrade impacts and guidelines
- Impacts of upgrading from release 5.0.0
- No specific impacts of upgrading from release 5.5.0

In addition, this chapter discusses the following:

- Preparing for installation
- Downloading and installing the Extension
- Post-installation procedures
- SAP® function modules
- Configuring TMS on an SAP® 4.6C or 4.7 system
- Authorizing users to Use RFCs and TMS

System Requirements

Mercury IT Governance Center release 6.0 and Mercury Change Management Extension for SAP® Solutions release 6.0.0 are installed on the same system and have the same system requirements. For more information about version level and other general system requirements, see the *System Requirements and Compatibility Matrix* document, which is available from the Mercury IT Governance Download Center:

<http://itg.merc-int.com/support/download/login.jsp>

Installing or Upgrading to Release 6.0.0

Before installing or upgrading the Extension, you must install (or upgrade to) and configure Mercury IT Governance Center release 6.0. For information about those procedures, see the *System Administration Guide and Reference*.

After you have installed Mercury IT Governance Center release 6.0, you can install Mercury Change Management Extension for SAP® Solutions release 6.0.0 or upgrade to release 6.0.0 from either of the following releases:

- Mercury Change Management Extension for SAP® Solutions release 5.5.0
- Kintana™ Accelerator for mySAP.com release 5.0.0

The Mercury IT Governance Center release 6.0 upgrade process detects the existence of either release of the Extension in your environment and advises you that you will need to upgrade the Extension. This chapter provides information about upgrading the Extension from either release 5.5.0 or release 5.0.0.

If you are upgrading the Extension from any release earlier than Kintana Accelerator for mySAP.com release 5.0.0, you must first upgrade it to release 5.0.0, then upgrade it to release 6.0.0. The Mercury IT Governance Center upgrade process enforces this rule. For information about upgrades to (and features of) releases earlier than release 5.0.0, see the documentation for all of the releases from your current product release through release 5.0.0 as necessary.

Upgrade the Extension before using Mercury IT Governance Center release 6.0 for productive work.

General Upgrade Impacts and Guidelines

The Extension upgrade process replaces code entities installed in earlier releases, including all reference (REFERENCE) versions of the Extension entities described in [Chapter 4, *Extension Entities*, on page 39](#).

During the upgrade process, existing non-reference entities, including those that you have copied, renamed, or customized for your specific environment, are not modified in any way. In other words, these non-reference entities retain all your customizations and they do not reflect any changes made in release 6.0.0, so they might not be compatible with Mercury IT Governance Center release 6.0.

Therefore, after upgrading to release 6.0.0, you should review the new reference entities. If necessary, copy and rename them, then apply the same customizations that were previously made to the corresponding non-reference entities for the earlier release.

Impacts of Upgrading from Release 5.0.0

The only significant impact seen in the Extension for an upgrade from release 5.0.0 is that some product names changed in release 5.5.0 as shown in [Table 2-1](#).

Table 2-1. Product name changes in release 5.5.0

Product Name in Release 5.0.0	Product Name in Release 5.5.0
Kintana Accelerator for mySAP.com	Mercury Change Management Extension for SAP® Solutions
Kintana Deliver	Mercury Change Management
Kintana Drive	Mercury Project Management™
Kintana Create	Mercury Demand Management™

No Specific Impacts of Upgrading from Release 5.5.0

Release 6.0.0 does not have any release-specific impact on operation of the Extension after an upgrade from release 5.5.0.

Preparing for Installation

To prepare for installation of the Extension:

1. Purchase the Extension, if you have not already done so.

You will not be allowed to download the Extension installation files from the Mercury IT Governance Download Center unless you have the username and password given to you at the time of purchase.

2. Decide where to put the installation file (`mitg-600-SAP.jar`).

The installation script looks in one of these locations for this file:

- `ITG_Home` directory (this is the recommended location)
- If the `ITG_DEPLOYMENT_HOME` environment variable is set: `ITG_Home/Deployment_Home` directory
- If you use the `-D` option on the `sh` command to start the installation procedure: `Deployment_Home` directory

3. Collect the following information, which you will need to supply during the installation procedure:

- The username and password you were given at the time you purchased the Extension.
- The database password for the Mercury IT Governance Center schema
- A Mercury IT Governance Center logon username

The username (typically “admin”) must belong to a security group that has the following access grants:

- SysAdmin: Migrate ITG Objects
- SysAdmin: Server Administrator
- The password for the Mercury IT Governance Center logon username

4. Stop the Mercury IT Governance Server.
5. Set the Mercury IT Governance Server to restricted mode by running the following script:

```
setServerMode.sh Restricted
```

For more information about this script, see the *System Administration Guide and Reference*.

6. Start the Mercury IT Governance Server.

Downloading and Installing the Extension

This section describes the download and installation procedures to install or upgrade the Extension.

Downloading the Installation Files

To download the installation files for Mercury Change Management Extension for SAP® Solutions:

1. Go to the Mercury IT Governance Download Center:

<http://itg.merc-int.com/support/download/login.jsp>

2. Log on using the username and password your company was given when it purchased the Extension.
3. In the ITG Download > License window:
 - a. Read the Software End User License Agreement.
 - b. Select the **I accept these terms** radio button.
 - c. Click **Submit**.
4. In the ITG Download > Main window, click the **Installs** link under the name.
5. To download the Extension, click **mitg-600-SAP.jar**.

Installation Procedure

To install the Extension:

1. Be sure you have completed all the steps in *Preparing for Installation on page 20*.

In particular, be sure Mercury IT Governance Center is running in restricted mode. This procedure is documented in *step 5 on page 21*.

2. Be sure you have completed all the steps in *Downloading the Installation Files on page 22*.

3. Copy the `mitg-600-SAP.jar` file to the `ITG_Home` directory.

For information about using another location for this file, see [step 2 on page 21](#).

Note

You do not need to unpack the installation file. The installation process automatically unpacks it.

4. Navigate to the `ITG_Home/bin` directory.
5. Run the script:

```
sh kDeploy.sh -i SAP
```

The `kDeploy` script can upgrade one Extension. For more information, see the *System Administration Guide and Reference*.

Note

If you have upgraded Mercury IT Governance Center to release 6.0 and if one or more Mercury Change Management Extensions were previously installed on your server at the release 5.0.0 or 5.5.0 level, you can upgrade multiple Extensions by running one script. To do so, download one `.jar` file for each Extension to the `ITG_Home` directory, and run the `sh mitg_extensions.sh upgrade` script from the `upgrade_600` directory.

6. As `kDeploy.sh` runs, respond to prompts for the information you collected in [step 3 on page 21](#) (for example, the database password for the Mercury IT Governance Center schema, and the Mercury IT Governance Center logon name and password).

Files are installed in various subdirectories under `ITG_Home`. Data is also placed in the Mercury IT Governance database.

When the installation procedure is complete, the following message appears:

```
Deployment SAP has been successfully installed.
```

7. Using a Web browser, view and check the installation summary report, which is located in:

```
ITG_Home/logs/deploy/600/SAP/log_x/installLog.html
```

where `log_x` is a random number generated by `kDeploy.sh` to make each log file name unique. The number increments by one each time the

installation script is run, so the log file for the most recent run is the one with the highest log number.

The summary report lists all Mercury entities installed as part of the Extension installation process.

Each entity that was installed correctly is marked as “Completed.” If there is an error for a particular entity, the report contains a direct link to another log file (HTML page) with additional information.

Installation of the Extension generates the logs that are listed and described in [Table 2-2](#).

Correct the errors, if necessary, and repeat the installation procedure. Otherwise, proceed to [step 8](#).

8. (Optional) To verify that Mercury Change Management Extension for SAP® Solutions is listed among the installed release 6.0.0 Mercury Extensions, issue the following command:

```
sh kDeploy.sh -l
```

The name `SAP` should appear in the list of installed Mercury Extensions.

For example, if you have both Mercury Change Management Extension for SAP® Solutions and Mercury Change Management Extension for E-Commerce Technologies™ installed, you could see a table similar to the following:

Deployment	Version	Deployed	Description
SAP	600	2005-02-15	SAP Extension
eCommerce	600	2005-03-22	eCommerce Extension

9. (Optional) Install or upgrade other Mercury Extensions you have purchased, if you have not already done so.

For specific installation procedures for the other Mercury Extensions, see the appropriate Extension document described in the *Guide to Documentation*.

10. Stop and restart the Mercury IT Governance Center in normal mode, as follows.

a. Stop the Mercury IT Governance Server.

b. Run the script:

```
setServerMode.sh NORMAL
```

For more information about this script, see the *System Administration Guide and Reference*.

c. Start the Mercury IT Governance Server.

Logs Generated During Installation

The logs listed and described in [Table 2-2](#) are generated during installation and saved in the `ITG_Home/logs/deploy/600/SAP` directory. The log number (#####) is a random number generated by `kDeploy.sh` to make each log file name unique.

Table 2-2. Logs generated during installation

Directory or File	Description
<code>ddlDriver.#####.log</code>	Contains information about data model changes made during installation.
<code>jarxvf.#####.log</code>	Contains information from the procedure that unpacks the <code>jar</code> file.
<code>packageDriver.#####.log</code>	Contains information about the installation of database code, for example, reports.
<code>postXMLDriver.#####.log</code>	Contains information about the application of SQL scripts required after the installation of Mercury-supplied data.
<code>preXMLDriver.#####.log</code>	Contains information about the application of SQL scripts required prior to the installation of Mercury-supplied data, such as the definition for Mercury Change Management Extension for SAP® Solutions.

Post-Installation Procedures

After you have finished installing Mercury Change Management Extension for SAP® Solutions, you need to:

- Review the object types
- Define environments for each application environment that will be a source or destination of migration, for example:
 - Host connection information
 - Database connection information
- If required, customize the logic in the various installed entities.
- Copy the `startRFC` utility from the SAPGUI Presentation CD in the install pack to the `ITG_Home/bin` directory. If the IT Governance Server is running on Windows, also copy `libRFC32.dll`.
- Install the SAP® function modules, as described in [SAP® Function Modules on page 26](#).
- On SAP® systems at release 46C or later, configure TMS, as described in [Configuring TMS on an SAP® 4.6C or 4.7 System on page 32](#).
- Authorize users, as described in [Authorizing Users to Use RFCs and TMS on page 32](#).

After the Extension has been running successfully for a substantial period of time, you can optionally delete all of the installation or upgrade files. However, Mercury recommends that you retain (or copy) the log files.

SAP® Function Modules

Remote Function Calls (RFCs) provided by Mercury must be installed on every SAP® system in the transport migration landscape. The Extension uses the `startRFC` utility provided by SAP® to invoke the RFCs on the SAP® systems.

Installing the Function Modules

The names of the Extension RFCs differ between SAP® Release 3.1x and later releases.

The Release 4.x RFCs are developed in the Mercury namespace (/KINTANA). You can install them on your SAP® systems without any risk of overwriting any existing code.

However, you must be careful when installing RFCs on SAP® systems at Release 3.1x, because devclasses, function groups, rfc, and structures on your SAP® system may have the same names as the RFCs being installed. Before installing these RFCs in a Release 3.1x system, check for the existence of the following names:

- Devclass: ZKT1
- Function Group: ZKT1
- Structures: ZKNTRET001, ZKNTTRL001, ZKNTOBJ001, ZKNTGTTR01

To install the SAP® function modules:

1. Unpack the `mitg_600_SAP.jar` file, which produces the following zip files containing transports for RFCs:
 - `SAP_31I.zip` for SAP® Release 3.1I
 - `SAP_40B.zip` for SAP® Release 4.0B
 - `SAP_46C.zip` for SAP® Release 4.6C
 - `SAP_47.zip` for SAP® Release 4.7
2. Unzip the zip files for your SAP® release into the SAP® system temporary directory. The following directories are created:
 - `SAP_release/cofiles`
 - `SAP_release/data`

The `K*` transport files are located in the `cofiles` directory. The `R*` transport files are located in the `data` directory. Copy these files to the appropriate directories in the `sap/trans` directory.



Depending on your SAP® release, you can run TPPARAM, TPPARAM.TPL, or TP_DOMAIN_SID.PFL in the tp commands used in [step 3](#) and [step 4](#) below.

3. Add the Mercury RFC code transport packages to the buffer (queue) for further importing into the target system. Execute the following at a command prompt from the `/bin` directory of the SAP® system:

- a. Test the connection to the target system:

```
tp connect target_sid  
pf=/usr/sap/trans/bin/TP_DOMAIN_SID.PFL
```

- b. Test the functioning of the Change and Transport System (CTS):

```
tp checkimpdp SID pf=/usr/sap/trans/bin/TP_DOMAIN_SID.PFL
```

If the system response is something other than:

```
RDDIMPDP is scheduled
```

then there may be an error within the transport system. Fix the error before continuing.

- c. Add the requests from the `cofiles/data` directory to the buffer, using the following command, in the sequence specified in the `sequence.txt` file:

```
tp addtobuffer TR# target_sid  
pf=/usr/sap/trans/bin/TP_DOMAIN_SID.PFL
```

Repeat this command for all files in the `cofiles` directory.

- d. Check that the transport number has been added to the buffer, using the following command:

```
tp showbuffer target_sid  
pf=/usr/sap/trans/bin/TP_DOMAIN_SID.PFL
```

4. Import the transports in the order specified in the `sequence.txt` file, using the following command:

```
tp import TR# client target_sid  
pf=/usr/sap/trans/bin/TP_DOMAIN_SID.PFL
```



Note

During the installation of the RFCs the following message may appear:
No valid development license available for namespace/KINTANA
You can ignore this message.

5. Check the following functions from the SE37 screen to verify the success of the transport.

For SAP® Release 3.1x:

- Z_KNTA_RFC_TP_READ_LOGFILE
- Z_KNTA_RFC_CHECK_SAP_RELEASE01
- Z_KNTA_RFC_TP_COMMAND01
- Z_KNTA_RFC_TR_OBJECTLIST01
- Z_KNTA_RFC_TR_PICKLIST01
- Z_KNTA_RFC_CHECK_TR_OBJECTS
- Z_KNTA_RFC_GET_TR_TYPE
- Z_KNTA_RFC_TR_PICKLIST02

For SAP® Release 4.x:

- /KINTANA/RFC_TP_READ_LOGFILE
- /KINTANA/RFC_CK_SAP_RELEASE01
- /KINTANA/RFC_TP_COMMAND01
- /KINTANA/RFC_TR_OBJECTLIST01
- /KINTANA/RFC_TR_PICKLIST01
- /KINTANA/RFC_CHECK_TR_OBJECTS

- /KINTANA/RFC_GET_TR_TYPE
- /KINTANA/RFC_TR_PICKLIST02
- /KINTANA/RFC_CREATE_CHANGE_REQ
- /KINTANA/RFC_IMPORT_CHANGE_REQ

SAP®-supplied RFCs for Release 46C:

- CTS_API_CREATE_CHANGE_REQUEST
- CTS_API_READ_CHANGE_REQUEST
- CTS_API_IMPORT_CHANGE_REQUEST

Using the Function Modules

The RFCs provided with the Extension perform the functions described in [Table 2-3](#).

Table 2-3. RFCs included in the Extension

Extension RFCs for Release 3.1x and Release 4.x	Purpose
CTS_API_READ_CHANGE_REQUEST (There is no Extension-supplied RFC to invoke this SAP®-supplied RFC.)	Invokes the SAP®-supplied RFC: CTS_API_READ_CHANGE_REQUEST
/KINTANA/RFC_CREATE_CHANGE_REQ (Release 4.x only)	Invokes the SAP®-supplied RFC: CTS_API_CREATE_CHANGE_REQUEST
/KINTANA/RFC_IMPORT_CHANGE_REQ (Release 4.x only)	Invokes the SAP®-supplied RFC: CTS_API_IMPORT_CHANGE_REQUEST
Z_KNTA_RFC_CHECK_SAP_RELEASE01 and /KINTANA/RFC_CK_SAP_RELEASE01	Checks the SAP® release number against the value passed to it.
Z_KNTA_RFC_CHECK_TR_OBJECTS and /KINTANA/RFC_CHECK_TR_OBJECTS	Determines whether a particular transport number contains objects specified in the Environment window's Critical Objects field, which can include any combination of OBJECT, OBJ_NAME, and OBJFUNC.

