HOPEX SAP Blueprint

User Guide

HOPEX V2

INTRODUCTION

SAP projects are used to define, document and implement company solutions to given problems according to business requirements and SAP capabilities.

SAP provides many tools for creating projects, however, business requirements come from businesses and are IT independent.

Business requirements are defined and formalized in modeling applications such as **MEGA Process**.

SAP Solution Manager helps implement and manage complex system landscapes. In general, systems are distributed across different geographic locations, and business processes cover more than one system. With such complex scenarios, IT success depends on the integration of technical and business requirements. SAP Solution Manager provides SAP customers with an efficient means of handling both the technical and business process sides of solution implementation.

In order to quickly implement their business strategies and orientations, companies must be able to quickly transfer their processes and new business concepts to the SAP world. It is therefore important to align the business requirements as seen in SAP with what has been designed in **HOPEX Business Process Analysis**.

This is where **HOPEX SAP Blueprint** comes in. Its purpose is to design and document how SAP meets the business requirements as defined in **HOPEX Business Process Analysis**. It is used to exchange information relating to processes between **HOPEX Business Process Analysis** and SAP Solution Manager.

The **HOPEX SAP Blueprint** interface is used to align SAP process models with business process models, thus providing organizations with the means for taking the business view into account, improving implementation choices and reducing SAP deployment and migration costs.

CONVENTIONS USED

☛ *Remark on the preceding points.*

📖 *Definition of terms used in this guide.*

☺ *A tip that may simplify things.*

Things you must not do.

Very important remark to avoid errors during an operation.

Commands are presented in this way: **File > Open**.

The names of MEGA products and technical modules are presented in this way: **HOPEX**.

PRESENTATION OF THIS GUIDE

The following points are covered here:

✓ "Exchanging Data with SAP", page 11: explains how to exchange objects between **HOPEX SAP Blueprint** and SAP Solution Manager.

✓ "Designing for SAP Projects", page 21: explains how to:

- access SolMan data in **HOPEX**
- manage SolMan objects
- create mapping between SolMan objects and business objects
- initialize a SolMan project from business objects
- populate a BPMN diagram from a SolMan structure
- exchange documents between **HOPEX** and SAP Solution Manager
- manage implementation, maintenance, and template projects

✓ "Documentation in HOPEX SAP Blueprint", page 57: explains documentation generation in **HOPEX**, including Web sites, reports and MS Word reports.

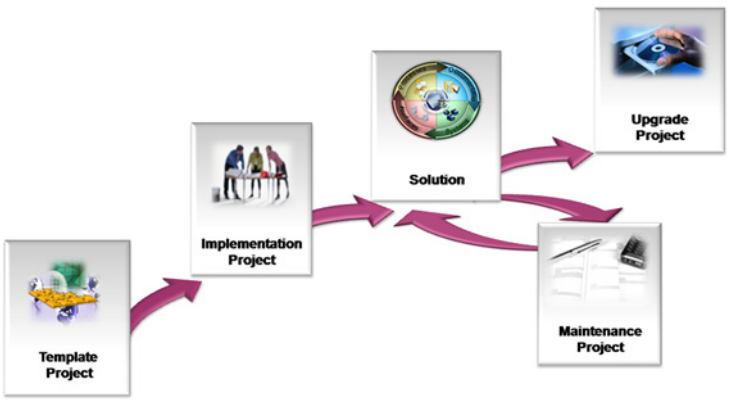
✓ "HOPEX SAP Blueprint Glossary", page 77: definition of the main terms used in this guide.

☛ *The present document does not describe how to install the components necessary for imports/exports into/from SAP Solution Manager. Refer to the "MEGA SolMan installation guide" available with the **HOPEX SAP Blueprint** portfolio.*

PRESENTATION OF HOPEX SAP BLUEPRINT

With **HOPEX SAP Blueprint** you can:

- Manage SAP projects
  HOPEX SAP Blueprint provides the metamodel structure necessary for hosting SAP Solution Manager Blueprint artifacts and for connecting them to the business view.
  It manages the different lifecycle statuses of an SAP project. It recognizes, when synchronizing an SAP project, if the project originates from the evolution of the project lifecycle.

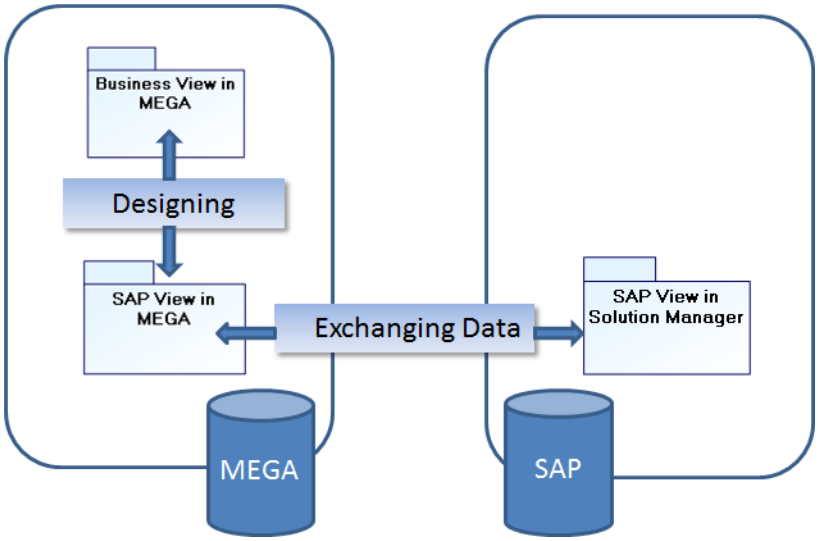


- Exchange data with SAP Solution Manager
  HOPEX SAP Blueprint provides tools for importing and exporting data into/from SAP Solution Manager.

In order to exchange SAP Solution Manager project definitions with **HOPEX**, the **HOPEX SAP Blueprint** interface relies on:

- A tool that exports/imports projects from/into SAP Solution Manager.
- A metamodel in **HOPEX**, called the SolMan metamodel that is used to describe SolMan projects. This metamodel is linked to the **MEGA**

Process metamodel in order to match Business modeling data with SAP Solution Manager data.



PRESENTATION OF SAP SOLUTION MANAGER

Concepts Used in SAP Solution Manager

SAP provides a wide range of enterprise software applications and business solutions to empower all aspects of businesses. In its offering, SAP uses the concept of process blueprints which are project-based process structures to help implement and maintain its solutions such as ERP, CRM, SCM, etc. These blueprints are maintained with the SAP Solution Manager tool.

SAP Solution Manager can be used to evaluate and implement solutions. This is done through projects.

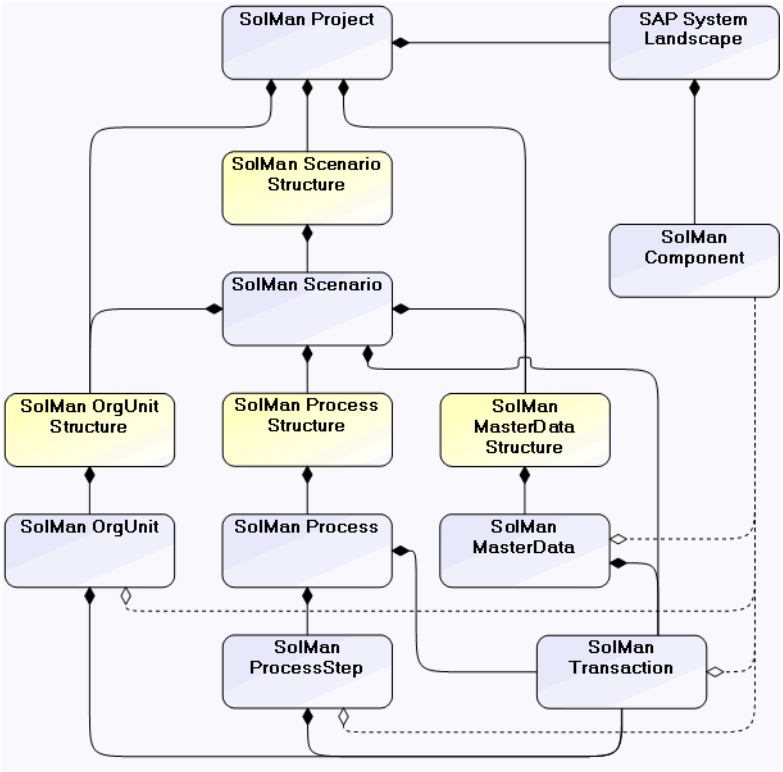
Each project has:

- a ***system landscape***
  A system landscape is composed of an arbitrary number of components which are referenced by process steps and transactions.
- a ***Blueprint structure***
  Business Blueprints are used to document the business process requirements of companies and give a general idea of how business processes could be mapped in SAP Systems.

The Blueprint in Solution Manager is a hierarchical tree. At the top of the hierarchy is the Project (where project is the name of the SAP Solution Manager project). There are three levels to this hierarchy:

- ***Project level***: Contains Master data, Organizational units, Business Scenarios
- ***Scenario level***: Contains Organizational units, Master data, Business Processes
- ***Process level***: Contains Process steps
  Entities called transactions are commonly included in Process steps but may also be attached to Processes and Scenarios.
  This is the SAP view of business processes. This hierarchy is supported and reproduced in **HOPEX SAP Blueprint**.

Below is a diagram illustrating the SAP Solution Manager metamodel.



SAP Solution Manager metamodel

The content of this structure is connected to the business view and maintained in sync with its equivalent in SAP Solution Manager by the MEGA/SolMan Exchange Module.

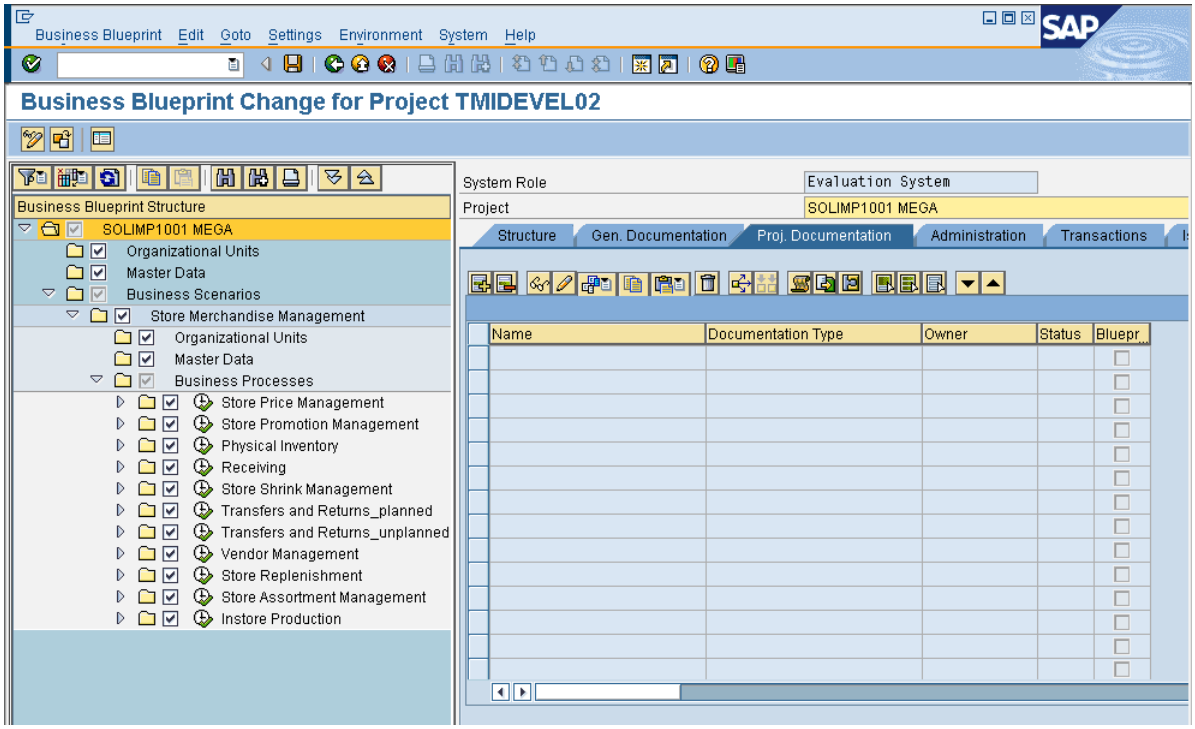
Overview of SAP Solution Manager

Let us take a quick look at how projects are presented in SAP Solution Manager.

1. Log on to SAP Solution Manager (**Start > Programs > SAP Front End > SAP Logon**).
2. Select a server and click **Logon**.
3. Enter the user name > password and press the <Enter> key.

> ☛ *If Solution Manager does not automatically start, run the "solar01" transaction (below the menu bar, enter solar 01 in the field left of the diskette and click the check button).*

By default, the last project used by the user opens.

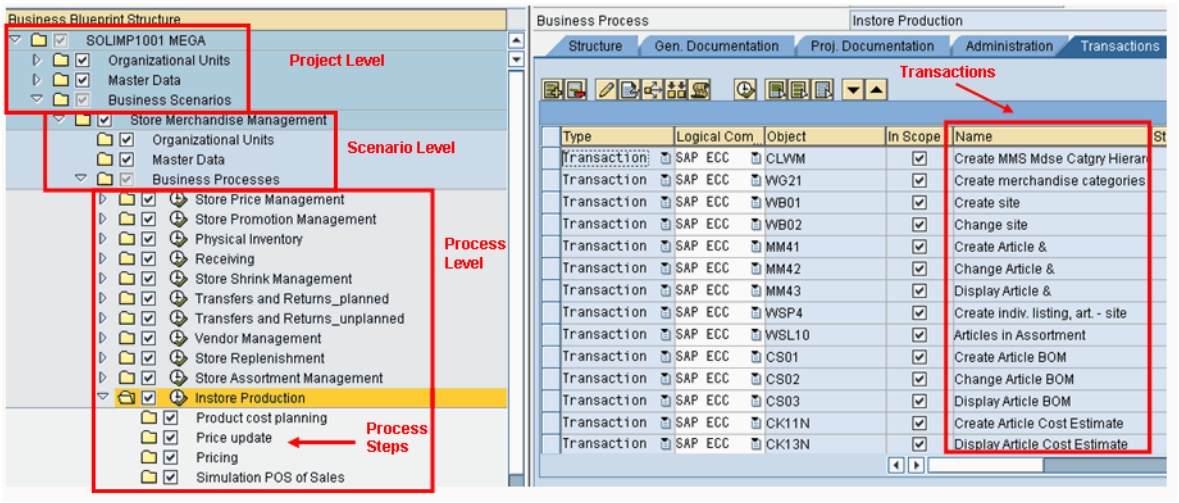


The project in this example is the Project SOLIMP1001 MEGA while the Project ID is TMIDEVEL02.

The content of the project, such as the scenarios, business processes and processes are presented in a tree hierarchy to the left of the window. The objects to be exchanged with **HOPEX** are in this tree. When objects exist but are not displayed in the tree, this is indicated by a clock with a green checkmark.

In exchanges, the same tree structure is displayed in **HOPEX**.

When you click on an object in the tree, information relating to this object is displayed in the corresponding tabs in the right frame.



EXCHANGING DATA WITH SAP

HOPEX SAP Blueprint enables to exchange SAP objects between **HOPEX** and SAP Solution Manager.

In order to ensure consistency, the exchange is always performed on the basis of projects.

✓ "Import/Export Prerequisites", page 12
✓ "Importing/Exporting", page 14
✓ "Properties Exchanged between MEGA and SAP Solution Manager", page 17

☛ *Before exchanging data, make sure the appropriate components were installed. Refer to the "MEGA SolMan installation guide".*

IMPORT/EXPORT PREREQUISITES

Activating Variations

Before importing/exporting, it is advised to activate variations in **HOPEX SAP Blueprint**.

☛ *Variations are necessary to be able to view object versions and differences.*

(Windows Front-End) To activate variations:

1. Log in to **HOPEX** and from the **HOPEX** desktop, select **Tools** > **Options**.
2. In the **Business Process and Architecture Modeling** group, select the **Activate variations** option.

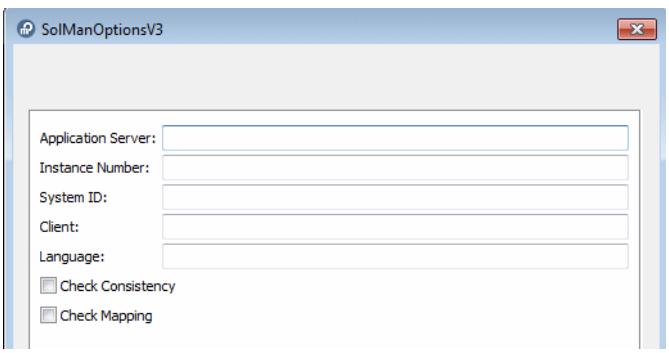
(Web Front-End) To activate variations:

1. Log in to **HOPEX** and from the **HOPEX** desktop, select **Main Menu > Settings** > **Options**.
2. In the **Business Process and Architecture Modeling** group, select the **Activate variations** option.

Import/Export Settings

To set the import/export settings:

1. Log in to **HOPEX**.
2. From the **HOPEX** desktop select:
   - (Windows Front-End) **Tools > SolMan Exchange**.
   - (Web Front-End) **Main menu > SolMan Exchange**.
3. In the wizard that appears, click **Options**.
   A dialog box appears.



You must complete the settings before the import/export can take place.