Table 2-3. RFCs included in the Extension [continued]

Extension RFCs for Release 3.1x and Release 4.x	Purpose
Z_KNTA_RFC_GET_TR_TYPE and /KINTANA/RFC_GET_TR_TYPE	Gets the type of transport (CUST or SYST), so that, depending on the type of transport request, the user can make decisions in the workflow.
Z_KNTA_RFC_TP_COMMAND01 and /KINTANA/RFC_TP_COMMAND01	Performs migrations in the SAP® environment—export, add to buffer, import, and other operations—that could also be implemented with a <code>tp</code> command in SAP®.
Z_KNTA_RFC_TP_OBJECTLIST01 and /KINTANA/RFC_TP_OBJECTLIST01	Gets the object list for the transport request.
Z_KNTA_RFC_TP_READ_LOGFILE and /KINTANA/RFC_TP_READ_LOGFILE	Checks the transport log for the export and import migration operations.
Z_KNTA_RFC_TR_PICKLIST01 and /KINTANA/RFC_TR_PICKLIST01	<p>From an SAP® source system, obtains and displays a list of transports based on the following value of the TRTASKSTATUS parameter:</p> <ul style="list-style-type: none"> • RELE includes only transports that have all of their tasks released. • UNREL includes only transports that have no tasks or have at least one unreleased task. • ALL includes all transports.
Z_KNTA_RFC_TR_PICKLIST02 and /KINTANA/RFC_TR_PICKLIST02	Improves the performance of retrieving the transport list by using selection criteria to filter the list of transports.

Configuring TMS on an SAP® 4.6C or 4.7 System

All SAP® systems must be registered in the Transport Management System (TMS) domain. Extended transport control must be activated in all systems. Only one consolidated route into a virtual system can be defined for each development client.

Table 2-4 shows an example of how to set up a basic three-system SAP® landscape with the Extension to support TMS. In this example, DEV should be assigned to be the transport domain controller.

Table 2-4. Example SAP® systems setup to support TMS

SAP® System	Routes
DEV	DEV > DUM (consolidation route)
QA	None
PRD	None
DUM (A virtual system)	None



Setting up the consolidation route into a virtual system (DUM) is a prerequisite to creating transportable change (transport) requests in the DEV system.

Authorizing Users to Use RFCs and TMS

SAP® users need to have authorizations to execute RFCs and perform transport functions such as creating transport requests, creating tasks, and exporting and importing transport requests. The standard authorizations S.A_DEVELOP and S_CTS_ADMIN can be used and customized as needed.



For detailed information about TMS and setting authorizations, see the printed and online product documentation from SAP®.

Chapter

3

Configuring the Extension

In This Chapter:

- *Configuring Environments*
 - *Configuring the Extension Data Tab*
 - *Configuring the Host Tab*
 - *Configuring Users*
-

Configuring Environments

Before you can use the Extension, you must configure the environment for each SAP® instance in the landscape.

Configuring the Extension Data Tab

The environment for Mercury Change Management Extension for SAP® Solutions is specified in the Mercury IT Governance Workbench Environment window, **Extension Data** tab, **SAP** subtab. *Figure 3-1* shows a sample environment. *Table 3-1* lists the field names and their definitions.

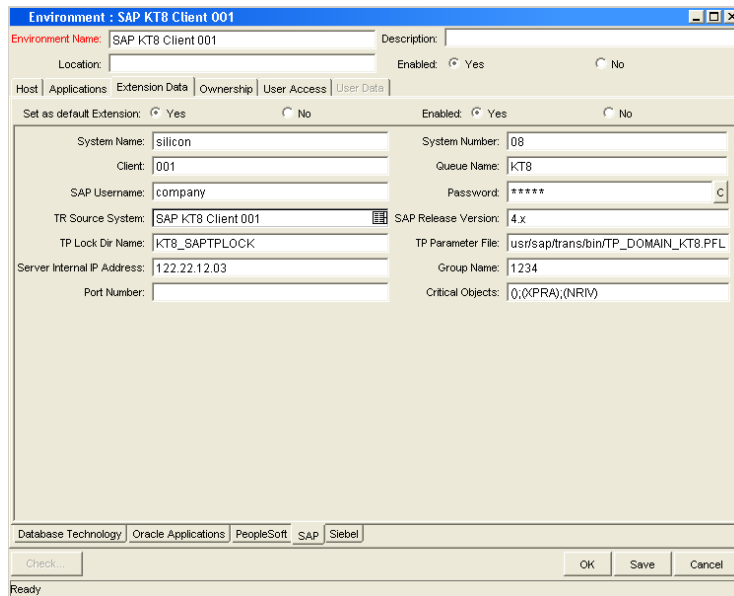


Figure 3-1. Environment window, Extension Data tab, SAP subtab, sample data

Table 3-1. Environment window, Extension Data tab, SAP subtab field definitions

Field Name	Definition
Set as default Extension	Whether or not SAP is the default subtab to show for this window's Extension Data tab.
Enabled	Whether or not the fields on this tab are available to be configured.
System Name	Name for the SAP® system represented by this environment.
System Number	System number for the SAP® system.

Table 3-1. Environment window, Extension Data tab, SAP subtab field definitions [continued]

Field Name	Definition
Client	Client name.
Queue Name	Queue name for the SAP® system.
SAP Username	Username (in the SAP® system) to be used for all migrations to or from this environment.
Password	Password corresponding to the SAP Username.
TR Source System	List of environments defined in Mercury IT Governance products. Set this field to the environment that corresponds to the TR Source System for this particular SAP® system.
SAP Release Version	SAP® release number.
TP Lock Dir Name	Name of the Lock Directory. Contains the log file that includes the Package Id and the Line Id that define this lock.
TP Parameter File	Full pathname of the TPPARAM file, used in case the file is not stored in the default location.
Server Internal IP Address	Internal IP address of the SAP® Application Server used when the server is behind a firewall and accessed through a gateway, to be specified with the -h parameter of the startRFC call to the RFC.
Group Name	SAP® Router String, to be specified with the -g parameter of the startRFC call to the RFC.
Port Number	Port number at which the SAP® server can be reached when the server is behind a firewall and accessed through a gateway, to be specified with the -x parameter of the startRFC call to the RFC.
Critical Objects	An environment-specific list used to identify objects of transports that are not allowed for that environment. Must be specified exactly in the format described in SAP 2 Step Migration With Critical Objects Check Object Type on page 51.

To access the **SAP** subtab on the **Extension Data** tab in the Workbench Environment window:

1. Open the Workbench.
2. From the shortcut bar, click the **Environments** button and click the **Environments** icon.
3. Open a new environment or, if the environment of interest already exists, open it. The Environment window opens.
4. For this Extension, click the **Extension Data** tab and then, at the bottom of the window, click the **SAP** subtab.

Configuring the Host Tab

On the **Host** tab of the Environment window, select Enable Server and complete the fields in the **Server** section. *Figure 3-2* shows a sample environment.

The screenshot shows the 'Environment : SAP KT8 Client 001' window with the 'Host' tab selected. The 'Server' section is enabled and contains the following data: Name: silicon.company.com, Type: Sun Solaris, Username: kt8adm, Password: ***** (masked), NT Domain: (empty), Base Path: /usr/sap/trans, Connection Protocol: SSH, Transfer Protocol: FTP. The 'Client' section is disabled. The 'Database' section is also disabled. The 'Enable Server' checkbox is checked. At the bottom, there are 'Check...', 'OK', 'Save', and 'Cancel' buttons. The status bar at the very bottom says 'Ready'.

Figure 3-2. Environment window, Host tab sample data

Configuring Users

The Extension allows an organization to map an SAP® Username to a particular Mercury IT Governance Center user. This Username allows you to track interactions with SAP® and is reflected in any generated Trans Req Logs.

Figure 3-3 shows the User window, **Extension Data** tab, **SAP** subtab. *Table 3-2* contains field definitions.

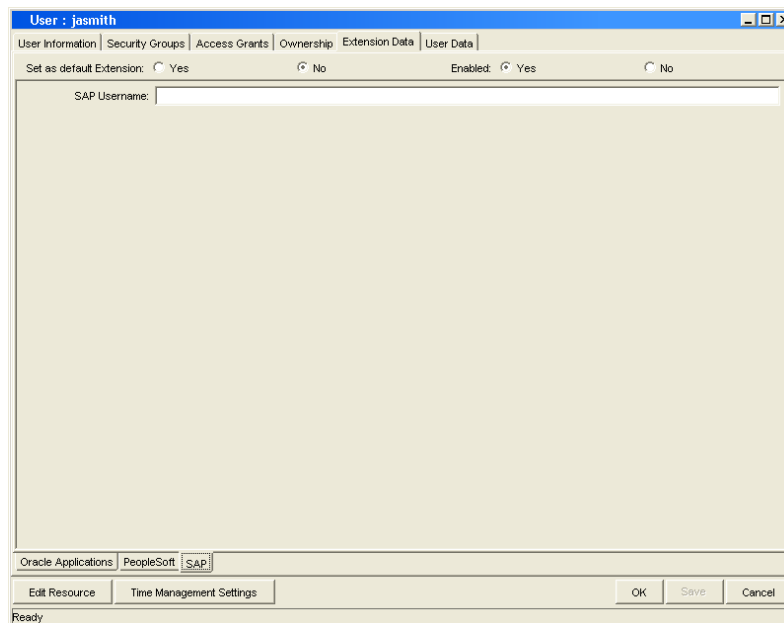


Figure 3-3. User window, Extension Data tab, SAP subtab

Table 3-2. User window, Extension Data tab, SAP subtab field definitions

Field Name	Definition
Set as Default Extension	Whether or not SAP is the default subtab to show for this window's Extension Data tab.
Enabled	Whether or not the fields on this tab are available to be configured.
SAP Username	SAP Username. If this field is left blank, all the transports are shown. To obtain a list of transport requests for multiple users, specify usernames separated by semicolons (:), as in: "John;Jack;Jill".

To access the **SAP** subtab on the **Extension Data** tab in the Workbench User window:

1. Open the Workbench.
2. From the shortcut bar, click **Sys Admin** and click the **Users** icon.
3. Open a new user or, if the user of interest already exists, open it. The User window opens.
4. Click the tabs as required to configure a user. For this Extension in particular, click the **Extension Data** tab and then, at the bottom of the window, click the **SAP** subtab.

For More Information

For more information about defining Mercury IT Governance Center users and privileges, see the *System Administration Guide and Reference*.

Chapter 4 Extension Entities

In This Chapter:

- *Object Types*
 - *Overview of Object Types*
 - *Reference Object Types*
 - *List of Object Types*
 - *Unconditional Mode*
 - *SAP 1 Step Migration Object Type*
 - *SAP 2 Step Migration Object Type*
 - *SAP 2 Step Migration Select TRs with Unreleased Tasks Object Type*
 - *SAP 2 Step Migration (starttrfc calls SAP behind gateway) Object Type*
 - *SAP 2 Step Migration With Check for Warnings Object Type*
 - *SAP 2 Step Migration With Critical Objects Check Object Type*
 - *SAP 2 Step Migration With Locking Parameters Object Type*
 - *SAP 2 Step Migration with Selection Criteria and Exclusion List Object Type*
 - *SAP 2 Step Migration With Selection Criteria for Transports Object Type*
 - *SAP 46C Object Type: Create, Get Object List, Import Change Req Object Type*
 - *SAP Cofile Datafile ADO File Migrator Object Type*
 - *SAP Mig using Picklist02 and Getting the TR Type Object Type*
 - *SAP Reorder Pkg Lines on Export Time and Import All Object Type*
 - *SAP - Transport Migration with Release Management Object Type*
- *Request Types*

- *Overview of Request Types*
 - *Reference Request Types*
 - *List of Request Types*
 - *SAP Bug/Enhancement Request Type*
 - *SAP Status Update Request Type*
 - *Workflows*
 - *Overview of Workflows*
 - *Reference Workflows*
 - *List of Workflows*
 - *SAP 46C Development/Bug Fix WF - Change Management Workflow*
 - *SAP 46C Development/Bug Fix WF - Demand Management Workflow*
 - *SAP Bug/Enhancement Workflow*
 - *SAP Critical Objects Check Workflow*
 - *SAP Dev=>Test=> Prod does not share the trans directory Workflow*
 - *SAP Dev=>Test=>Prod + Warning check Workflow*
 - *SAP - Distribute to Prod Workflow*
 - *SAP Reorder Package Lines and Import All Workflow*
 - *SAP Status Update Req Workflow*
 - *SAP - Transport Migration with Release Management Workflow*
 - *SAP - Transport Packages to Prod Subworkflow*
 - *SAP using Picklist02, getting the TR type Workflow*
 - *Report Types*
 - *Overview of Report Types*
 - *Reference Report Types*
 - *List of Report Types*
 - *SAP Request Detail Report*
 - *SAP Transport Migration Report*
 - *Validations*
 - *Tokens*
 - *SAP Transaction Request Log*
-

Object Types

This section provides reference information about the SAP®-specific object types provided in the Extension. These object types are listed and defined in [Table 4-1](#).

Overview of Object Types

Migration and compilation of object types are driven by commands included within the object types. For more information about commands in the Mercury IT Governance Center environment, see the *Commands, Tokens, and Validations Guide and Reference*. For more information about using object types in packages, see the *Mercury Change Management User's Guide*.

You can view or modify an object type as follows:

1. From the Workbench, click **Change Mgmt** and click the **Object Types** icon.
2. If you want, select a particular Extension from the Extension drop-down list.
3. In the Object Type Workbench window, click **List**.
4. Select the object type of interest and click **Open**.
5. Edit the object type. (On the **Fields** tab, the list of fields in the Prompts column is alphabetized.)

Subsequent figures in this section show screens you can use to revise object types in conjunction with adding package lines. You can access these screens as follows:

1. From the Workbench, click **Change Mgmt** and click the **Packages** icon.
2. Add a new or open an existing package, as necessary.
3. Select a workflow.
4. Add a line.
5. Select the object type of interest.

Reference Object Types

Reference (REFERENCE) object types cannot be edited, but you can copy and rename them and edit the copies to meet your needs. You can also use existing non-reference object types as is or configure them further to meet your needs.

List of Object Types

Table 4-1 lists and defines the object types included in the Extension. Each is described in subsequent sections.

Table 4-1. Object types included in the Extension

Object Type Name	Definition
SAP 1 Step Migration	Performs single-step Export, Add to Buffer, and Import.
SAP 2 Step Migration	Performs two-step Export, Add to Buffer, and Import.
SAP 2 Step Migration Select TRs with Unreleased Tasks	Shows how transports with unreleased tasks are to be listed in the pick list.
SAP 2 Step Migration (startRFC calls SAP behind gateway)	Shows how <code>startRFC</code> should be used for SAP® servers behind a firewall.
SAP 2 Step Migration With Check for Warnings	Performs two-step migration that checks for warnings and returns error codes.
SAP 2 Step Migration With Critical Objects Check	Checks whether the transport contains objects that are specified as critical in the Extension Environment window.
SAP 2 Step Migration With Locking Parameters	Shows the use of lock fields specified in the Extension Environment window. Uses the scripts <code>lock_with_parameters.sh</code> and <code>unlock_with_parameters.sh</code> .
SAP 2 Step Migration with Selection Criteria and Exclusion List	Performs two-step migration with different combinations of selection criteria for getting all transports that are not exported and not saved in another package.
SAP 2 Step Migration With Selection Criteria for Transports	Performs two-step migration with different combinations of selection criteria for transports.
SAP 46C Object Types: Create, Get Object List, Import Change Req	Lets users describe, create, and import transport requests
SAP Cofile Datafile ADO File Migrator	Performs SAP® transport migration in two steps. Also migrates the transport files (<code>cofile</code> , <code>datafile</code> , and <code>ADO</code> files) when the <code>trans</code> directory is not shared between instances.