Some of these settings directly correspond to the settings used for connection to SAP Solution Manager with the SAP Front End:

- **Application Server**
- **Instance Number**
- **System Id**: number corresponding to the SAP system used
- **Client**: SAP client number
- **Language**: exchange file language

Other settings are available:

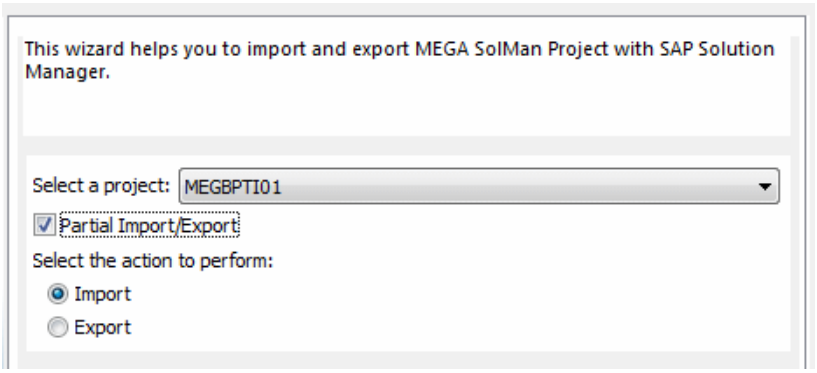
- **Check Consistency**: activates the consistency modeling rules for the project being exchanged.
  - If selected and an invalid consistency rule is encountered when the exchange process is launched, this process is automatically aborted and no exchange takes place.
  - If left unselected: the exchange takes place if the data is correct. If the data is incorrect, the exchange process fails.
- **Check Mapping**: activates the mapping modeling rules for the project being exchanged.
  - If selected and an invalid mapping rule is encountered, the exchange process is aborted.
  - If left unselected: the exchange takes place if the data is correct. If the data is incorrect, the exchange process fails.

IMPORTING/EXPORTING

Importing/Exporting a Whole Project

To import or export a project:

1. From the **HOPEX** desktop select:
   - (Windows Front-End) **Tools > SolMan Exchange**.
   - (Web Front-End) **Main menu > SolMan Exchange**.
2. In the window that appears, enter the **Login** and **Password** of the SAP user with the appropriate authorization.
3. Click **Next**.
4. In the **Select a project** field, enter the Project ID of the project you want to import from SAP Solution Manager or export from **HOPEX**.



> ☛ *To obtain a project ID, see "Obtaining a Project ID in SAP Solution Manager", page 18.*

5. Select the exchange method considered:
   - **Import**: selected by default.

   The first time you use **HOPEX SAP Blueprint**, you must import a project from SAP Solution Manager as you cannot create SAP projects in **HOPEX**.
   - **Export**

   > ☛ *The Project being exchanged must not be edited in SAP Solution Manager during the exchange.*
6. If you want to import/export some scenarios only, select the **Partial Import/Export** check box.

   > ☛ *For more details about this option, see "Importing/Exporting Scenarios", page 15.*
7. Click **Next**.

   The project data import/export is being launched.

8. Click **Finish**.

   ☛ *If the exchange does not start or you have an error message:*

   - *verify your import/export settings. For more details on the exchange settings, see "Import/Export Prerequisites", page 12.*
   - *view the trace file: from the **HOPEX** workspace, select **? > About MEGA**. Click the **System Information** button then **Error Log > Edit**.*

Importing/Exporting Scenarios

You can import or export only part of a project by selecting the scenarios which are of interest to you.

To import or export scenarios:

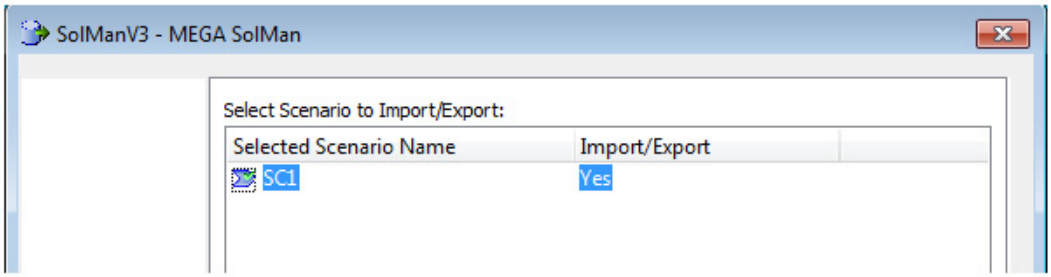
1. See "Importing/Exporting a Whole Project", page 14.
2. In the import/export wizard, select the **Partial Import/Export** check box.

   ☛ *To access the import/export wizard, see "Importing/Exporting a Whole Project", page 14*

   ☛ *This check box is not selected by default.*
3. Click **Next**.
4. From the list of scenarios listed, select "Yes" in the **Import/Export** drop-down list.

   ☛ *For more details about the scenarios listed, see:*

   - *"Importing scenarios", page 15*
   - *"Exporting scenarios", page 16*



   ☛ *You must select at least one scenario here.*
5. Click **Next**.
   Depending on the action selected, the import or export is being launched.

Importing scenarios

When you choose to import a project partially, the list of scenarios listed is built from the SAP server.

You can import a scenario:

- regardless of its presence or absence in the MEGA repository,
- even if the corresponding project still does not exist in the MEGA repository.

Only the objects located below the selected scenarios are updated.

Exporting scenarios

You can export scenarios which have never been exported before.

When you export a project partially, the SAPId of the objects located below the selected scenarios are updated.

PROPERTIES EXCHANGED BETWEEN MEGA AND SAP SOLUTION MANAGER

The data exchanged between **HOPEX** and SAP Solution Manager through the import/export tool is contained in the SolMan project.

SolMan projects are identified in **HOPEX** and SAP Solution Manager through their SAP IDs.

As ***SAP IDs cannot be generated in HOPEX*** it is important that data imported into **HOPEX** retain their SAP IDs so that when exported to SAP Solution Manager, the objects with the same SAP ID in Solution Manager can be updated.

As such, objects imported into **HOPEX**:

- are assigned **HOPEX** IdAbs
- still retain their SAP IDs.

> ☛ *The **HOPEX** IdAbs value is not directly available on the object as an attribute in SAP Solution Manager.*

SAP Identifiers

Objects created in SAP Solution Manager are automatically assigned SAP IDs.

When objects created in SAP Solution Manager are imported into **HOPEX**, the values of these identifiers are kept.

> ☛ *SAP IDs cannot be generated in **HOPEX** so the SAP ID attributes values for objects created in **HOPEX** remain empty.*

Automatic specification of SAP IDs

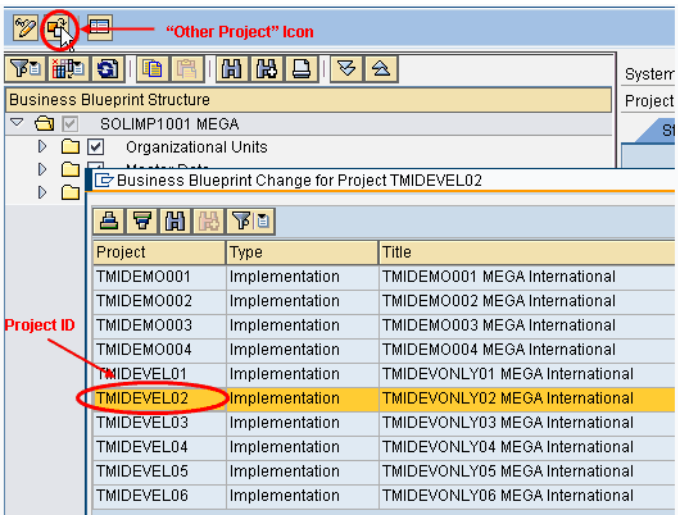
To automatically specify SAP IDs:

1. Export the SolMan project from **HOPEX SAP Blueprint** into SAP Solution Manager.
   IDs are automatically specified in SAP Solution Manager.

Obtaining a Project ID in SAP Solution Manager

To obtain a SAP project ID:

- In SAP Solution Manager, click the **Other Project** button or press **<Shift+ F5>**.
  A pop-up window appears with the list of projects. The current project is highlighted. The project ID number is displayed in the **Project** column.



Accessing a Project ID in SAP Solution Manager

MEGA Identifiers

Objects created in **HOPEX** do not have SAP IDs.

HOPEX IDs are however assigned to objects created in **HOPEX** and those that define projects imported from SAP Solution Manager.

Importing a SAP Solution Manager project into HOPEX

When you import a Solution Manager project into **HOPEX**:

- If no **HOPEX** identifier is specified, the object is created.
- If **HOPEX** identifiers are specified and the object already exists in **HOPEX**, it is updated.
- If the object does not exist, it is created with the specified **HOPEX** identifier.

> ☛ *When importing Solution Manager projects into MEGA, the MEGA identifier of the newly created objects are automatically transfered to SAP Solution Manager at the end of the import.*

Exporting a SolMan project from HOPEX

SolMan project objects exported from **HOPEX** have **HOPEX** IDs. When these IDs are imported into SAP Solution Manager via the **HOPEX** connector, they are:

- kept and restored when the project is exported from SAP Solution Manager
- re-imported into **HOPEX**.

> ☛ *When exporting SolMan projects from MEGA, the SAP identifier associated to the created object in SAP is automatically transfered to MEGA at the end of the export.*

Names in HOPEX SAP Blueprint

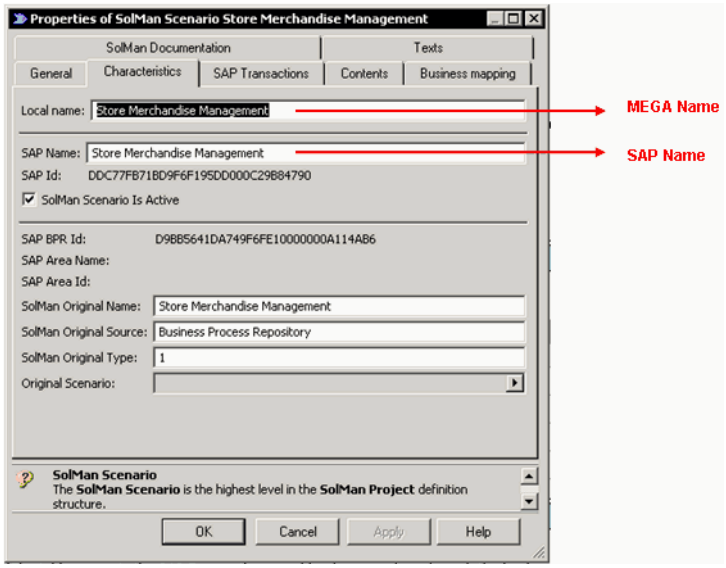
Object names are managed through two different attributes:

- **HOPEX** Name
- SAP Name

Managing two attributes in **HOPEX**:

- Facilitates keeping SAP names and using different names in **HOPEX**
- Follows the rule of name uniqueness in **HOPEX**. If this rule is not followed for objects coming from SAP Solution Manager, the names of these objects are automatically modified in **HOPEX**.

When you change one of these attribute values, this does not affect the other.



When projects and their data are imported/exported into/from **HOPEX**, the SAP name does not change.

When exporting from **HOPEX** to SAP Solution Manager:

- If a SAP name is specified for an object in **HOPEX**, the SAP name remains the same in SAP Solution Manager.
- If no SAP Name is specified for an object in **HOPEX**, the **HOPEX** name (Local name) is taken into account in the export and becomes the name of the object in SAP Solution Manager.

Namespace rules

When naming objects in **HOPEX** a particular namespace rule applies for the SolMan metamodel.

According to this rule, no two objects of the same MetaClass can have the same name.

If you try to give an object a name that is already assigned to an object of the same MetaClass:

- the name is automatically modified.
- The string "-1" or "-[n]" is added to the name, where [n] is a number that makes the name unique.

☛ *The value of n is incremented by 1 each time you try to the name.*

Example

Two SolMan Processes exist in a SolMan Scenario and are called "P" and "P-1". If you try to give a new SolMan Process the name "P", the name "P-2" will automatically be assigned to the new object.

This automatic behavior occurs when SolMan projects are imported into **HOPEX**.

DESIGNING FOR SAP PROJECTS

SAP represents certain businesses in projects which are further subdivided into Business Scenarios, Business Processes, Process Steps and Transactions. They also include Master Data and Organizational units. All these objects are presented in a hierarchy in SAP Solution Manager.

HOPEX SAP Blueprint offers the possibility of presenting the SAP hierarchy in **HOPEX** to map business processes modeled in **HOPEX** with the information in SAP. The hierarchy structure in SAP Solution Manager is exported to **HOPEX SAP Blueprint** and seen identically in both products. You then have the option of modifying the projects to better meet business requirements by adding or deleting objects.

HOPEX SAP Blueprint enables you to align SAP Solution Manager project lifecycle with **HOPEX** through management of implementation, maintenance and template projects.

HOPEX SAP Blueprint also enables you to initialize a SolMan project from business objects and populate a diagram from a SolMan structure.

- ✓ "Accessing SolMan Data in HOPEX", page 22
- ✓ "Managing Projects", page 27
- ✓ "Aligning SAP Project Lifecycle with HOPEX", page 48

ACCESSING SOLMAN DATA IN HOPEX

Once the SolMan projects have been imported into **HOPEX**, they can be viewed in the **Solution Manager** navigation window.

Three types of projects can be viewed in **HOPEX SAP Blueprint**:

- Implementation projects

  📖 *An implementation project is used to implement business processes in an SAP landscape.*

- Maintenance projects

  📖 *A maintenance project is used to maintain changes in the productive environment (solution).*

- Template projects

  📖 *A template project is used to create and distribute a template defining the project structure.*

  ☛ *For more information about these project types, see "Overview of SAP Solution Manager Lifecycle", page 48.*

You can also launch an SAP transaction directly from **HOPEX SAP Blueprint**.

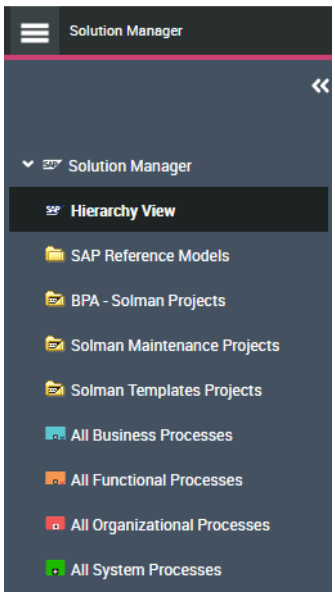
☛ *See "Viewing a Transaction", page 25.*

Viewing SolMan Projects in HOPEX

Accessing SolMan projects

To view SolMan projects:

- In **HOPEX Windows Front-End** desktop select **Navigation Windows > Solution Manager**.
- In **HOPEX Web Front-End** Enterprise Architect desktop, from the main navigation menu select **Solution Manager**.
  The "Solution Manager" navigation page appears.



The **Hierarchy View** displays the repository in which you are working.

Contents of the Hierarchy View

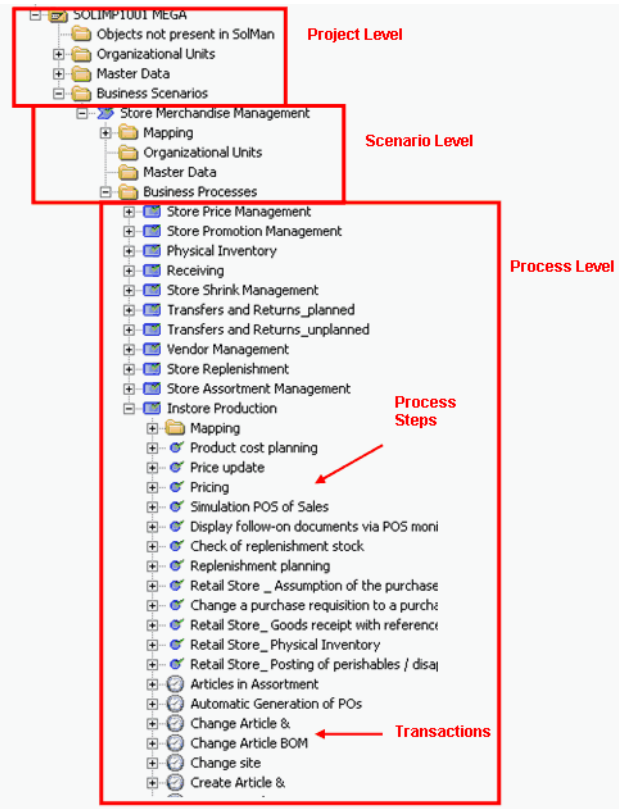
All the projects created during imports can be found in a folder of the **Solution Manager** navigation window. The folder depends on the type of projects imported. Three types of projects are available:

- Implementation Projects
- Maintenance Projects
- Template Projects

> ☛ *Below is described the hierarchy of implementation projects. The same hierarchy applies to maintenance projects and template projects.*

To access data from imports:

- Expand the folder corresponding to the type of project imported then the project folder required to view the hierarchy.



The hierarchy represented here reflects what is actually managed in the corresponding view of SAP Solution Manager.

The objects managed are:

- SolMan Projects
- SolMan Organizational Units
- SolMan Master Data
- SolMan Scenarios
- SolMan Processes
- SolMan Process Steps
- SolMan Transactions

The displayed hierarchy is almost the same as that displayed in SAP Solution Manager except that transactions are displayed here.

The icons corresponding to the different objects in an SAP Project are displayed in the table below.

Object type	Icon	Owner object
Scenario		Project
Organizational Unit		Project , Scenario
Master Data		Project, Scenario
Process		Scenario
Process Step		Process
Transaction		Process Step, Process, Organizational Unit, Master data

☛ *For more information about how to handle these objects, see "Managing Projects", page 27.*

Viewing a Transaction

You can view a transaction screen directly from **HOPEX SAP Blueprint**.

☛ *SAP GUI thick client must be installed on the workstation.*

Defining settings for transaction launch

Before viewing a transaction, you need to define the settings required for authentication.

To define settings for transaction launch:

1. Access the SolMan project.

   ☛ *See "Viewing SolMan Projects in HOPEX", page 23.*

2. Right-click the SolMan project and select **Properties**.

3. In the **SolMan Project Transaction Launch** tab, specify the settings as follows:
   - Configured SAP Login: SAP client number
   - SAP Language
   - Server
   - System Number
   - System ID
   - Client

   ☛ *These settings directly correspond to the settings used for connection to SAP Solution Manager with the SAP Front End.*

Launching a transaction

To launch a transaction:

1. From a SolMan project properties, right-click a transaction and select **Launch SAP Transaction**.
   The transaction screen is displayed in **HOPEX SAP Blueprint**.