Table 4-1. Object types included in the Extension [continued]

Object Type Name	Definition
SAP Mig using Picklist02 and Getting the TR Type	Performs standard migrations and allows users to specify the criteria for viewing the list of transports that are eligible for migration.
SAP Reorder Pkg Lines on Export Time and Import All	Exports the transport, registers the export time of the transport, cleans the system buffer, resequences the package lines in the order of the export time, builds the buffer of the destination system, and imports all transports in the buffer.
SAP - Transport Migration with Release Management	Performs SAP® transport migration from a Dev to a Test environment and, with QA approval, adds the package to a release to import it into a Prod environment.

Unconditional Mode

Many object types use the Unconditional Mode (UMODE) field. The value(s) specified in this field are passed to the `starttrfc` utility. In this field, you can enter one or more of the values shown in [Table 4-2](#). Do not separate multiple values with any other characters. For example, **18** is a valid value.

Table 4-2. Unconditional Mode values

Value	Definition
0	Import from buffer without deleting and then use unconditional mode 1 to allow another import into the correct location.
1	During export, ignore any incorrect status of the transport control file. During import, execute the request even if it has already been imported.
2	During import, overwrite original objects.
3	During import, overwrite system-specific objects.
4	Import into system other than the target system that was defined in the transport request.
6	During import, overwrite objects that are unconfirmed repairs.
8	During import, ignore transport restrictions based on table classes.
9	Import into system even if it is locked against this type of transport.

SAP 1 Step Migration Object Type

The Extension performs migrations using SAP's CTS. The SAP 1 Step Migration object type performs this function.

Each migration consists of three steps: Export, Add to Buffer, and Import. The Export step submits and exports the transport request (TR). The Add to Buffer step adds the transport request to the import queue for the destination. The Import step completes the migration by importing the contents of the TR to the destination client.

Figure 4-1 shows sample data for the SAP 1 Step Migration object type when adding a package line. *Table 4-3* contains field definitions for the object type.

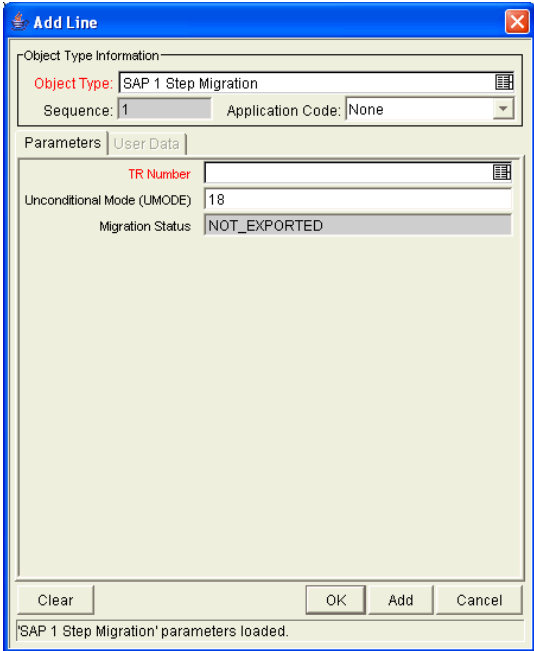


Figure 4-1. SAP 1 Step Migration object type sample data

Table 4-3. SAP 1 Step Migration object type field definitions

Name	Definition
TR Number	Transport request number to be migrated.
Unconditional Mode (UMODE)	Unconditional Mode. See Table 4-2 on page 43 .
Migration Status	Status field reflecting the state of the migration.

SAP 2 Step Migration Object Type

The SAP 2 Step Migration object type performs the Export in one workflow step and executes the Add to Buffer and Import actions in a separate step. This object type needs to be customized for the workflow step name in which the Export, the Add to Buffer, and the Import occur.

Figure 4-2 shows sample data for the SAP 2 Step Migration object type when adding a package line. *Table 4-4* contains field definitions for the object type.

Figure 4-2. SAP 2 Step Migration object type sample data

Table 4-4. SAP 2 Step Migration object type field definitions

Name	Definition
TR Number	Transport request number to be migrated.
Unconditional Mode (UMODE)	Unconditional Mode. See Table 4-2 on page 43 .
Migration Status	Status field reflecting the state of the migration.

SAP 2 Step Migration Select TRs with Unreleased Tasks Object Type

The SAP 2 Step Migration Select TRs with Unreleased Tasks object type performs a migration. It also allows users to specify criteria, including the Status of Transport Tasks field, for viewing a subset of the list of transports that are eligible for migration.

Figure 4-3 shows sample data for the SAP 2 Step Migration Select TRs with Unreleased Tasks object type when adding a package line. *Table 4-5* contains field definitions for the object type.

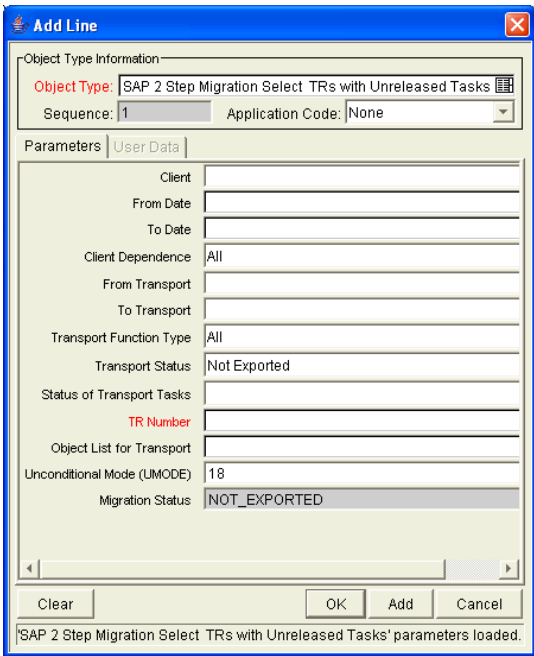


Figure 4-3. SAP 2 Step Migration Select TRs with Unreleased Tasks object type sample data

Table 4-5. SAP 2 Step Migration Select TRs with Unreleased Tasks object type field definitions

Field Name	Definition
Client	SAP® client number.
From Date	Transport requests modified on or after this date.
To Date	Transport requests modified on or before this date.
Client Dependence	Client Specific, Client Independent, or All.
From Transport	Starting transport number.
To Transport	Ending transport number.
Transport Function Type	Transport type: Transportable Change Request (Workbench), Customizing Request, Local Package, or All.
Transport Status	Transport status: Exported, Not Exported, or All.
Status of Transport Tasks	<p>Transport tasks that have one of the following statuses:</p> <ul style="list-style-type: none"> • All transports • Transports that have all of their tasks released • Transports that have no tasks or that have at least one unreleased task <p>For more information, see Using the Function Modules on page 30.</p>
TR Number	Transport request number to be migrated, where the auto-complete list is limited by the selection criteria specified in other fields.
Object List for Transport	Object list for the transports.
Unconditional Mode (UMODE)	Unconditional Mode. See Table 4-2 on page 43 .
Migration Status	Status field reflecting the state of the migration

SAP 2 Step Migration (startRFC calls SAP behind gateway) Object Type

The SAP 2 Step Migration (startRFC calls SAP behind gateway) object type is an example object type and shows how the `startRFC` command can be used in case there is a firewall between the Mercury IT Governance Server and the SAP® system.

In the other Extension object types, the first three parameters passed after the `startRFC` call usually have the following format:

```
ksc_local_exec [AS.BASE_PATH]/bin/startRFC  
-h [SOURCE_ENV.SERVER_NAME]  
-s [SOURCE_ENV.AC.SAP_SYSTEM_NUMBER]  
-c [SOURCE_ENV.AC.SAP_CLIENT] ...
```

However, for this object type, these parameters have the following format:

```
ksc_local_exec [AS.BASE_PATH]/bin/startRFC  
-h [SOURCE_ENV.AC.SAP_INTERNAL_IP_ADDRESS]  
-g [SOURCE_ENV.AC.SAP_GROUP_NAME]  
-x [SOURCE_ENV.AC.SAP_PORT_NUMBER] ...
```



Note

For more information on how `startRFC` can be used, see the SAP® online help that comes with `startRFC`. To access the online help, go to the directory in SAP® where `startRFC` is located and issue the command without any parameters.

Figure 4-4 shows sample data for the SAP 2 Step Migration (startRFC calls SAP behind gateway) object type when adding a package line. *Table 4-6* contains field definitions for the object type.

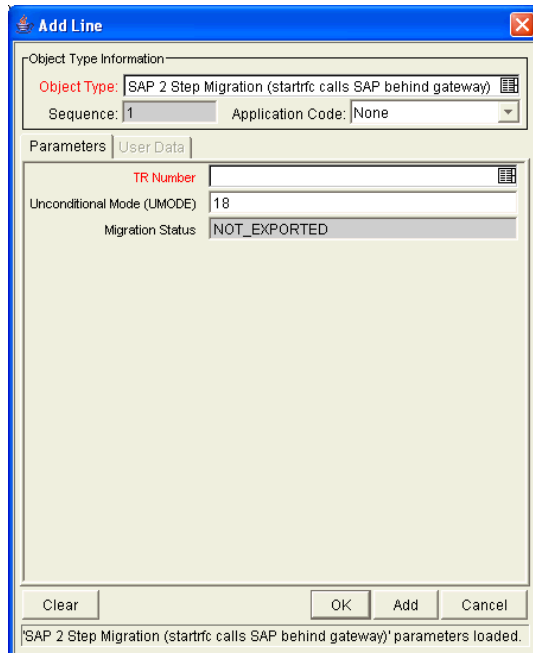


Figure 4-4. SAP 2 Step Migration (startRFC calls SAP behind gateway) object type sample data

Table 4-6. SAP 2 Step Migration (startRFC calls SAP behind gateway) object type field definitions

Field Name	Definition
TR Number	Number of the transport request to be migrated.
Unconditional Mode (UMODE)	Unconditional Mode. See Table 4-2 on page 43 .
Migration Status	Status field reflecting the state of the migration.

SAP 2 Step Migration With Check for Warnings Object Type

The SAP 2 Step Migration With Check for Warnings object type performs standard migrations and checks for warnings. The warnings that are issued route the object through the appropriate warnings-related workflow step.

Figure 4-5 shows sample data for the SAP 2 Step Migration With Check for Warnings object type when adding a package line. *Table 4-7* contains field definitions for the object type.

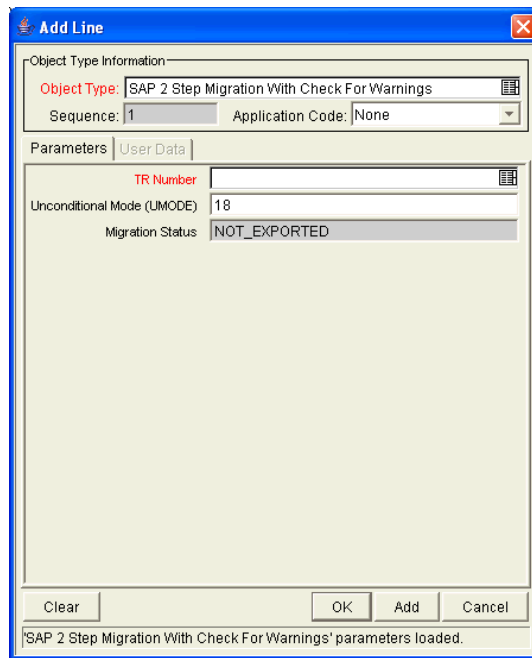


Figure 4-5. SAP 2 Step Migration With Check For Warnings object type sample data

Table 4-7. SAP 2 Step Migration With Check For Warnings object type field definitions

Field Name	Definition
TR Number	Transport request number to be migrated.
Unconditional Mode (UMODE)	Unconditional Mode. See Table 4-2 on page 43 .
Migration Status	Status field reflecting the state of the migration.

SAP 2 Step Migration With Critical Objects Check Object Type

The SAP 2 Step Migration With Critical Objects Check object type allows users to specify criteria for viewing a subset of the list of transports that are eligible for migration.

This object type uses the value specified in the Critical Objects field in the Environment window, **Extension Data** tab, **SAP** subtab, to determine whether there is any risk in carrying out an import to that destination environment.

For a particular transport number, the `Critical Object Check` command in the object type checks whether any of the objects in the transport match any values in the Critical Objects field in the Environment window. If a match is found, the RFC issues a warning code of 4. An appropriate workflow step can then let the user decide whether or not the transport should be imported into the destination environment.

The Critical Objects field must be specified in the following format, otherwise results will be incorrect:

```
(Program Id1, Program Id2, Program Id3,...) ; (Object1,
Object2,... ) ; (Object Name1, Object Name2 , ...)
```

The first set of parentheses always enclose the Program Id(s) that are to be queried, the second always enclose the Object(s), and the third always enclose the Object Name(s). The sets of parentheses must be separated by semicolons (;). Multiple entries within parentheses must be separated by a comma, as in:

```
(LIMU) ; (XPRA , DTED) ; (V_TVTW , NRIV)
```

This example specifies that a warning should be issued before an attempt is made to import a transport with an object having a Program Id of LIMU, or an Object of XPRA or DTED, or an Object Name of V_TVTW or NRIV.

This object type should be used with a workflow that has steps similar to those of the SAP Critical Objects Check Workflow (see [SAP Critical Objects Check Workflow on page 86](#)).

[Figure 4-6](#) shows sample data for the SAP 2 Step Migration With Critical Objects Check object type when adding a package line. [Table 4-8](#) contains field definitions for the object type.

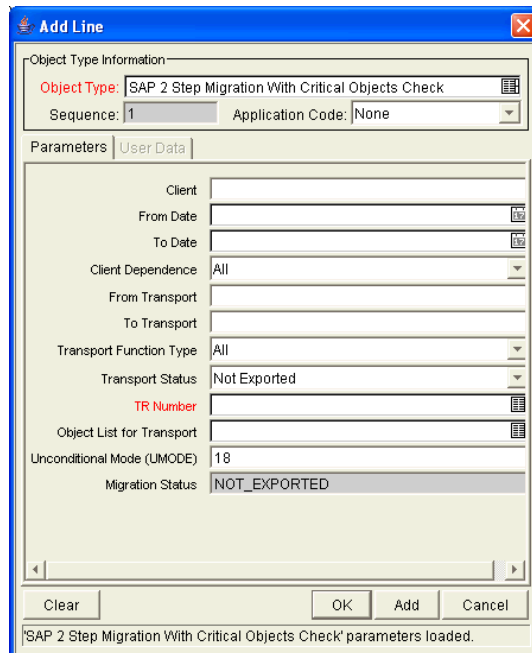


Figure 4-6. SAP 2 Step Migration With Critical Objects Check object type sample data

Table 4-8. SAP 2 Step Migration With Critical Objects Check object type field definitions

Field Name	Definition
Client	SAP® client number.
From Date	Transport requests modified on or after this date.
To Date	Transport requests modified on or before this date.
Client Dependence	Client Specific, Client Independent, or All.
From Transport	Starting transport number.
To Transport	Ending transport number.
Transport Function Type	Transport type: Transportable Change Request (Workbench), Customizing Request, Local Package, or All.
Transport Status	Transport status: Exported, Not Exported, or All.
TR Number	Transport request number to be migrated.
Object List for Transport	Object list for the transports.
Unconditional Mode (UMODE)	Unconditional Mode. See Table 4-2 on page 43 .
Migration Status	Status field reflecting the state of the migration.