   ☛ *This feature is not available in **HOPEX Web Front-End**.*

MANAGING PROJECTS

The procedures and indications given below apply to:

- implementation projects
- maintenance projects
- template projects

☛ *For procedures specific to maintenance and template projects, see "Aligning SAP Project Lifecycle with HOPEX", page 48.*

About SolMan Projects

In SAP Solution Manager, components are used to:

- host transactions
- support processes

To ensure that processes and transactions are attached to components in a project, the components used in the project must first be defined. The system Landscape of the project defines these SAP logical components.

For this reason SolMan projects cannot be created in **HOPEX**. They must first be created in SAP Solution Manager with their appropriate system landscapes and then imported into **HOPEX**, even if no scenarios are selected in SAP Solution Manager.

After this first import, the project and its logical components are defined in **HOPEX** with their correct SAP IDs.

Modifying SolMan Objects

Before modifying a SolMan object, you need to check whether it can be modified or not. Some objects of the imported projects cannot be modified. You can identify them thanks to the icon.

You first need to activate indicators showing the objects that cannot be modified.

Viewing objects that cannot be modified

To be able to view objects that cannot be modified:

1. From MEGA desktop, select:
   - (**HOPEX Windows Front-End**) **Tools > Options**.
   - (**HOPEX Web Front-End**) **Main menu > Settings > Options**.
2. In the left tree, select **Status Indicators**.
3. Select the **Indicate objects that cannot be modified** check box.

☛ *There is also an indicator showing the objects that can be modified.*

When an object cannot be modified by the current user, a symbol representing a closed padlock is displayed:

- In diagrams: the symbol is displayed under the object.
- In a tree: the symbol is displayed on the right of the object name.

When an object is locked, the **Immutability** attribute displays the "Locked" value.

> ☛ *This attribute can be viewed in the **General tab** of the property page when you are in Expert metamodel mode (**Options > Respository > Metamodel Access** > "Expert").*

Motives for automatic object locking

There are different reasons for which an object is automatically locked by **HOPEX SAP Blueprint**.

An object is locked:

- if a new version of the object has been created.

  > ☛ *For more information about variations, see "Viewing project versions", page 53.*

- if the object displays a value (any value) in **SAP Global Attribute**

  > ☛ *This attribute can be viewed in the **Characteristics** tab of the property page.*

- if, within the framework of a maintenance project, the object that is part of a solution is not checked-out. This applies to scenarios, processes or process steps.

  > ☛ *For more information about maintenance projects, see "Managing Maintenance Projects", page 52.*

- if, when importing a transaction, the transaction parent is locked.

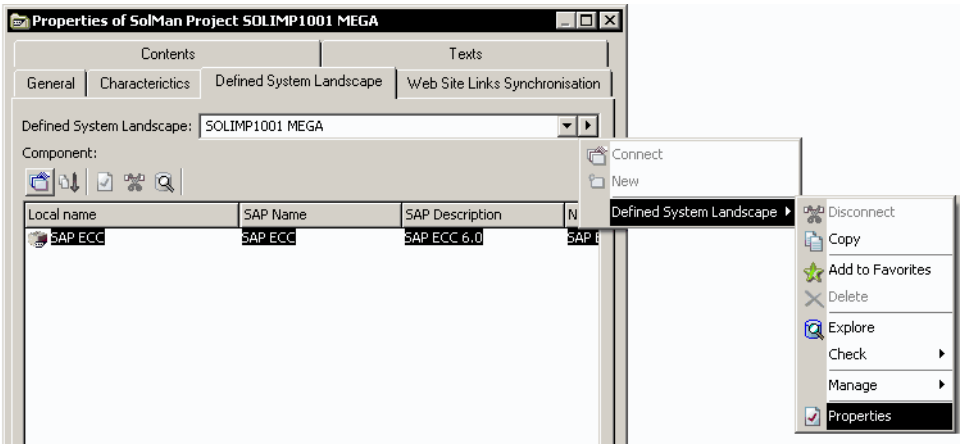
The System Landscape Attributes of a SolMan Project

You can define SAP Components that define a System Landscape from the System Landscape properties window. This window can be accessed from the SolMan project.

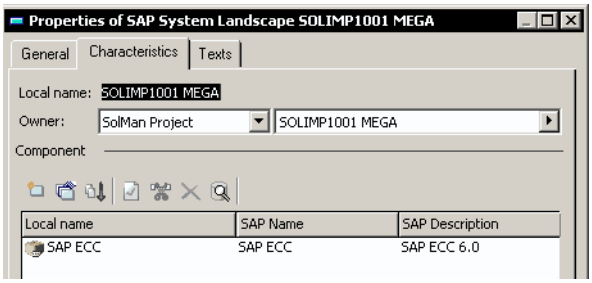
To define SAP Components that define a System Landscape:

1. Acess a SolMan project.
2. See "Viewing SolMan Projects in HOPEX", page 23.
3. Right-click the SolMan project and in the pop-up menu that appears, click **Properties**.
4. In the properties window of the project, select the **Defined System Landscape** tab.

5. To the right of "Defined System Landscape" field, click the arrow and select **Defined System Landscape > Properties**.



The Properties window of the SAP System Landscape appears.



Components that define the System Landscape are displayed in this window.

> ☛ *It is highly recommended that you neither add nor delete SAP Components in HOPEX. This should be done in SAP Solution Manager. During the next synchronization the System Landscape in **HOPEX** is aligned with the System Landscape updated in SAP Solution Manager.*

Activating/Deactivating SolMan Objects

SAP provides many Scenarios with many Processes. Not all these objects are relevant to any given Project. As such, SAP Solution Manager offers the possibility of activating or deactivating these objects according to Project requirements.

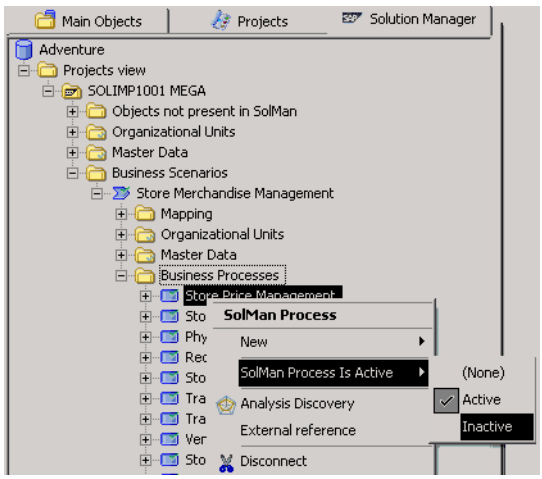
All objects imported from SAP Solution Manager can be activated or deactivated within **HOPEX**. This is done with the "Is Active" attribute that can be found on objects of the following MetaClasses:

- SolMan Scenario
- SolMan Organizational Unit
- SolMan Master Data
- SolMan Process
- SolMan ProcessStep
- SAP Transaction

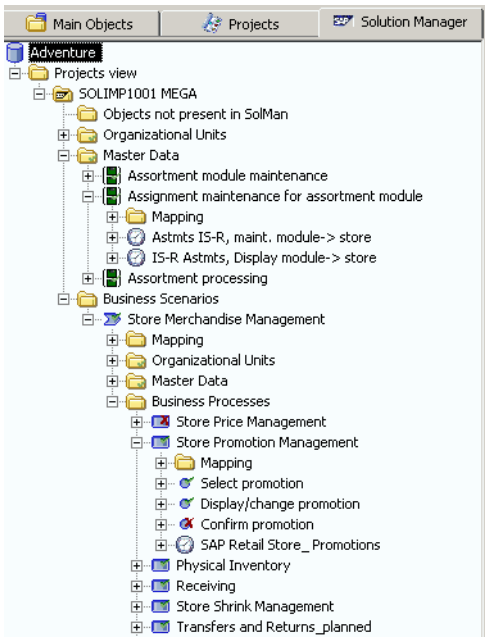
The "Is Active" attribute corresponds to the same attribute in Solution Manager. It is used to activate/deactivate objects of the SAP system.

To set the "Is Active" attribute:

1. In the Solution Manager navigation tree right-click an object.
2. In the pop-up menu that appears select **Inactive**.



The object now appears with a red cross indicating its inactive state. When objects are Active they are displayed with a green checkmark.



The "Is Active" attribute behaves as follows:

- If an object is deactivated, all its sub-objects are inactive.

  ☛ *When an object is deactivated, all its sub-objects are seen as deactivated however their active state is restored when this object is reactivated.*

- If an object is activated, all its super-objects are activated.

  ☛ *When you activate an object, the objects above this object in the tree, including the parent object, are also activated.*

  ☛ *The Active/Inactive status associated to each SolMan object indicates whether or not the object (and its sub-hierarchy) is to be used in the project. Inactive objects are not used in projects but are still present in the project and are still exchanged between **HOPEX** and SAP Solution Manager. At any moment during the project, inactive objects can be activated.*

Adding SolMan Objects

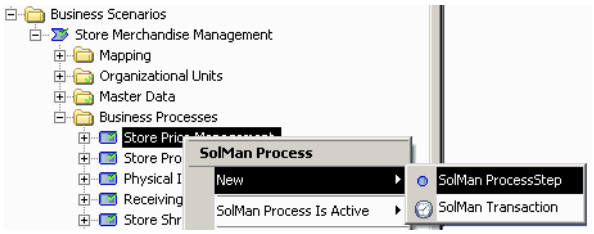
Project requirements cannot always be met by simply selecting from the standard objects provided by SAP. Sometimes you may be required to add new objects that do not exist in SAP. **HOPEX SAP Blueprint** allows you to insert new objects in the project hierarchy.