SAP 2 Step Migration With Locking Parameters Object Type

The SAP 2 Step Migration With Locking Parameters object type can be used for migrations when the transport is shared by different systems. The object type creates a logical lock named SAPTPLOCK_*parameter* where *parameter* is the value specified in the TP Lock Dir Name field in the Environment window, **Extension Data** tab, **SAP** subtab. Once the transport is released, the logical lock is also removed. The scripts `lock_with_parameters.sh` and `unlock_with_parameters.sh` are used to lock and unlock the transport. One lock can be specified per system.

[Figure 4-7](#) shows sample data for the SAP 2 Step Migration With Locking Parameters object type when adding a package line. [Table 4-9](#) contains field definitions for the object type.

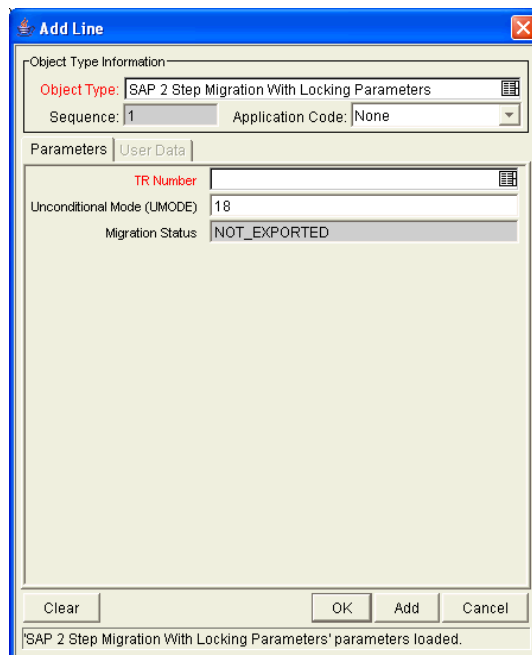


Figure 4-7. SAP 2 Step Migration With Locking Parameters object type sample data

Table 4-9. SAP 2 Step Migration With Locking Parameters object type field definitions

Field Name	Definition
TR Number	Transport request number to be migrated.
Unconditional Mode (UMODE)	Unconditional Mode. See Table 4-2 on page 43 .
Migration Status	Status field reflecting the state of the migration.

SAP 2 Step Migration with Selection Criteria and Exclusion List Object Type

The SAP 2 Step Migration with Selection Criteria and Exclusion List object type performs standard migrations. This object type also allows users to specify criteria for viewing a subset of the list of transports that are eligible for migration. Only the transport requests that are not already saved in Mercury Change Management are displayed.

Figure 4-8 shows sample data for the SAP 2 Step Migration with Selection Criteria and Exclusion List object type when adding a package line. *Table 4-10* contains field definitions for the object type.

The screenshot shows a dialog box titled "Add Line" with a blue border and a close button in the top right corner. The dialog is divided into two main sections: "Object Type Information" and "Parameters".

Object Type Information:

- Object Type: SAP 2 Step Migration with Selection Criteria and Exclusion List
- Sequence: 1
- Application Code: None

Parameters:

- Client: [Empty field]
- From Date: [Empty date field]
- To Date: [Empty date field]
- Client Dependence: All
- From Transport: [Empty field]
- To Transport: [Empty field]
- Transport Function Type: All
- Transport Status: Not Exported
- TR Number: [Empty field]
- Object List for Transport: [Empty field]
- Unconditional Mode (LIMODE): 18
- Migration Status: NOT_EXPORTED

At the bottom of the dialog, there are four buttons: "Clear", "OK", "Add", and "Cancel". Below the buttons, a status bar reads: "SAP 2 Step Migration with Selection Criteria and Exclusion List' parameters loaded."

Figure 4-8. SAP 2 Step Migration with Selection Criteria and Exclusion List object type sample data

Table 4-10. SAP 2 Step Migration with Selection Criteria and Exclusion List object type field definitions

Field Name	Definition
Client	SAP® client number.
From Date	Transport requests modified on or after this date.
To Date	Transport requests modified on or before this date.
Client Dependence	Client Specific, Client Independent, or All.
From Transport	Starting transport number.
To Transport	Ending transport number.
Transport Function Type	Transport type: Transportable Change Request (Workbench), Customizing Request, Local Package, or All.
Transport Status	Transport status: Exported, Not Exported, or All.
TR Number	Transport request number to be migrated, where the auto-complete list is limited by the selection criteria specified in other fields.
Object List for Transport	Object list for the transports.
Unconditional Mode (UMODE)	Unconditional Mode. See Table 4-2 on page 43 .
Migration Status	Status field reflecting the state of the migration.

SAP 2 Step Migration With Selection Criteria for Transports Object Type

The SAP 2 Step Migrations With Selection Criteria for Transports object type performs standard migrations. This object type also allows users to specify criteria for viewing a subset of the list of transports that are eligible for migration.

Figure 4-9 shows sample data for the SAP 2 Step Migration With Selection Criteria for Transports object type when adding a package line. *Table 4-11* contains field definitions for the object type.

The screenshot shows the 'Add Line' dialog box with the following data:

Object Type Information	
Object Type:	SAP 2 Step Migration With Selection Criteria for Transports
Sequence:	1
Application Code:	None

Parameters | User Data

Client	
From Date	
To Date	
Client Dependence	All
From Transport	
To Transport	
Transport Function Type	All
Transport Status	Not Exported
TR Number	
Object List for Transport	
Unconditional Mode (UMODE)	18
Migration Status	NOT_EXPORTED

Buttons: Clear, OK, Add, Cancel

Footer: SAP 2 Step Migration With Selection Criteria for Transports' parameters loaded.

Figure 4-9. SAP 2 Step Migration With Selection Criteria for Transports object type sample data

Table 4-11. AP 2 Step Migration With Selection Criteria for Transports object type field definitions

Field Name	Definition
Client	SAP® client number.
From Date	Transport requests modified on or after this date.
To Date	Transport requests modified on or before this date.
Client Dependence	Client Specific, Client Independent, or All.
From Transport	Starting transport number.
To Transport	Ending transport number.
Transport Function Type	Transport type: Transportable Change Request (Workbench), Customizing Request, Local Package, or All.
Transport Status	Transport status: Exported, Not Exported, or All.
TR Number	Transport request number to be migrated, where the auto-complete list is limited by the selection criteria specified in other fields.
Object List for Transport	Object list for the transports.
Unconditional Mode (UMODE)	Unconditional Mode. See Table 4-2 on page 43 .
Migration Status	Status field reflecting the state of the migration.

SAP 46C Object Type: Create, Get Object List, Import Change Req Object Type

Changes in SAP® are recorded in Transport Change Requests. For enhancements or bug fixes to SAP® systems, transport requests need to be created. The object type called SAP 46C Object Type: Create, Get Object List, Import Change Req creates a transport request in the SAP® system, reads the object list of the released transport, and imports the transport into the destination system. For each of these steps, the object type calls an RFC in the SAP® system using `startRFC`.

This object type calls two RFCs in the Mercury IT Governance namespace that in turn call SAP®-supplied RFCs. For more information about these Extension-supplied and SAP®-supplied RFCs, see [Using the Function Modules on page 30](#).

Figure 4-10 shows sample data for the SAP 46C Object Type: Create, Get Object List, Import Change Req object type when adding a package line. Table 4-12 contains field definitions for the object type.

Figure 4-10. SAP 46C Object Type: Create, Get Object List, Import Change Req object type sample data

Table 4-12. SAP 46C Object Type: Create, Get Object List, Import Change Req object type field definitions

Field Name	Definition
Description	Description of the transport request. Words must be separated by an underscore.
Category	Type of request: Customizing request or Workbench request .
Source Client	Source SAP® client where the transport request will be created.
Owner	Owner of the transport request.
Destination System	Destination SAP® system where the transport request will be imported.
Destination Client	Destination SAP® client where the transport request will be imported.
Request	Automatically generated transport request number.

SAP Cofile Datafile ADO File Migrator Object Type

The SAP Cofile Datafile ADO Migrator object type migrates transport requests from one SAP® system to another when the `trans` directory is not shared. For example, when development and test instances share the `trans` directory but the production instance resides on a different system and does not share the `trans` directory, this object type migrates the changes to the production instance. This object type migrates cofiles (whose names begin with `K`), datafiles (whose names begin with `R`), and ADO datafiles (whose names begin with `D`) to the destination instance.



Note

This object type must be used with a workflow that has steps similar to those of the workflow SAP Dev=>Test=> Prod does not share the `trans` directory. See [SAP Dev=>Test=> Prod does not share the trans directory Workflow on page 86](#).

Figure 4-11 shows sample data for the SAP Cofile Datafile ADO File Migrator object type when adding a package line. *Table 4-13* contains field definitions for the object type.

Figure 4-11. SAP Cofile Datafile ADO File Migrator object type sample data

Table 4-13. SAP Cofile Datafile ADO File Migrator object type field definitions

Name	Definition
TR Number	Transport request number to be migrated.
Unconditional Mode (UMODE)	Unconditional Mode. See Table 4-2 on page 43 .
Migration Status	Status field reflecting the state of the migration.

SAP Mig using Picklist02 and Getting the TR Type Object Type

The SAP Mig using Picklist02 and Getting the TR Type object type performs a standard migration. This object type also allows users to specify criteria for viewing a subset of the list of transports that are eligible for migration.

This object type is different from the SAP 2 Step Migration With Selection Criteria for Transports object type in that it calls one of the following RFCs, depending on the SAP® release:

- Z_KNTA_RFC_PICKLIST02
- /KINTANA/RFC_TR_PICKLIST02).

In addition, this object type determines and displays the type of the transport (Client Dependent or Client Independent) in the TR Type field.

Figure 4-12 shows sample data for the SAP Mig using Picklist02 and Getting the TR Type object type when adding a package line. *Table 4-14* contains field definitions for the object type.

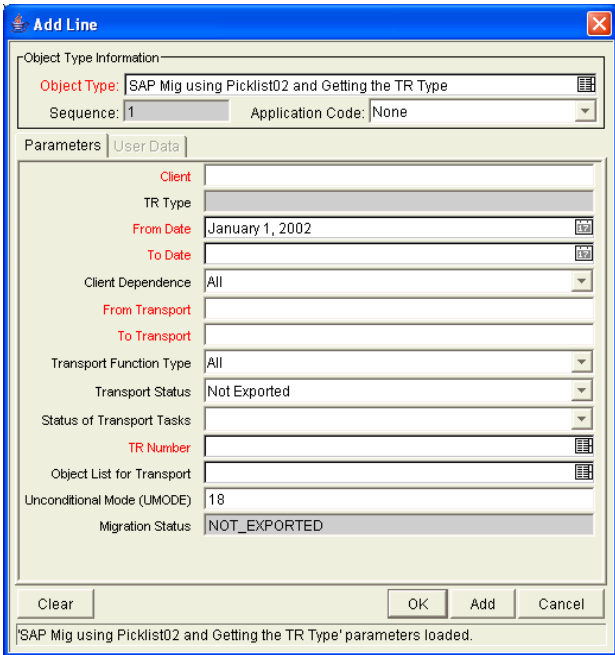


Figure 4-12. SAP Mig using Picklist02 and Getting the TR Type object type sample data

Table 4-14. SAP Mig using Picklist02 and Getting the TR Type object type field definitions

Field Name	Definition
Client	SAP® client number
TR Type	Field displaying the type of transport request, determined when the transport request is retrieved.
From Date	Transport requests modified on or after this date.
To Date	Transport requests modified on or before this date.
Client Dependence	Client Specific, Client Independent, or All.
From Transport	Starting transport number.
To Transport	Ending transport number.
Transport Function Type	Transport type: Transportable Change Request (Workbench), Customizing Request, Local Package, or All.
Transport Status	Transport status: Exported, Not Exported, or All.
Status of Transport Tasks	<p>Transport tasks that have one of the following statuses:</p> <ul style="list-style-type: none"> • All transports • Transports that have all of their tasks released • Transports that have no tasks or that have at least one unreleased task <p>For more information, see Using the Function Modules on page 30.</p>
TR Number	Transport request number to be migrated, where the auto-complete list is limited by the selection criteria specified in other fields.
Object List for Transport	Object list for the transports.
Unconditional Mode (UMODE)	Unconditional Mode. See Table 4-2 on page 43 .
MIgration Status	Status field reflecting the state of the migration

SAP Reorder Pkg Lines on Export Time and Import All Object Type

The SAP Reorder Pkg Lines on Export Time and Import All object type can perform Export, Add to Buffer, Import, Clean Buffer, and Import All functions, depending on the workflow step source.

This object type also allows users to specify criteria for viewing a subset of the list of transports that are eligible for migration.

The object type gets the latest transport export time from the transport cofile and stores it in the Transport Export Time parameter. The SQL script `kdlvac_sap_reorder_pkglines.sql` located in the `ITG_Home/scripts` directory is used to reorder the package lines into the correct sequence, according to their Transport Export Times.

The object type command Get Export Time requires temporary file creation rights on the `tmp` directory.

After reordering is done, use Window > Refresh to view the package lines in ascending order of the transport's last export time.

This object type should be used with a workflow that has steps similar to those of the SAP Reorder Package Lines and Import All Workflow (see [SAP Reorder Package Lines and Import All Workflow](#) on page 90).

Figure 4-13 shows sample data for the SAP Reorder Pkg Lines on Export Time and Import All object type when adding a package line. *Table 4-15* contains field definitions for the object type.

The screenshot shows the 'Add Line' dialog box with the following fields and values:

- Object Type Information:**
 - Object Type: SAP Reorder Pkg Lines on Export Time and Import All
 - Sequence: 1
 - Application Code: None
- Parameters | User Data:**
 - Client: |
 - From Date: |
 - To Date: |
 - Client Dependence: All
 - From Transport: |
 - To Transport: |
 - Transport Function Type: All
 - Transport Status: Not Exported
 - TR Number: |
 - Object List for Transport: |
 - UMODE: 18
 - Migration Status: NOT_EXPORTED
 - Transport Export Time: |
 - Cofile: |
 - Temporary Directory: /tmp

Buttons: Clear, OK, Add, Cancel

Footer: "SAP Reorder Pkg Lines on Export Time and Import All" parameters loaded.

Figure 4-13. SAP Reorder Pkg Lines on Export Time and Import All object type sample data

Table 4-15. SAP Reorder Pkg Lines on Export Time and Import All object type field definitions

Field Name	Definition
Client	SAP® client number.
From Date	Transport requests modified on or after this date.
To Date	Transport requests modified on or before this date.
Client Dependence	Client Specific, Client Independent, or All.
From Transport	Starting transport number.
To Transport	Ending transport number.
Transport Function Type	Transport type: Transportable Change Request (Workbench), Customizing Request, Local Package, or All.
Transport Status	Transport status: Exported, Not Exported, or All.
TR Number	Transport request number to be migrated, where the auto-complete list is limited by the selection criteria specified in other fields.
Object List for Transport	Object list for the transports.
UMODE	Unconditional Mode. See Table 4-2 on page 43 .
Migration Status	Status field reflecting the state of the migration.
Transport Export Time	Time when the transport request was exported.
Cofile	Cofile from which the export time is taken.
Temporary Directory	Temporary directory.

SAP - Transport Migration with Release Management Object Type

The SAP - Transport Migration with Release Management object type, introduced in release 6.0.0 of the Extension, can perform Export, Add to Buffer, Import, Clean Buffer, and Import All functions, depending on the workflow step source.