However, as projects and their System Landscapes must be created in SAP Manager, the objects that can be added in **HOPEX SAP Blueprint** are restricted to:

- SolMan Scenarios
- SolMan Master Data
- SolMan Organizational Unit
- SolMan Process
- SolMan ProcessStep
- SAP Transaction

To insert a new object in the project hierarchy:

1. See "Viewing SolMan Projects in HOPEX", page 23.
2. In the **Solution Manager** navigation tree, select the parent object where the new object is to be inserted.
3. Right-click this parent object and select the appropriate object type in the **New** menu.

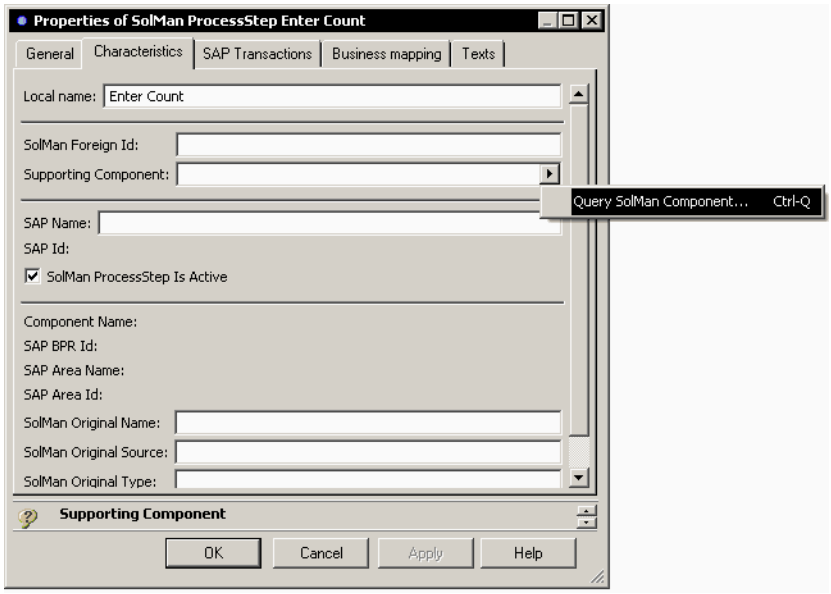


A creation dialog box appears.

4. Enter the name of the new object in the dialog box and click **OK**.
The new object appears in the hierarchy
5. Right-click the new object and in the pop-up menu, select **Properties** to open the properties dialog box.

6. Enter the name of the Component that supports the object (Supporting Component).

> ☛ *You can either create a new component or find a component that already exists.*
>
> ☛ *You can only add supporting components for Process Steps and Transactions.*



The new object has no SAP IDs. The SAP IDS will be assigned by SAP Solution Manager during the next synchronization. Once assigned, these IDs must not be changed.

> ☛ *When you create new objects, you do not need to explicitly select the "Is Active" attribute. By default, the object inherits the value of the parent object.*

Retrieving Objects Not Present in SAP Solution Manager

Objects that are present in **HOPEX SAP Blueprint** but which have been deleted from SAP Solution Manager can be found in a specific folder during the import from SAP Solution Manager into **HOPEX SAP Blueprint**.

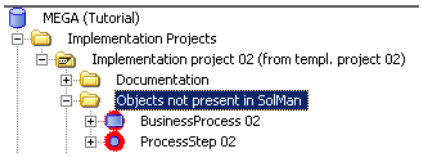
if objects are deleted from a project in SAP Solution Manager and this project is then imported into **HOPEX**, these objects are not automatically deleted in **HOPEX SAP Blueprint**. They are instead marked as unfound in SAP Solution Manager. This is the case for links between the object and its project.

> ☛ *These links are displayed in the **Solution Manager** navigation window in the "Objects not present in SolMan" sub-folder of a project folder. All the links that existed on the object before the synchronization are kept in **HOPEX SAP Blueprint**. The objects deleted in SAP Solution Manager are therefore still present and in their original place in **HOPEX** after the synchronization.*

Accessing objects deleted from SAP Solution Manager

To access objects deleted from SAP Solution Manager:

❱ From a project, unfold the **Objects not found in SolMan** folder.



These objects will no longer be exchanged during an export to SAP Solution Manager and will not be recreated in SAP Solution Manager either.

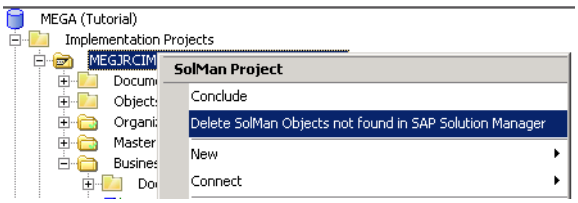
You can choose:

- to keep the objects not found in Solution Manager
- to delete them

Deleting the objects not found in SAP Solution Manager

To delete objects that have not been found in SAP Solution Manager:

❱ Right-click on a project, and select **Delete SolMan Objects Not Found in SAP Solution Manager**.



All the objects, documentation types and statuses not found in SAP Solution Manager are deleted.

☛ *For more information about documentation types and statuses, see "Managing MEGA document classification", page 45.*

Deleting SolMan Objects

SAP covers a wide variety of business cases, by far much more than a company needs. As all objects are not necessary for all projects, project teams need to know which objects will definitely not be used. Once this has been decided, the objects that do not correspond to the company's context can be deleted in **HOPEX** and in SAP Solution Manager.

The **HOPEX SAP Blueprint** view is a real hierarchy so deleting one object of this hierarchy also deletes all its sub-objects at the deepest level.

To delete an object:

1. See "Viewing SolMan Projects in HOPEX", page 23.

2. In the **Solution Manager** navigation tree, right-click the object to be deleted.
3. In the pop-up menu that appears, select **Delete**.
   A deletion window appears. All the objects that will be deleted are presented with a check box.
4. Click **Delete**.

The object and all its sub-objects have disappeared from in the **Solution Manager** navigation tree.

Mapping SolMan Objects with Business Objects

Objects of the SolMan hierarchy can be linked to objects of the business view according to the correspondence table below.

SolMan Concept	HOPEX Concept
Project	Library
Scenario	Business Process Organizational Process Functional Process Activity Task System Process Business Function Operation
Process	Business Process Organizational Process Functional Process Activity Task System Process Business Function Operation
Process Step	Business Process Organizational Process Functional Process Activity Task System Process Business Function Operation
Master Data	Content Data Model Package
Organizational Unit	Org-Unit
Transaction	IT Service

Mapping

HOPEX business objects that have been linked to SolMan Objects in the project are placed in the "Mapping" folders of the **Solution Manager** navigation window.

Because of this one-to-one correspondence and the related identification issue, objects cannot be moved around from one place to another in **HOPEX SAP Blueprint**. They can only be created, duplicated or deleted.

You can map objects:

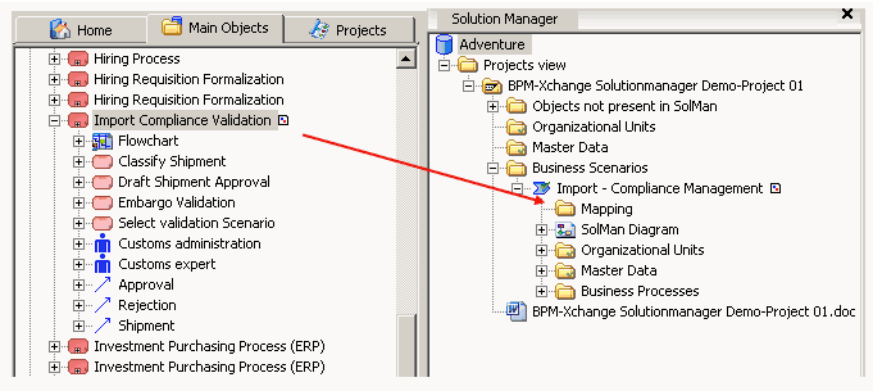
- in SolMan diagrams
- in the navigation window

In the navigation window

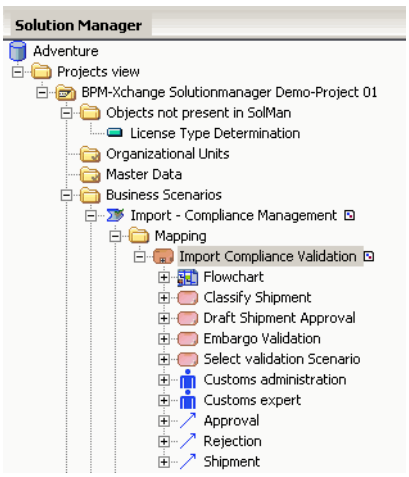
To map objects in the navigation window:

1. In the **Solution Manager** navigation window, select the SolMan object to be mapped and unfold it.
   Its mapping folder appears.

2. In the **Objects** navigation window, select the business object to be mapped then, drag and drop it into the **Mapping** folder of the Solman object.