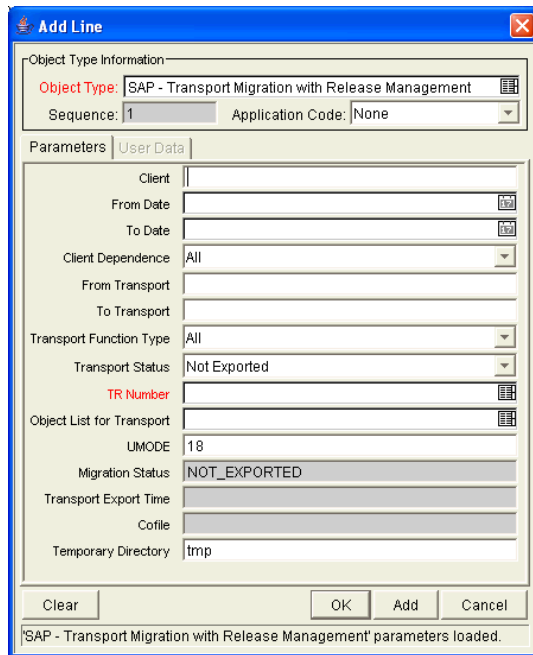
This object type is associated with the following two workflows, also introduced in release 6.0.0:

- **SAP - Transport Migration with Release Management workflow.** Using this workflow, the SAP - Transport Migration with Release Management object type performs transport migration from a Dev environment to a Test environment and, with QA approval, then adds a package to a release for import into a Prod environment. See [SAP - Transport Migration with Release Management Workflow on page 95](#).
- **SAP - Distribute to Prod workflow.** In Mercury Change Management, packages are created for SAP® transport requests (TRs), with one package line representing one TR. In an SAP® landscape, developers and consultants can work on different SAP® modules, creating TRs that get released at various times. Regardless of how the potentially interdependent TRs are grouped into packages, they must be imported into a destination system in the same order they were released, as indicated by the SAP® Export time.

The SAP - Transport Migration with Release Management object type and the SAP - Distribute to Prod workflow allow you to import multiple packages in the chronological order that their individual package lines (TRs) were exported, accumulating a release for more efficient migration to a Prod environment. See [SAP - Distribute to Prod Workflow on page 88](#).

The object type command Get Export Time requires temporary file creation rights on the `tmp` directory.

[Figure 4-14](#) shows sample data for the SAP - Transport Migration with Release Management object type when adding a package line. [Table 4-16](#) contains field definitions for the object type.



Add Line

Object Type Information

Object Type: SAP - Transport Migration with Release Management

Sequence: 1 Application Code: None

Parameters | User Data

Client

From Date

To Date

Client Dependence: All

From Transport

To Transport

Transport Function Type: All

Transport Status: Not Exported

TR Number

Object List for Transport

UMODE: 18

Migration Status: NOT_EXPORTED

Transport Export Time

Cofile

Temporary Directory: tmp

Clear OK Add Cancel

SAP - Transport Migration with Release Management' parameters loaded.

Figure 4-14. SAP - Transport Migration with Release Management object type sample data

Table 4-16. SAP - Transport Migration with Release Management object type field definitions

Field Name	Definition
Client	SAP® client number.
From Date	Transport requests modified on or after this date.
To Date	Transport requests modified on or before this date.
Client Dependence	Client Specific, Client Independent, or All.
From Transport	Starting transport number.
To Transport	Ending transport number.
Transport Function Type	Transport type: Transportable Change Request (Workbench), Customizing Request, Local Package, or All.
Transport Status	Transport status: Exported, Not Exported, or All.
TR Number	Transport request number to be migrated, where the auto-complete list is limited by the selection criteria specified in other fields.
Object List for Transport	Object list for the transports.
UMODE	Unconditional Mode. See Table 4-2 on page 43 .
Migration Status	Status field reflecting the state of the migration.
Transport Export Time	Time when the transport request was exported.
Cofile	Cofile from which the export time is taken.
Temporary Directory	Temporary directory.

Request Types

This section provides reference information about the SAP®-specific request types provided in the Extension. These request types are listed and defined in [Table 4-17](#).

Overview of Request Types

Migration and compilation of request types can be driven by commands included within the request types. For more information about commands in the Mercury IT Governance Center environment, see the *Commands, Tokens, and Validations Guide and Reference*. For more information about using request types in packages, see the *Mercury Change Management User's Guide*.

As an example, [Figure 4-15 on page 72](#) shows a screen you can use to create requests from an existing SAP Bug/Enhancement request type. You can access this screen as follows:

1. Make sure that the desired request type is enabled. From the Workbench, click **Demand Mgmt** and click the **Request Types** icon. If the desired request type needs to be enabled, open and enable it.
2. In the standard interface, select **Create > Request**. The Create New Request page appears.
3. Select the Request Type of interest from the drop-down list and click **Create**.

Reference Request Types

Reference (REFERENCE) request types cannot be edited, but you can copy and rename them and edit the copies to meet your needs. You can also use existing non-reference request types as is or configure them further to meet your needs.

List of Request Types

Table 4-17 lists and defines the request types included in the Extension. Each is described in subsequent sections.

Table 4-17. Request types included in the Extension

Request Type Name	Definition
SAP Bug/Enhancement Request Type	Gathers information required to log and track changes to an SAP® instance.
SAP Status Update Request Type	Automates the process of gathering and reviewing status reports.

SAP Bug/Enhancement Request Type

The SAP Bug/Enhancement Request Type captures specific information needed to log and track changes to SAP® instance(s). Once the appropriate resolution has been identified, a Change Management package can be generated and the SAP® object types can be used to apply the required changes.

Use the SAP Bug/Enhancement Workflow as the default workflow for this request type.

Figure 4-15 shows the screen for creating an SAP Bug/Enhancement Request based on the provided request type. *Table 4-18* contains field definitions for the request type.

The screenshot displays the 'Create New SAP Bug/Enhancement Request Type' form. At the top, there are 'Expand All' and 'Collapse All' buttons, followed by 'Submit' and 'Cancel' buttons. The form is organized into sections: 'Header', 'Summary', 'Details', and 'Bug'. The 'Bug' section contains the following fields: 'SAP Release' (dropdown), 'Impact' (dropdown), 'Estimated Time To Complete' (text input), 'SAP Module' (dropdown), 'Category' (dropdown), 'Difficulty' (dropdown), 'SAP Component' (dropdown), 'Error Log' (text input with '(no document attached)' and an 'Add' button), 'Resolution' (dropdown), 'Request Description' (text area), 'Reproducible' (radio buttons for 'Yes' and 'No'), 'Resolution Summary' (text area), and 'Steps To Replicate' (text area). At the bottom, there are 'Notes' and 'References' sections, followed by 'Submit' and 'Cancel' buttons.

Figure 4-15. SAP Bug/Enhancement Request creation

Table 4-18. SAP Bug/Enhancement Request Type field definitions

Field Name	Definition
Summary tab (not expanded in Figure 4-15)	
Workflow	SAP Bug/Enhancement Workflow
Bug tab	
SAP Release	SAP® release number.
SAP Module	SAP® module.
SAP Component	SAP® component.
Request Description	Problem being encountered with the application.
Reproducible	Whether or not the error is reproducible.
Steps to Replicate	Text describing how to recreate the problem.
Impact	Impact: Severe , Warning , Minor , or Cosmetic .
Category	Request category: ABAP , Customizing , or ALL .
Error Log	Attached error log.
Estimated Time To Complete	Estimated time needed to address the bug or enhancement.
Difficulty	Difficulty to fix: Easy , Medium , or Hard .
Resolution	Resolution: Fixed , Not Fixed , Not Reproducible , Duplicate , or Process Fix .
Resolution Summary	Description of the changes made for the bug or enhancement.

SAP Status Update Request Type

Many organizations use manual status reports to gather information on project status, exceptions, and risks. However, the process can be inefficient due to the time and resources spent on updating and consolidating information and the need for managers to follow up with group members regarding task completion. Reviewers may not know when status reports are ready for review, who to contact, or how to access the most current versions of the reports. The SAP Status Update Request Type automates the process of gathering and reviewing status reports. It lets managers request information, it automatically notifies group members of requirements for information, and it monitors them to make sure that tasks are completed. When the tasks for completing a report have been done, all reviewers are automatically notified. All involved parties have access to the latest version of the report.

This request type allows users to enter basic requestor information and determine which project teams need to provide status updates. The requestor can indicate the required date for the information and which individual is directly responsible for the update from each team (this responsibility can also have specified defaults). Once the request is submitted, the request goes through an Update Request process that routes the request to the appropriate teams and individuals. The status updates are attached to the request so that all individuals with appropriate access can use the request as the repository for the project status information for the given time period.

This request type is designed to work with the SAP Status Update Req workflow.

To use the SAP Status Update Request Type:

1. Decide which subteams will supply you with status reports.
2. Create new Status/Lead fields for the new teams not already predefined.
3. Delete the Status/Lead fields that are not relevant for your project.
4. Decide the defaults for each status field (whether they are Requested or Not Requested).
5. If you have already identified the Team Leads for the project, make their names the default values in the Team Lead fields.

Figure 4-16 shows the screen for creating an SAP Status Update Request based on the provided request type. *Table 4-19* contains field definitions for the request type.

Create New SAP Status Update Request Type

Expand All Collapse All Submit Cancel

Header

Summary

Details

Status Request

*Request Date:

*Project System Status: Requested	Project System Team Lead: <input type="text"/>
*Finance Status: Requested	Finance Team Lead: <input type="text"/>
*Mfg Status: Requested	Mfg Team Lead: <input type="text"/>
*HRMS Status: Requested	HRMS Team Lead: <input type="text"/>
*CRM Status: Requested	CRM Team Lead: <input type="text"/>
*BW Status: Requested	BW Team Lead: <input type="text"/>
*APO Status: Requested	APO Team Lead: <input type="text"/>
*Basis Status: Requested	Basis Team Lead: <input type="text"/>
*Testing Status: Requested	Testing Team Lead: <input type="text"/>

Notes

References

Submit Cancel

Figure 4-16. SAP Status Update Request creation

Table 4-19. SAP Status Update Request Type field definitions

Field Name	Definition
Summary tab (not expanded in Figure 4-16)	
Workflow	SAP Status Update Req
Status Request tab	
Request Date	The due date for the status reports requested by the request. This is a required field but it does not drive any specific notification or workflow logic.
Project System Status	If the requestor wants a status report from the project system team, set this field to Requested . This activates the Project branch in the workflow, prompting for and eventually collecting the project system team status report. If a status report is not required, set this field to Not Requested .
Finance Status	If the requestor wants a status report from the finance team, set this field to Requested . This activates the Finance branch in the workflow, prompting for and eventually collecting the project system team status report. If a status report is not required, set this field to Not Requested .
Mfg Status	If the requestor wants a status report from the manufacturing team, set this field to Requested . This activates the Mfg branch in the workflow, prompting for and eventually collecting the manufacturing team status report. If a status report is not required, set this field to Not Requested .
HRMS Status	If the requestor wants a status report from the HRMS team, set this field to Requested . This activates the HRMS branch in the workflow, prompting for and eventually collecting the project system team status report. If a status report is not required, set this field to Not Requested .
CRM Status	If the requestor wants a status report from the CRM team, set this field to Requested . This activates the CRM branch in the workflow, prompting for and eventually collecting the project system team status report. If a status report is not required, set this field to Not Requested .
BW Status	If the requestor wants a status report from the BW team, set this field to Requested . This activates the BW branch in the workflow, prompting for and eventually collecting the project system team status report. If a status report is not required, set this field to Not Requested .

Table 4-19. SAP Status Update Request Type field definitions [continued]

Field Name	Definition
APO Status	<p>If the requestor wants a status report from the APO team, set this field to Requested. This activates the APO branch in the workflow, prompting for and eventually collecting the project system team status report.</p> <p>If a status report is not required, set this field to Not Requested.</p>
Basis Status	<p>If the requestor wants a status report from the Basis team, set this field to Requested. This activates the Basis branch in the workflow, prompting for and eventually collecting the basis team status report.</p> <p>If a status report is not required, set this field to Not Requested.</p>
Testing Status	<p>If the requestor wants a status report from the Testing team, set this field to Requested. This activates the Testing branch in the workflow, prompting for and eventually collecting the testing team status report.</p> <p>If a status report is not required set this field to Not Requested.</p>
Project System Team Lead	<p>The individual from the project system team whose status report is requested. This person is notified of this request and is responsible for attaching the report to this request and acknowledging this activity in the workflow.</p> <p>If Project System Status is set to Requested, this field must be specified.</p>
Finance Team Lead	<p>The individual from the finance team whose status report is requested. This person is notified of this request and is responsible for attaching the report to this request and acknowledging this activity in the workflow.</p> <p>If Finance Status is set to Requested, this field must be specified.</p>
Mfg Team Lead	<p>The individual from the manufacturing team whose status report is requested. This person is notified of this request and is responsible for attaching the report to this request and acknowledging this activity in the workflow.</p> <p>If Mfg Status is set to Requested, this field must be specified.</p>
HRMS Team Lead	<p>The individual from the HRMS team whose status report is requested. This person is notified of this request and is responsible for attaching the report to this request and acknowledging this activity in the workflow.</p> <p>If HRMS Status is set to Requested, this field must be specified.</p>
CRM Team Lead	<p>The individual from the CRM Team whose status report is requested. This person is notified of this request and is responsible for attaching the report to this request and acknowledging this activity in the workflow.</p> <p>If CRM Status is set to Requested, this field must be specified.</p>

Table 4-19. SAP Status Update Request Type field definitions [continued]

Field Name	Definition
BW Team Lead	<p>The individual from the BW Team whose status report is requested. This person is notified of this request and is responsible for attaching the report to this request and acknowledging this activity in the workflow.</p> <p>If BW Status is set to Requested, this field must be specified.</p>
APO Team Lead	<p>The individual the APO Team whose status report is requested. This person is notified of this request and is responsible for attaching the report to this request and acknowledging this activity in the workflow.</p> <p>If APO Status is set to Requested, this field must be specified.</p>
Basis Team Lead	<p>The individual from the Basis Team whose status report is requested. This person is notified of this request and is responsible for attaching the report to this request and acknowledging this activity in the workflow.</p> <p>If Basis Status is set to Requested, this field must be specified.</p>
Testing Team Lead	<p>The individual from the Testing Team whose status report is being requested. This person is notified of this request and is responsible for attaching the report to this request and acknowledging this activity in the workflow.</p> <p>If Testing Status is set to Requested, this field must be specified.</p>

Workflows

This section provides reference information about the SAP®-specific workflows provided in the Extension. These workflows are listed and defined in [Table 4-20](#).

Overview of Workflows

Some workflows are associated with object types and Mercury Change Management, and include package execution. Other workflows are associated with request types and Mercury Demand Management, and describe decision-making processes. For more information about Mercury Change Management and Mercury Demand Management, see the *Mercury Change Management: Configuring a Deployment System* document and the *Mercury Demand Management: Configuring a Request Resolution System* document.

Migration and compilation of entities using workflows are driven by commands included within the entities or workflow steps. For more information about commands in the Mercury IT Governance Center environment, see the *Commands, Tokens, and Validations Guide and Reference*.

Reference Workflows

Reference (REFERENCE) workflows cannot be edited, but you can copy and rename them and edit the copies to meet your needs. You can also use existing non-reference workflows as is or configure them further to meet your needs.

List of Workflows

[Table 4-20](#) lists and defines the workflows included in the Extension. Each is described in subsequent sections.

Table 4-20. Workflows included in the Extension

Workflow Name	Product Scope	Definition
SAP 46C Development/Bug Fix WF - Change Management	Mercury Change Management	Creates transport requests and imports them in Release 46C environments.
SAP 46C Development/Bug Fix WF - Demand Management	Mercury Demand Management	Logs and tracks requests for enhancements or bugs in the SAP® Release 46C environment.
SAP Bug/Enhancement Workflow	Mercury Demand Management	Logs and tracks requests for bugs and enhancements.
SAP Critical Objects Check Workflow	Mercury Change Management	Checks for any transports that are considered critical to the environment.
SAP Dev=>Test=> Prod does not share the trans directory	Mercury Change Management	Performs migrations of SAP® transport files between unshared <code>trans</code> directories.
SAP Dev=>Test=>Prod + Warning check	Mercury Change Management	Logs and tracks changes to SAP® instance(s) and check for Warnings at every step.
SAP - Distribute to Prod	Mercury Change Management	Works with the SAP - Transport Packages to Prod subworkflow to migrate the package lines of multiple packages in chronological order by export time.
SAP Reorder Package Lines and Import All Workflow	Mercury Change Management	Resorts package lines, cleans and builds the buffer, and imports all.
SAP Status Update Req	Mercury Demand Management	Provides a process to automatically notify group members, follow up with them until information is received, contact the appropriate reviewers, and distribute the latest version of the reports.
SAP - Transport Migration with Release Management	Mercury Change Management	Performs migrations from the Dev environment to the Test environment and adds a release for import into the Prod environment upon QA approval.
SAP - Transport Packages to Prod (This is a subworkflow.)	Mercury Change Management	Called by the SAP - Distribute to Prod workflow to migrate the package lines of multiple packages in chronological order by export time.
SAP using Picklist02, getting the TR type	Mercury Change Management	Logs and tracks changes to your SAP® instance(s). This workflow uses the <code>Z_KNTA_RFC_PICKLIST02</code> or the <code>/KINTANA/RFC_TR_PICKLIST02</code> RFC to get the list of transports. It determines the type of the transport (Client Dependent or Independent).

SAP 46C Development/Bug Fix WF - Change Management Workflow

The SAP 46C Development/Bug Fix WF - Change Management workflow can be used with the SAP 46C Development/Bug Fix WF - Demand Management workflow. It is used to create a transport (change) request in SAP Release 46C systems. Once the transport request is created, the developer has to create a task for this request in SAP® and assign the changes to this transport request. When the transport request is released (exported) using Transport Organizer (Transaction /SE10) in SAP®, the transport request can be imported into the destination system. This workflow can be used with an object type such as the SAP 46C Object Type: Create, Get Object List, Import Change Req object type. The workflow is shown in *Figure 4-17*.

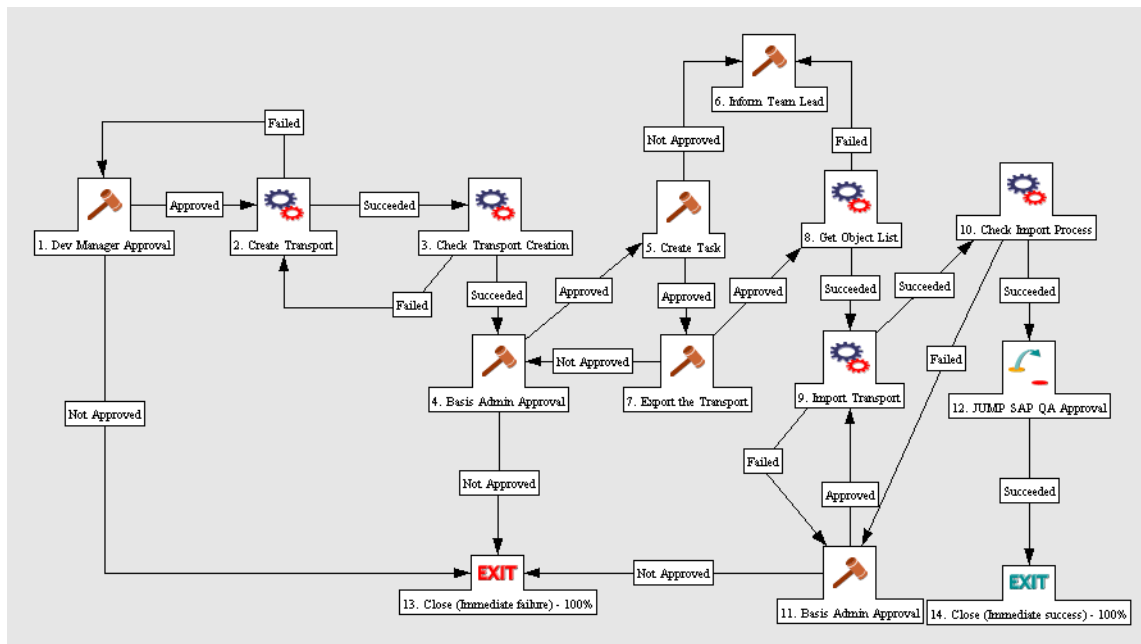


Figure 4-17. SAP 46C Development/Bug Fix WF - Change Management workflow

SAP 46C Development/Bug Fix WF - Demand Management Workflow

The SAP 46C Development/Bug Fix WF - Demand Management workflow is used with the SAP Bug/Enhancement Request Type so that requests related to SAP® applications are resolved in a timely manner. Submitted bugs and enhancements go through the workflow shown in *Figure 4-18* and described in the procedure that follows.

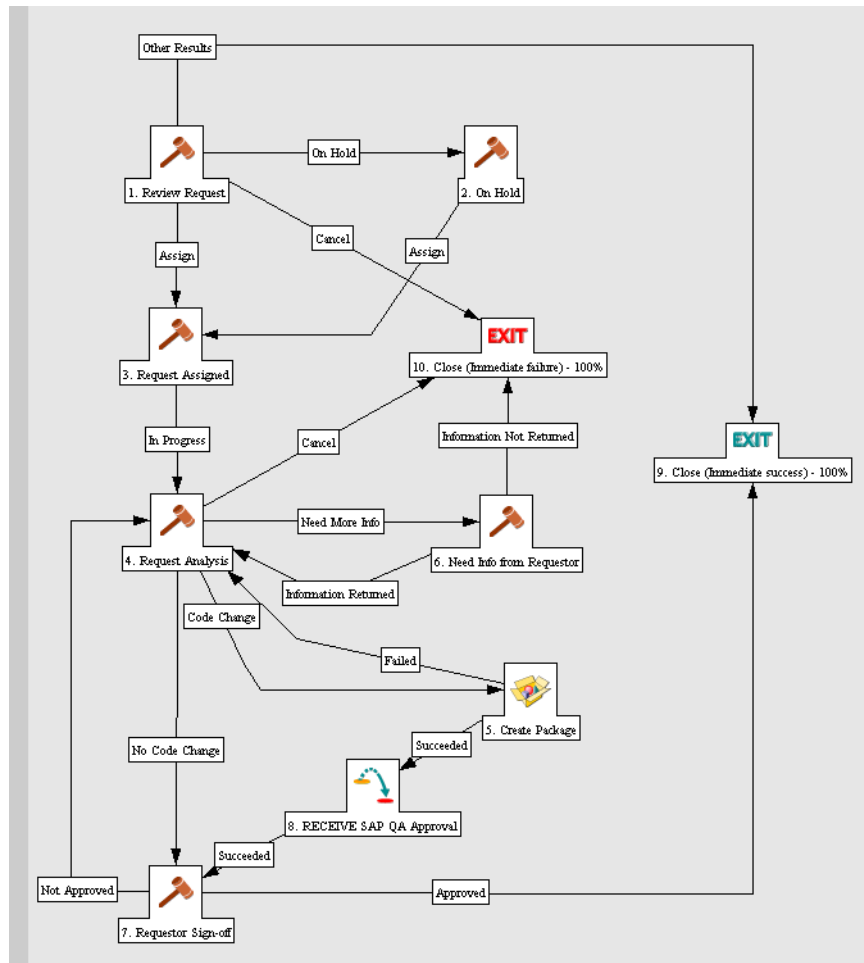


Figure 4-18. SAP 46C Development/Bug Fix WF - Demand Management workflow

The workflow steps are described as follows:

- 1. Review Request**—Requests are generated using Mercury Demand Management. Once submitted, the request becomes eligible for review. The request may then be assigned, placed on hold, or time out.
- 2. On Hold**—The request remains on hold until it is assigned or cancelled.
- 3. Request Assigned**—Once assigned, the request is placed In Progress and moves to the Request Analysis step.
- 4. Request Analysis**—Analysis can lead to one of the following:
 - Cancellation and the Close (Immediate failure) step
 - The Need Info from Requestor step
 - A code change that leads to the Create Package step
 - No code change and the Requestor Sign-off step
- 5. Create Package**—In this step, a package is generated and the appropriate object type and workflow are selected. Depending on the system environment, the following can be used to apply the changes:
 - The SAP 46C Object Type: Create, Get Object List, Import Change Req object type
 - The SAP 46C Development/Bug Fix WF - Change Management workflow
- 6. Need Info from Requestor**—The request remains in this state until the requestor provides more information and sets the status back to In Progress.
- 7. Requestor Sign-off**—After completion of any required code change, the requestor approves the request.
- 8. RECEIVE SAP QA Approval**—Approval is received from the JUMP SAP QA Approval step in the SAP 46C Development/Bug Fix WF - Change Management workflow.
- 9. Close (Immediate success)**—This step represents successful completion of the workflow.
- 10. Close (Immediate failure)**—If the request is cancelled or requires information from the requestor that is not provided, the workflow branches to this step.

SAP Bug/Enhancement Workflow

The SAP Bug/Enhancement workflow is used with the SAP Bug/Enhancement request type so that requests related to the SAP® applications are resolved in a timely manner.

Submitted bugs and enhancements go through the process shown in [Figure 4-19](#) and described in the procedure that follows.

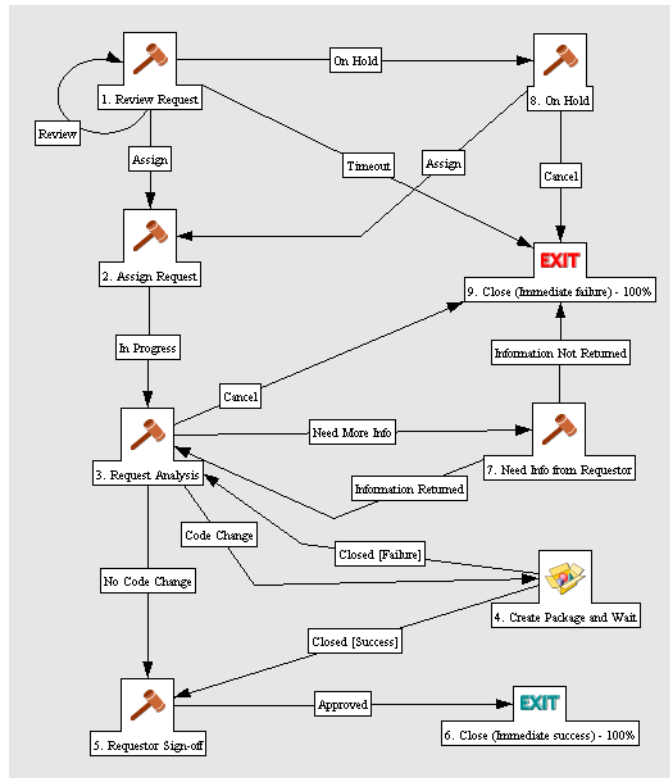


Figure 4-19. SAP Bug/Enhancement Workflow

The workflow steps are described as follows:

1. Review Request—Requests are generated using Mercury Demand Management. Once submitted, the request becomes eligible for review. The request may then be assigned, placed on hold, or time out.

2. Assign Request—Once assigned, the request is placed In Progress and moves to the Request Analysis step.

3. Request Analysis—Analysis can lead to one of the following:

- Cancellation and the Close (Immediate failure) step
- The Need Info from Requestor step
- A code change that leads to the Create Package and Wait step
- No code change and the Requestor Sign-off step

4. Create Package and Wait—In this step, a package is generated and the appropriate object type and workflow are selected.

5. Requestor Sign-off—After completion of any required code change, the requestor approves the request.

6. Close (Immediate success)—This step represents successful completion of the workflow.

7. Need Info from Requestor—The request remains in this state until the requestor provides more information and sets the status back to In Progress.

8. On Hold—The request remains on hold until it is assigned or cancelled.

9. Close (Immediate failure)—If the request is cancelled, times out, or requires information from the requestor that is not provided, the workflow branches to this step.

SAP Critical Objects Check Workflow

The SAP Critical Objects Check Workflow is used to determine whether or not a transport should be imported into an environment.

This workflow can be used with an object type such as SAP 2 Step Migration With Critical Objects Check. The workflow is shown in *Figure 4-20*.

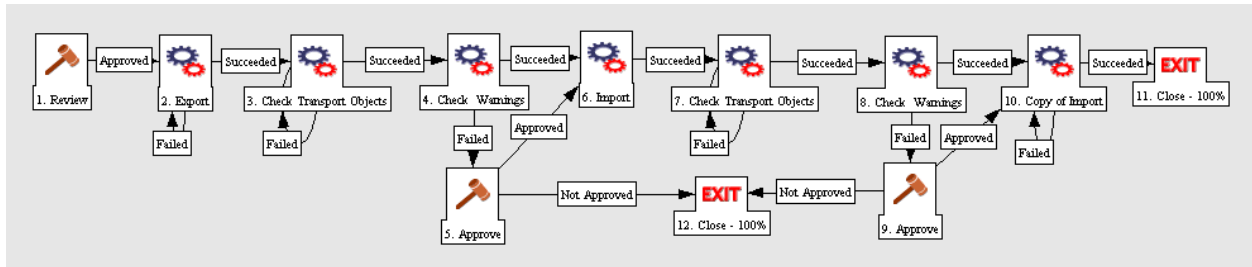


Figure 4-20. SAP Critical Objects Check Workflow

The Check Transport Objects steps are used by the object type to determine whether any values specified in the Critical Objects field in the Environment window, **Extension Data** tab, **SAP** subtab exist in the object list of the transport. If so, the RFC issues a warning code of 4, which is interpreted in the Check Warnings workflow steps. The user then decides whether to approve or disapprove further migration activity.

SAP Dev=>Test=> Prod does not share the trans directory Workflow

The SAP Dev=>Test=> Prod does not share the trans directory workflow is used for migrating transport files from the trans directory of one SAP® system to that of another when the transport directories are not shared between the two systems. This workflow can be used with an object type such as SAP Cofile Datafile ADO File Migrator. The workflow is shown in *Figure 4-21*.

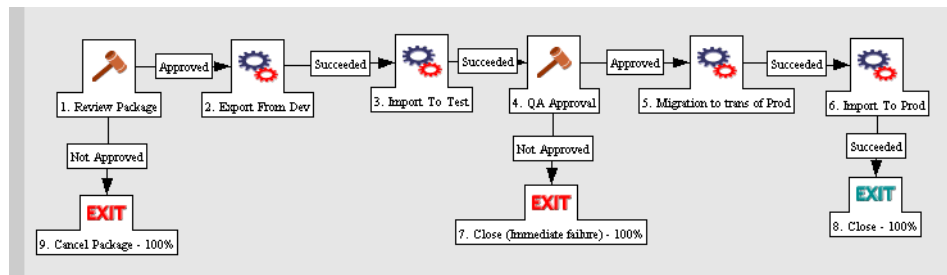


Figure 4-21. SAP Dev=> Test=> Prod does not share the trans directory workflow

SAP Dev=>Test=>Prod + Warning check Workflow

The SAP Dev=>Test=>Prod + Warning check workflow logs and tracks changes to SAP® instances. This workflow enables the user to check for warnings at every step. If the execution step (Export or Import) receives a warning, then the user can approve or disapprove execution of the next step. The workflow is shown in [Figure 4-22](#).