The mapping is established.



When you map a **HOPEX** object with an SAP Solution Manager object, its sub-objects (owned objects) are not automatically mapped with the sub-objects of the associated SAP Solution Manager object.

In the above example, an organizational process is mapped with a scenario. The sub-objects of the organizational process are displayed in the Solution Manager navigation window under the scenario, however, none of them are linked to any of the scenario's sub-objects. The sub-objects must be explicitly mapped like the business object and the scenario, by dragging and dropping the business object sub-objects in the Mapping folder of the concerned scenario sub-object.

In a SolMan diagram

You can map **HOPEX** business objects with SAP Solution Manger objects in a SolMan diagram.

To create a diagram in **HOPEX SAP Blueprint**:

1. Right-click the SolMan object that contains the objects to be mapped. This can be a project, a scenario or a process.
2. In the pop-up menu that appears select **New > Diagram**.
3. In the dialog box that appears, select the SolMan Diagram type and click on the **Create** button.

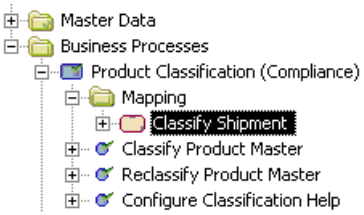
To map **HOPEX** and SolMan objects:

1. In the object bar select the icon corresponding to a **HOPEX** object (Process, Operation, etc.) and click in the diagram.
2. Create the **HOPEX** business objects and place them in a vertical line in the in the diagram.
   - Click the arrow of the **Name** field and search for the object to be added in the repository.

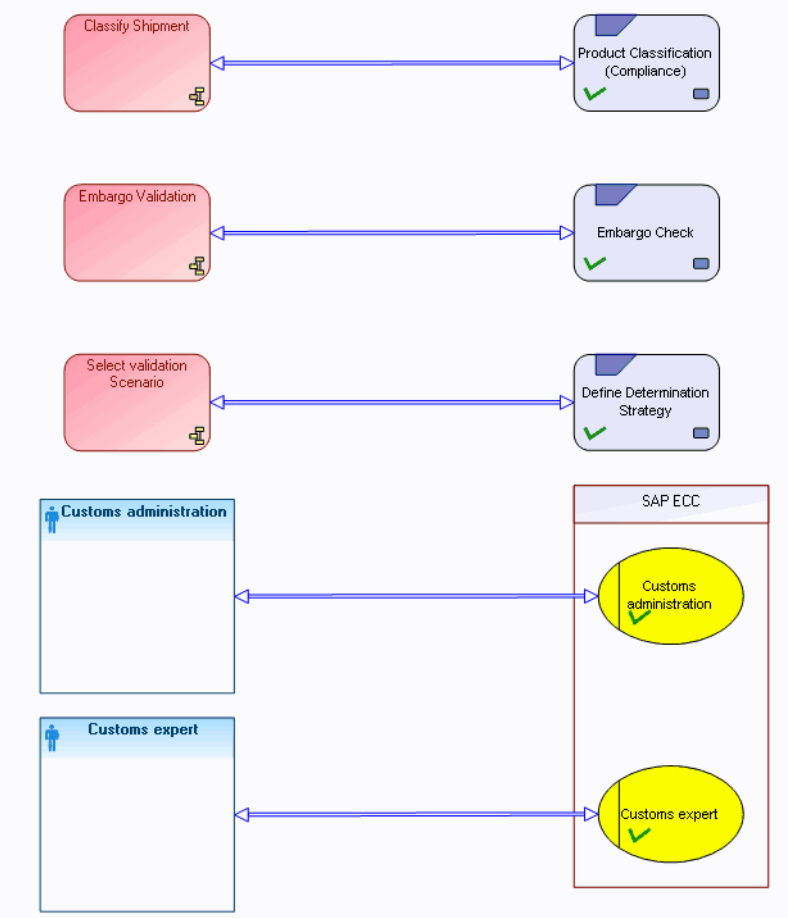
     ☛ *You cannot create new items in SolMan diagrams. If you want to add an object that does not exist, you must first create it in the correct navigation tree.*
   - Click **Connect**.

   The object appears in the diagram.
3. Create the SolMan objects and place them in a vertical line to the other side of the diagram.
4. In the object bar, select the **Link** icon and click in the diagram on the first object to be mapped.
5. Without releasing the mouse button, draw a line to the second object to be mapped then release it.
   Once mapped, the **HOPEX** objects appear in the **Solution Manager** navigation window, under the SolMan objects.

   In the figure below, the "Product Classification (Compliance)" Business Process is mapped with the "Classify shipment" operation.



Example of a SolMan Diagram



Initializing a SolMan Project from Business Objects

A specific wizard enables initialization of contents of a SolMan project from business objects i.e. **HOPEX** objects. It consists in transforming a BPMN diagram into a SolMan structure.

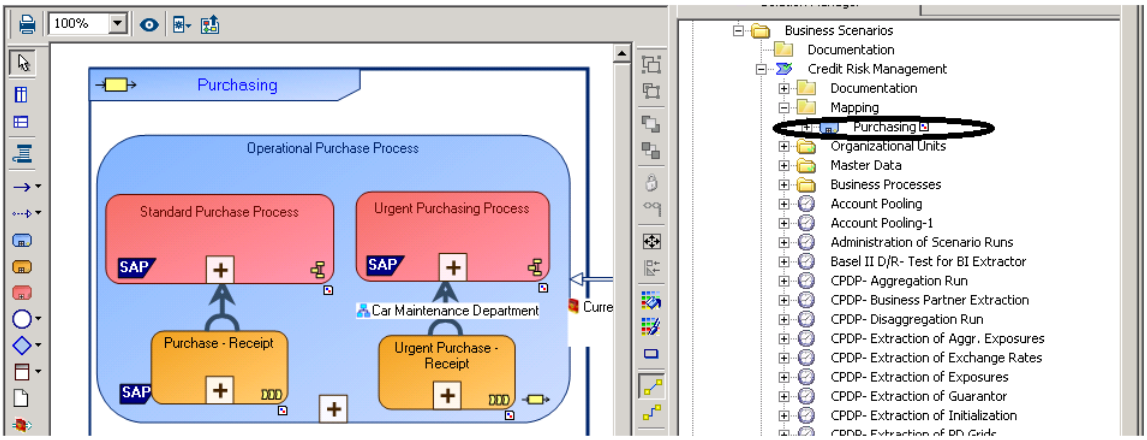
Prerequisites

Before launching the wizard, you need to make sure:

- the object from which you want to launch the wizard is already mapped with a **HOPEX SolMan** element.

  ☛ *For more information on mapping, see "Mapping SolMan Objects with Business Objects", page 35.*

  In the example below, the "Purchasing" business process is mapped to the "Credit Risk Management" Solman scenario.



- you have created a parameter file indicating the mapping levels between MEGA objects and Solman elements. For more information, see "Creating a parameter file", page 40.

Creating a parameter file

Before launching the wizard, you need to create a parameter file which specifying the mapping levels between MEGA objects and Solman elements.

Location of the parameter file

The "megasolmanbusinessimport.ini" file should be located in the USER folder of the appropriate environment:

<Environment>\Db\<Repository>\USER\<User name>

Syntax used

Parameterization is found in a [MetaAssociationEnd] section.

The syntax is as follows:

```
[Metaclass field]=[MetaAssociationEnd1
field];[MetaAssociationEnd2 field];[MetaAssociationEnd3
field]
```

☛ *The list of MetaAssociationEnds are those to browse from the MetaClass occurrence. The sub-objects taken into account are those obtained by the defined link.*

☛ *A * sign before the MetaAssociationEnd means there is a change in mapping level.*

No change in mapping level	The SolMan element created is of the same type as the SolMan element mapped with the parent MEGA object.
Change in mapping level (* before the MetaAssociation)	The SolMan element created is of a lower level than the SolMan element mapped with the parent MEGA object.

In the event of a change in mapping level:

- If the owner was mapped wih a SolMan Scenario, the object is mapped with a SolManProcess
- If the owner was mapped with a SolMan Process, the object is mapped with a SolMan ProcessStep
- if the owner was mapped with a Solman ProcessStep, the object is mapped with a SolMan Transaction

Example

[MetaAssociationEnd]
~pj)grmQ9pG90[Business Process]=~Zs()h50XBn70[Owned Business Process];*~6R65VIXKpG10[Organizational Process]
~gsUiU9B5iiR0[Organizational Process]=*~prUiaCB5iOB2[Operation]

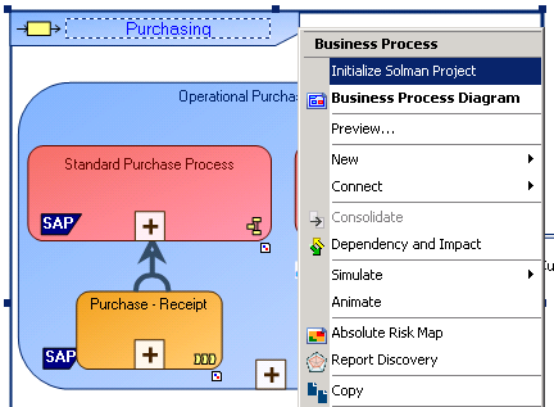
☛ *In the above example the sub-processes of the process from which you want to initialize the wizard must be owned by the process.*

Launching the wizard

To launch the wizard:

1. Open a BPMN diagram, for example a business process diagram.

2. Right-click on the root **HOPEX** object from which you want to initialize the Solman project and select **Initialize Solman Project**.