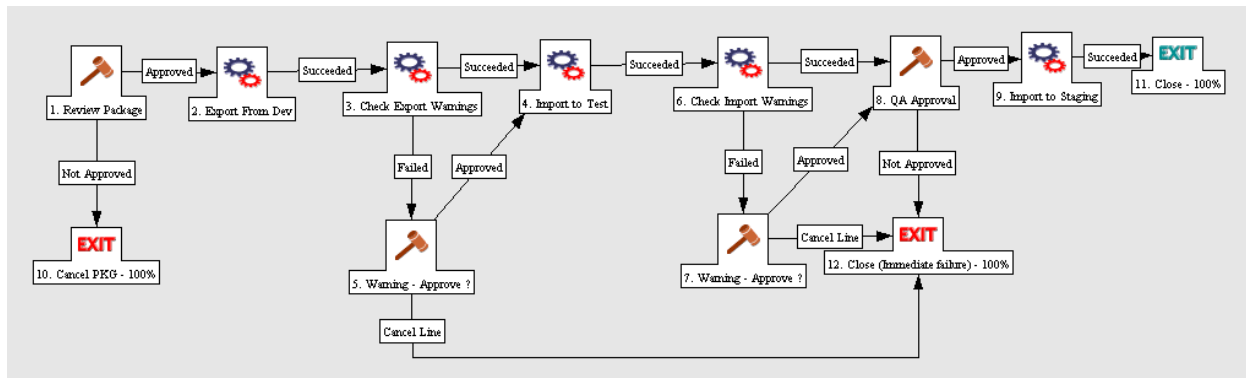


Figure 4-22. SAP Dev=>Test=>Prod + Warning check workflow

SAP - Distribute to Prod Workflow

The SAP - Distribute to Prod workflow migrates changes to the Prod environment. It is used with the SAP - Transport Migration with Release Management object type. The workflow is shown in *Figure 4-23*. It is the only workflow that calls the SAP - Transport Packages to Prod subworkflow, which is shown in *Figure 4-24*.

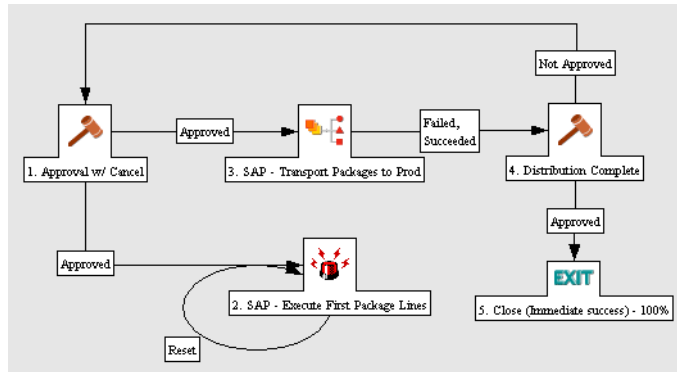


Figure 4-23. SAP - Distribute to Prod workflow

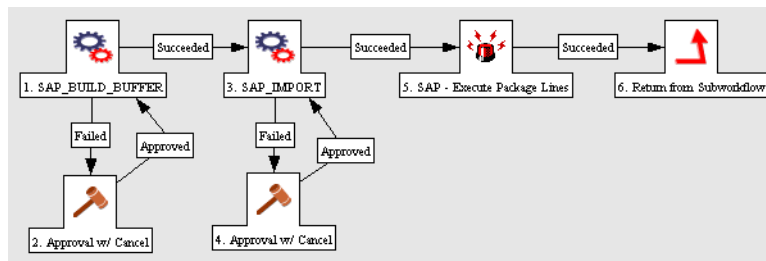


Figure 4-24. SAP - Transport Packages to Prod subworkflow

After approval is given in the workflow's Approval w/ Cancel step, the SAP - Execute First Package Lines step and the SAP - Transport Packages to Prod subworkflow are initiated simultaneously.

From the export times of all of the package lines in all of the packages, the SAP - Execute First Package Lines step identifies the first package line to be executed. Then the subworkflow performs the migration of that package line. Thereafter, the subworkflow repeatedly identifies the next package line in the sequence to be migrated, and migrates it, until all the package lines have been migrated in the chronological order of their export times.

The workflow's SAP - Execute First Package Lines step and the subworkflow's SAP - Execute Package Lines step use the special command

```
ksc_run_java
com.kintana.core.server.execution.ExecuteDistPackageLineCommand
```

The command's input parameters are described in [Table 4-21](#).

Table 4-21. Parameters for special command

Name	Description	Required?
STEP_LABEL	The workflow step's label for the subworkflow step that is to be executed	Yes
PARAMETER_TOKEN	The object type's PARAMETER token that is to be used to sort the package lines (in ascending order).	Yes
DEBUG	'true' to enable additional debugging. (Default is 'false')	No
DELAY_SECONDS	Delay before processing the command. If the command is initiated from the Distribution to Prod workflow, a default delay of 15 seconds is used to make sure the package lines have been initiated.	No
ksc_end_of_parameters	End of the command input parameters.	Yes

SAP Reorder Package Lines and Import All Workflow

The SAP Reorder Package Lines and Import All Workflow is used to carry out the normal operations of Export and Import. In addition, it carries out the operations of cleaning the buffer, resorting the package lines in the sequence of the transport's last export time, building the buffer in this new order, and carrying out an Import All into the destination system. This workflow can be used with an object type such as SAP Reorder Pkg Lines on Export Time and Import All. The workflow is shown in *Figure 4-25*.

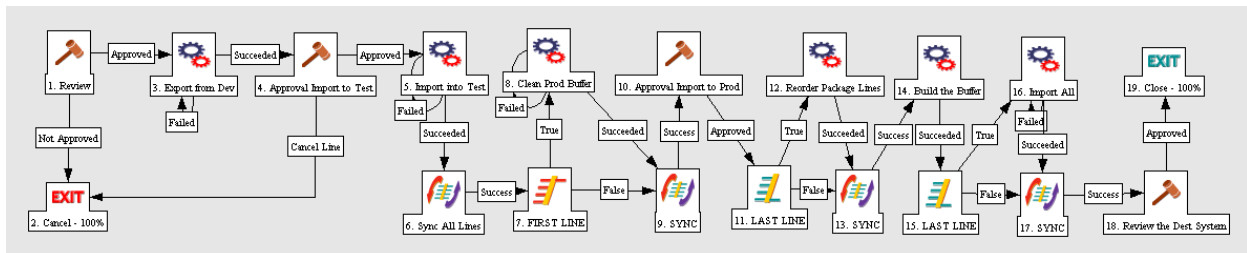


Figure 4-25. SAP Reorder Package Lines and Import All Workflow

After the initial tasks of exporting the transport and importing into the test system, all the package lines are synchronized before the production buffer is cleaned. The FIRST LINE step ensures that only the first line to reach that step actually initiates the Clean Prod Buffer step. After the Import to Prod is approved, the LAST LINE step triggers resorting the package lines according to the transport export times and rebuilding the buffer. The LAST LINE is later used to trigger the Import All step.

SAP Status Update Req Workflow

Projects involving SAP® applications require cooperation among group members from various business areas such as Finance, Manufacturing, Human Resources (HR), Business Warehouse (BW), Advanced Planning and Optimization (APO), and specialized technical teams such as SAP® Basis and Testing. The projects and subprojects require that manual status reports be gathered and reviewed. This can divert resources from critical project activities to asking for updates, following up with group members to receive information, assigning reviews, and making sure that the latest versions of reports are provided.

The SAP Status Update Req workflow provides a process to automatically notify group members, follow up with them until information is received, contact the appropriate reviewers, and distribute the latest versions of reports.

Once a Status Update Request is made, the SAP Status Update Req workflow splits into parallel branches for each project subteam. If a status update is requested for the specific subteam, the designated team lead is notified of the request. The individual is then repeatedly reminded of the request until the information is provided.

At any time, the requestor can view the request to see which teams have provided the requested information and which teams have not. There is no need for email or phone follow-up for status checks, because it is clear who currently owns the specific action items. The entire group of leads can be notified as others' reports are provided. Once all the requested status updates are provided, the requestor is notified and can review the individual information directly from the request. Entire teams can review the information, as well. More collaboration points can also be added into the process for status feedback and sign-off. The workflow is displayed in [Figure 4-26](#).

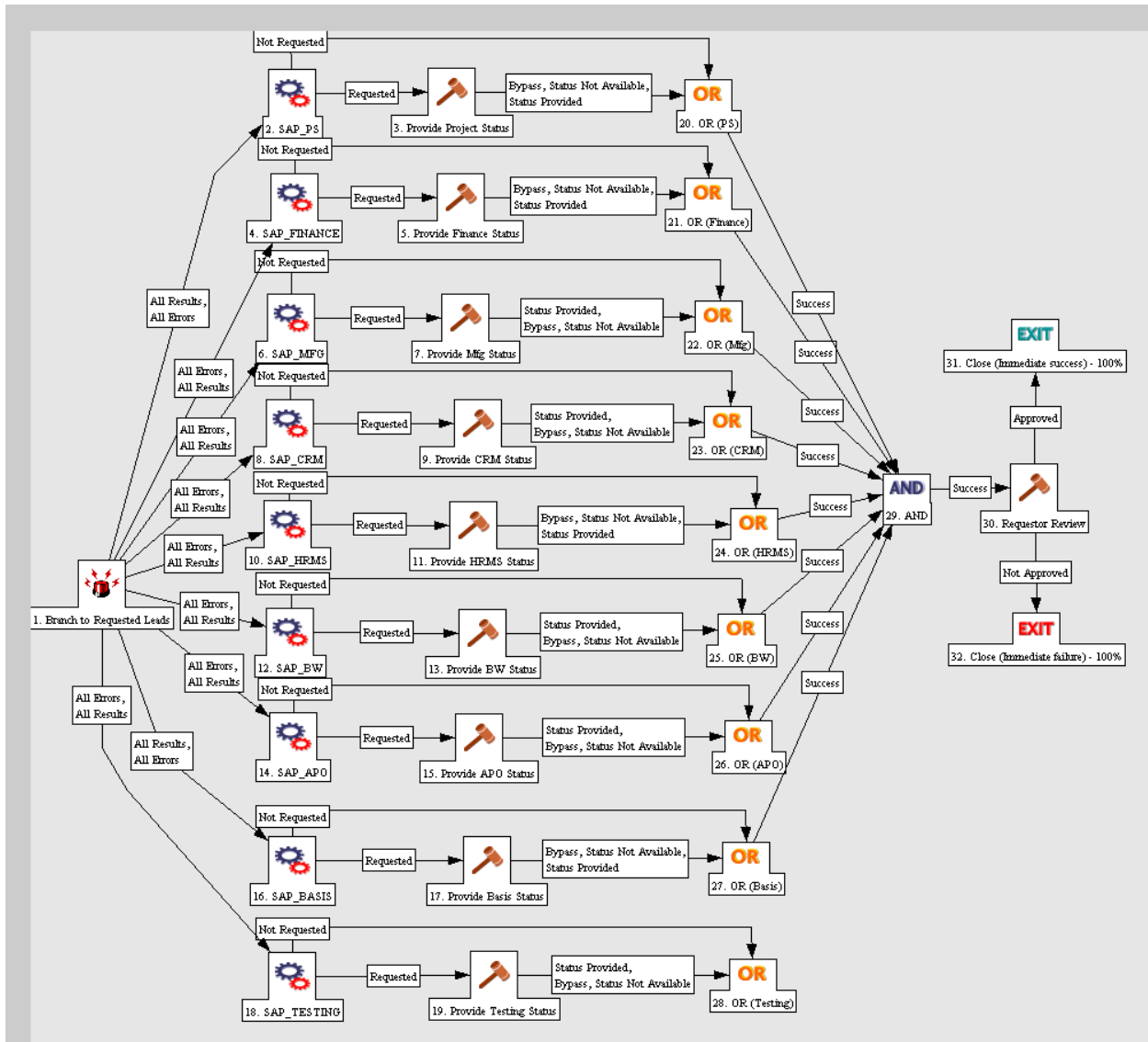


Figure 4-26. SAP Status Update Req workflow

Implementing the Workflow

To implement the SAP Status Update Req workflow:

- Monitor the notifications and make appropriate modifications to the text as well as list of the notification recipients. For example, you might want to notify team leads when individual reports are completed.
- Verify the security groups for each step to see if updates are necessary.
- Remove workflow branches for any status fields or team-lead fields that have been removed from the request type.
- To add branches:
 - Copy existing branches.
 - Update the step names.
 - Update the notifications.

Workflow Steps

The workflow steps are described as follows:

- 1. Branch to Requested Leads**—This is an automatic execution step that starts each of the team branches in the workflow. Although the priority of the request is noted, the workflow branches regardless of the priority.
- 2. SAP_PS** and analogous even-numbered steps through **18. SAP_TESTING**—These are automatic token resolution steps that look at the value of the associated token (SAP_PS through SAP_TESTING). If the value is **Requested**, the workflow moves to the associated Provide Status step. If the value is **Not Requested**, the workflow skips over the Provide Status step.
- 3. Provide Project Status** and analogous odd-numbered steps through **19. Provide Testing Status**—These steps notify the users who are specified in the Team Lead fields that they each need to complete a status report and attach it to the request. This notification includes reminders until the task is done, every two days by default.

When the task is done, the team lead attaches the report and sets this step to **Status Provided**. The team lead or requestor can also choose to set this step to **Bypass, Status Not Available** in case no report is going to be provided, but the workflow should move forward.

30. Requestor Review—Once all the branches are complete (either with the completion of the Provide Status step or by skipping the branch because the specific report was not requested), the original creator of the request gets a notification that the reports are ready. The requestor reviews the reports and either sets this step to **Approved** or **Not Approved**. Either result closes the request.

31. Close (Immediate success)—If the requestor approves the report, the workflow branches to this step.

32. Close (Immediate failure)—If the requestor does not approve the report, the workflow branches to this step.

SAP - Transport Migration with Release Management Workflow

The SAP - Transport Migration with Release Management workflow migrates changes from the Dev environment to the Test environment. If any warnings are generated, approval is needed to proceed. Over time, all package lines (TRs) accumulate in a release that becomes ready for import into Production upon QA approval.

This workflow is used with the SAP - Transport Migration with Release Management object type. The workflow is shown in [Figure 4-27](#).

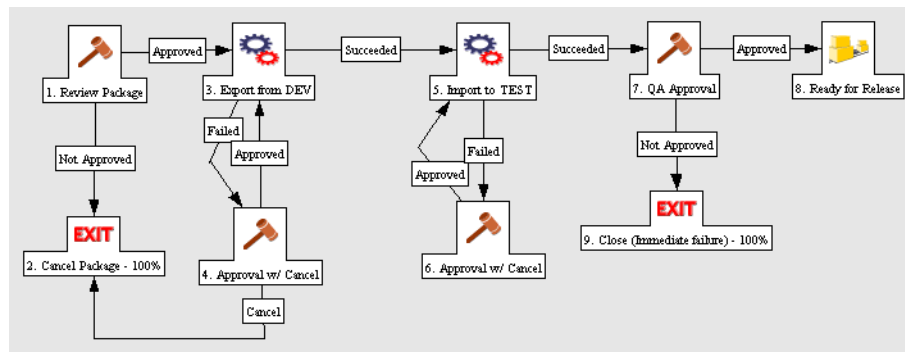


Figure 4-27. SAP - Transport Migration with Release Management workflow

SAP - Transport Packages to Prod Subworkflow

The SAP - Transport Packages to Prod subworkflow is called by only the SAP - Distribute to Prod workflow. For information about this subworkflow, see [SAP - Distribute to Prod Workflow on page 88](#).

SAP using Picklist02, getting the TR type Workflow

The SAP using Picklist02, getting the TR type workflow is used for carrying out all normal operations of Export and Import. In addition, it carries out the operation of finding the transport type (that is, whether the transport is Client Dependent or Client Independent). This workflow can be used with an object type such as SAP Mig using Picklist02 and Getting the TR Type. The workflow is shown in *Figure 4-28*.

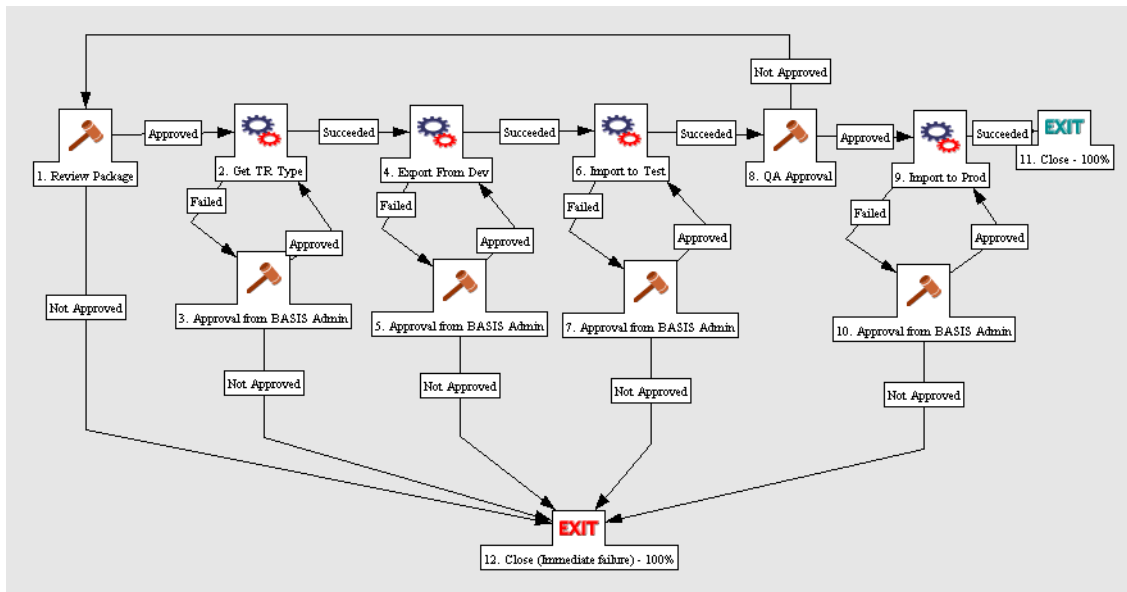


Figure 4-28. SAP using Picklist02 getting the TR type workflow

Report Types

This section provides reference information about the SAP®-specific report types provided in the Extension. These report types are listed and defined in [Table 4-22](#).

Overview of Report Types

The content or output of a report is controlled by what you specify in the fields for the report type, as described in this section. Some fields allow multiple entries. Some fields are hidden by default, but can be enabled to allow further control of the report output.

Execution of reports is driven by commands included within the report types. For more information about commands in the Mercury IT Governance Center environment, see the *Commands, Tokens, and Validations Guide and Reference*.

Report types are configured in the Workbench (in the shortcut bar, click **Configuration** and click the **Report Types** icon). Reports are run (submitted) from the standard interface (**Reports** menu).

For More Information

For information about running reports, see the *Reports Guide and Reference*.

Reference Report Types

Reference (REFERENCE) report types cannot be edited, but you can copy and rename them and edit the copies to meet your needs. You can also use existing non-reference report types as is or configure them further to meet your needs.

List of Report Types

Table 4-22 lists and defines the report types included in the Extension. Each is described in subsequent sections.

Table 4-22. Report types included in the Extension

Report Type Name	Definition
SAP Request Detail Report	Lists details of requests that use SAP® request types, based on criteria you specify.
SAP Transport Migration Report	Lists all the environments to which transports have been migrated and shows all the actions for a transport: Export, Add to Buffer, Import.

SAP Request Detail Report

The SAP Request Detail Report provides a detailed list of Mercury IT Governance requests that use the SAP® request types, based on criteria you specify.

Figure 4-29 shows the Submit Report window you use to specify which requests you want to appear in the SAP Request Detail Report and which information you want to appear for each request. *Table 4-23* provides definitions for the displayed fields.

The screenshot shows the 'Submit Report: SAP Request Detail Report' window. The window title is 'MERCURY' and it has a 'Close Window X' button in the top right corner. Below the title bar, there are 'Submit' and 'Cancel' buttons. The main area is titled 'Report Parameters' and has a 'Restore Default' button. The form is organized into two columns of fields:

- Left Column:** Request Numbers, SAP Request Type, Status, Assigned To, Created By, Department, Workflow, Contact, Creation Date From, Last Update Date From, Description Contains, Report Title (pre-filled with 'SAP Request Detail Report').
- Right Column:** Include Closed Requests (radio buttons for Yes/No), Priority, Assigned To Group, Request Sub Type, Application, Request Group, Company Name, Creation Date To, Last Update Date To, Order By (dropdown menu set to 'Request Number').

Below the main fields, there are several checkboxes for display options:

- *Show Header Fields: Yes No
- *Hide Prompts for Empty Fields: Yes No
- *Show Field Audit History: Yes No
- *Show Notes: Yes No
- *Show Status: Yes No
- *Show Detail Fields: Yes No
- *Show Contents of Table Fields: Yes No
- *Filter Notes: dropdown menu set to 'Show all notes'
- *Show References: Yes No

At the bottom of the window, there are sections for 'Scheduling' and 'Advanced Notifications', followed by 'Submit' and 'Cancel' buttons, and a 'Close Window X' button in the bottom right corner.

Figure 4-29. SAP Request Detail Report

Table 4-23. SAP Request Detail Report field definitions

Field Name	Definition
Request Numbers	Request numbers.
*Include Closed Requests	Whether or not to include requests that have been closed or cancelled.
SAP Request Type	Request type on which the report can be run.
Status	Requests having this status.
Priority	Requests having this priority,
Assigned To	Requests assigned to this user.
Assigned To Group	Requests assigned to this group.
Created By	Requests created by this user.
Request Sub Type	Requests having this sub-type.
Department	Requests logged against this department.
Application	Requests that are associated with this application.
Workflow	Requests that are associated with this workflow.
Request Group	Requests using request group(s) Customization, Upgrade, or Setup .
Contact	Requests having this contact name.
Company Name	Requests having this company name.
Creation Date From	Requests created on this date or later.
Creation Date To	Requests created on this date or earlier.
Last Update Date From	Requests last updated on this date or later.
Last Update Date To	Requests last updated on this date or earlier.
Description Contains	Requests having this description text string.
Report Title	Title of the report.
*Order By	Criterion to use to sort the requests in the report: Application, Assigned To, Created By, Creation Date, Department, Last Update Date, Priority, Request Group, Request Number, Request Sub Type, Request Type or Status .
*Show Header Fields	Whether or not the report will show the full header fields of each request.
*Show Detail Fields	Whether or not the report will show the detail fields of each request.

Table 4-23. SAP Request Detail Report field definitions [continued]

Field Name	Definition
*Hide Prompts for Empty Fields	Whether or not the report will hide prompts that have empty fields.
*Show Contents of Table Fields	Whether or not the report will show table fields for requests that have them.
*Show Field Audit History	Whether or not the report will show the transaction history of each request.
*Show Notes	Whether or not the report will show the notes attached to each request.
*Filter Notes	Whether the report will show all notes or only user notes.
*Show Status	Whether or not the report will show the workflow steps and current step status for each request.
*Show References	Whether or not the report will show the references associated with each request.

SAP Transport Migration Report

The SAP Transport Migration Report provides a list of the environments to which transports have been migrated, including the following fields (output):

- Transport Nr
- Pkg Number
- Pkg Ln
- User Name
- Action
- Action Date Time
- Environment Name
- Workflow Name

Figure 4-30 shows the Submit Report window you use to specify which transports you want to see in the SAP Transport Migration Report. *Table 4-24* provides definitions for the displayed fields.

The screenshot shows the 'Submit Report: SAP Transport Migration Report' window. The window title is 'MERCURY' and it has a 'Close Window' button in the top right corner. The main content area is titled 'Submit Report: SAP Transport Migration Report' and contains a 'Report Parameters' section. This section includes several input fields: 'SAP Transport Source Env Name', 'Transport Export From Date', 'From Transport (Exported)', 'ITG User (TR Exported By)', 'Transport Export To Date', and 'To Transport (Exported)'. There are also 'Submit' and 'Cancel' buttons at the top right and bottom right of the window. The window also has a 'Restore Default' button and a 'Close Window' button at the bottom right.

Figure 4-30. SAP Transport Migration Report

Table 4-24. SAP Transport Migration Report field definitions

Field Name	Definition
SAP Transport Source Env Name	Environment from which transport(s) were released.
Transport Export From Date	Starting date of exported transports to be listed in the report.
Transport Export To Date	Ending date of exported transports to be listed in the report.
From Transport (Exported)	Lowest transport number to use to generate the report.
To Transport (Exported)	Highest transport number to use to generate the report.
ITG User (TR Exported By)	Mercury IT Governance user who exported the transport.

Validations

The Extension includes a number of validations specifically related to the SAP® object types, request types, and report types. [Table 4-25](#) lists some of the command-driven validations that are used with SAP® system 3.1x.

[Table 4-26](#) lists similar validations that are used with SAP® Release 4.x or later. [Table 4-27](#) lists validations that are used with any SAP® release.

For More Information

For information about using and configuring validations, see the *Commands, Tokens, and Validations Guide and Reference*.

Table 4-25. Validations for SAP Release 3.1x

Validation Name	Description
SAP Object List - 3.1x	Used only to display the transport object list.
SAP TR List with Rel/Unreleased Tasks - 3.1x	Similar to SAP Transport List - 3.1x, but also gets a list of transports for which the included tasks are released or unreleased, depending on the value of the TRTASKSTATUS parameter of the RFC.
SAP TR Number - 3.1x	Gets a list of SAP® transports that are not exported but for which all the included tasks are submitted for a particular Username specified in the Workbench User window, Extension Data tab, SAP subtab.
SAP Transport List - 3.1x	Similar to SAP TR Number, but this validation gets the list of transports based on several additional filtering criteria specified in the parameters of the object type.
SAP Transport List (with Exclusion List) - 3.1x	Similar to SAP Transport List, but this validation gets only those transports that have not been selected in any other saved package with a NOT_EXPORTED status and that also meet the additional filtering criteria specified in the parameters of the object type.

Table 4-26. Validations for SAP Release 4.x or later

Validation Name	Description
SAP Object List	Used only to display the transport object list.
SAP TR List with Picklist02	Gets a list of SAP® transports using the /KINTANA/RFC_TR_PICKLIST02 RFC.
SAP TR List with Rel/Unreleased Tasks	Similar to SAP Transport List, but also gets a list of transports for which the included tasks are released or unreleased, depending on the value of the TRTASKSTATUS parameter of the RFC.
SAP TR Number	Gets a list of SAP® transports that are not exported but for which all the included tasks are submitted for a particular Username specified in the Workbench User window, Extension Data tab, SAP subtab.
SAP TR Number (startRFC call to SAP behind gateway)	Gets a list of SAP® transports when the SAP® system is behind a firewall.
SAP Transport List	Similar to SAP TR Number but this validation gets the list of transports based on several additional filtering criteria specified in the parameters of the object type.
SAP Transport List (with Exclusion List)	Similar to SAP Transport List, but this validation gets only those transports that have not been selected in any other saved package with a NOT_EXPORTED status and that also meet the additional filtering criteria specified in the parameters of the object type.

Table 4-27. Validations for any SAP release

Validation Name	Description
SAP Approval	Approval or decision step for SAP®.
SAP Category	Category of SAP® change: ABAP , Customizing , or ALL .
SAP Client	List of SAP® clients.
SAP Client Dependent/ Independent/All	Category of SAP® change: Client Specific , Client Independent , or All .
SAP Component	Components in the SAP® environment.
SAP Document Status	Status of the SAP® document.
SAP Environments All	List of all the SAP® environments.
SAP Migrated TR List	List of SAP® transports that have been exported using the Extension.
SAP Module	SAP® module name.
SAP Open Releases	List of all the open Mercury IT Governance releases.
SAP Owner	Owner of the Transport (Change) Request.
SAP Provide Status	Provide the status of the SAP® project.
SAP Release	SAP® Release.
SAP Request Category	Category of the Transport (Change) Request.
SAP - Request Numbers	List of request numbers for SAP® request types.
SAP Request Types	SAP® request types.
SAP System	Name of the SAP® system.
SAP TR Function	Category of the Transport Workbench: Customizing or Local .
SAP TR Status	Status of the transport: Exported , Not Exported , or Both .
SAP Transport Tasks Status	Status of the tasks of a transport: Released , Unreleased , or Both .

Tokens

While configuring certain features in Mercury IT Governance Center, it is often necessary to refer to information that is undefined until it is used in a specific context. Instead of generating objects that are valid only in specific contexts, variables can be used to create general objects that can be applied to a variety of contexts. These variables are called tokens.

Tokens can be used in (but are not limited to) the following Mercury IT Governance entities:

- Object types
- Request types
- Validations and SQL statements
- Report types
- Workflow executions and notifications
- Workflow steps

Extension-specific tokens are available to be used only after you install the Extension. [Table 4-28](#) describes the standard environment tokens included with the Extension.

For More Information

For information about using and configuring tokens, see the *Commands, Tokens, and Validations Guide and Reference*.

Table 4-28. Tokens included in the Extension

Prefix	Token	Description
ENV.AC	SAP_CLIENT	Three-digit number for the SAP® Client represented by this environment.
ENV.AC	SAP_DOMAIN_CONTROLLER	TR source system.
ENV.AC	SAP_GROUP_NAME	Group name.
ENV.AC	SAP_INTERNAL_IP_ADDRESS	Internal IP address.
ENV.AC	SAP_OBJECT_RESTRICTION_LIST	SAP® Objects Restriction List.
ENV.AC	SAP_PASSWORD	Password corresponding to the SAP_USERNAME for a particular environment.
ENV.AC	SAP_PORT_NUMBER	Port number.
ENV.AC	SAP_QUEUE_NAME	Queue name for a particular environment.
ENV.AC	SAP_SYSTEM_NAME	10-character system name for a particular environment.
ENV.AC	SAP_SYSTEM_NUMBER	2-digit system number for a particular environment.
ENV.AC	SAP_TP_LOCKFILE_NAME	TP Lock File Name.
ENV.AC	SAP_TP_PARAMETER_FILE	TP Parameter File.
ENV.AC	SAP_USER_NAME	Username that Mercury IT Governance Center uses for all SAP® migrations to and from this environment.
ENV.AC	SAP_VERSION	SAP® release.
USR.AC	SAP_USER_NAME	SAP® User Name.

SAP Transaction Request Log

You can generate the SAP Transaction Request Log (as an HTML page), as follows:

1. From the Mercury IT Governance Workbench Package window, select the package of interest.
2. Click the **Status** tab. See *Figure 4-31*.
3. Select a single line item. See *Figure 4-31*.
4. Click the drop-down list next to the **View** button and select **SAP Trans Req Log**.
5. Click **View**.

The log is generated and displayed as an HTML page.

6. View, print, or save the resulting HTML page.

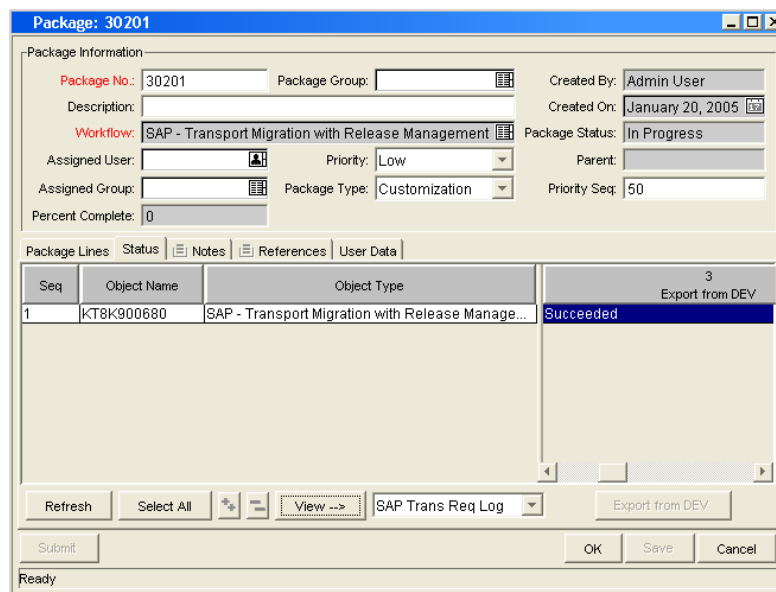


Figure 4-31. Package Status tab

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