☛ *The **HOPEX** object from which you want to initialize the project must be already mapped with a Solman element. For more information, see "Prerequisites", page 40.*

For this object and all the sub-objects below, an object is created in the Solman hierarchy.

```
In the example above:

- A business scenario named "Purchasing" is created and
mapped with the "Purchasing" business process.

- A business scenario named "Operational Purchasing" is
also created and mapped with the owned business process
"Operational Purchasing"

- A SolMan Process named "Standard Purchase Process" is
created and mapped with the organizational process
"Standard Purchase Process"
```

Hierarchy of SolMan objects created

The Solman hierarchy is created according to the structure defined in the parameter file.

☛ *For more information about the parameter file, see "Creating a parameter file", page 40.*

A business process produces a scenario.

The sub-processes could produce:

- a SolMan Scenario if there is no change in mapping level
- a Solman Process if there is a change in mapping level (*)

☛ *You can launch the wizard several times while designing your diagram. Updates in your diagram are transfered to your new SolMan structure.*

Generating a report

A report gives you an overview of the business objects that have been mapped to a SolMan object.

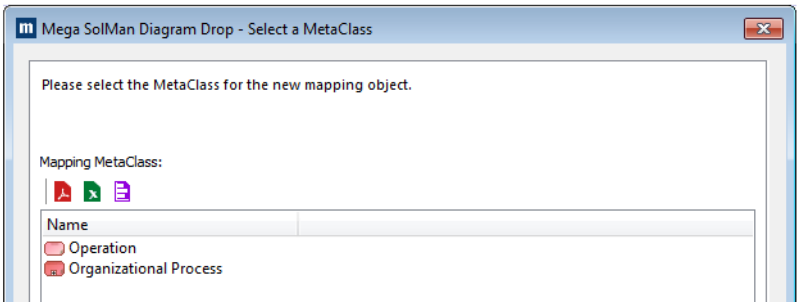
☛ *For more information, see "Solman Project Mapped Element Report", page 71.*

Populating a BPMN Diagram from a Solman Structure

You can update a BPMN diagram by drag and dropping elements from a Solman structure.

To update a BPMN diagram:

1. From the **Solution Manager** navigation window select an element and drag it to the BPMN diagram you want to update, for example a business process diagram.
   A wizard asks you which object type (metaclass) you want to use to create the corresponding object.



2. In the Mapping Metaclass frame, select an object type, for example "Functional Process".
   A new object is created, with "SAP" indicated on the shape.

3. Create in the same way the different objects needed in your diagram.

   ☛ *If at some point you cannot drag-and-drop objects, close your diagram and reopen it.*

4. Arrange your diagram and create links betweens objects accordingly.

   ☛ *If you try to drag-and-drop an object that has already been created in the diagram, the wizard asks you if you want to:*

   - *create a new mapping object*
   - *use an existing mapping object*

   ☛ *If you delete an object in the **HOPEX SAP Blueprint** hierarchy, the corresponding object in the BPMN diagram is not deleted.*

You have created a BPMN diagram from a SolMan structure.

Exchanging Documents Between HOPEX SAP Blueprint and SAP

It is possible to:

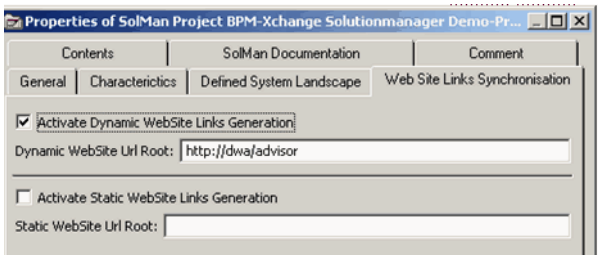
- create links to the URL documentation of SolMan objects so that they can be viewed from SAP Solution Manager
- access SAP Solution Manager documents of URL type from **HOPEX SAP Blueprint** through external references
- categorize the documents sent by **HOPEX SAP Blueprint** according to SAP classification.

Creating links to the URL documentation of SolMan objects

You can create links to the URL documentation of SolMan objects allowing you to view these in **HOPEX Explorer**.

To activate links to the URL documentation of SolMan objects:

- In the properties dialog box of SolMan projects, select the **Website Link Synchronizaton** tab.



The generated links are a result of mapping links in **HOPEX**.

Example

If in **HOPEX** a SolMan Scenario is mapped with an organizational process, a documentation link towards the **HOPEX Advisor** page of the organizational process is added in SAP Solution Manager at the next synchronization of the corresponding Scenario.

Pointing to dynamic Web sites

You can point to a dynamic Web site (**HOPEX Advisor**).

To specify access in SAP Solution Manager through ***dynamic*** Websites:

- Select the **Dynamic WebSite Links Generation** check box.

To specify the root address of dynamic websites:

- Enter the URL address in the **Dynamic WebSite URL Root** field.

Pointing to static Web sites

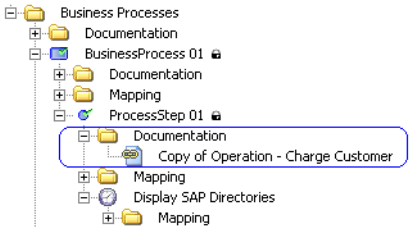
You can point to a static Web site.

To specify access in SAP Solution Manager through ***static*** Websites:

- Select the **Activate Static WebSite Links Generation** check box.

Accessing SAP Solution Manager Documents from HOPEX SAP Blueprint

SAP documents of URL type appear in **HOPEX SAP Blueprint** as external references after being imported from SAP Solution Manager:



These external references appear if you have:

- created documents for SolMan objects in SAP Solution Manager
- mapped SolMan objects with **HOPEX** business objects

Managing MEGA document classification

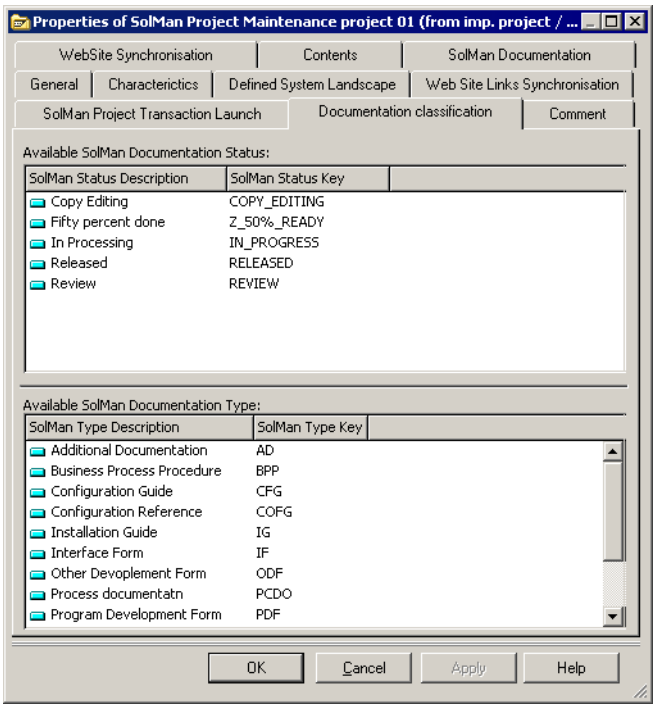
In SAP Solution Manager, documents have a specific classification.

By default, **MEGA** documentation originating from mapping is classified under "Additional documentation". You can categorize **MEGA** documents so that they appear in one of the categories of the SAP Solution Manager project.

Viewing document classification

To view the documentation statuses and types available on the SolMan project:

- In the SolMan project properties dialog box, select the **Documentation Classification** tab:



☛ *The values are those created initially in SAP Solution Manager.*

Specifying document classification

You need to specify the default classification of documents on the project.

To specify the default classification of project documents:

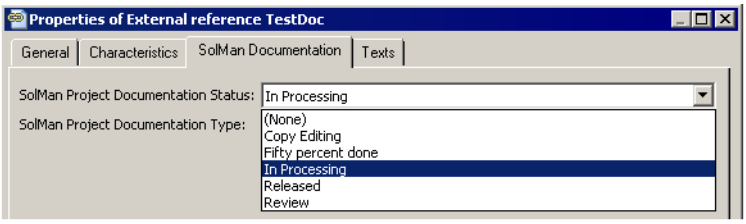
1. In the properties dialog box of a SolMan project, select the **Website Link Synchronizaton** tab.
2. Specify:
   - **SolMan Default Document Status**
   - **SolMan Default Document Type**

You can also modify the classification on an individual document.

To modify classification of **HOPEX** documents on an external reference:

1. in **HOPEX SAP Blueprint**, from a SolMan object, unfold the **Documentation** folder, right-click the external reference and open its properties dialog box.
   You can modify the desired values for:
   - **Solman Document Status**
   - **Solman Document Type**

2. Select another documentation type.



Example of values for Solman Project Documentation Status

☛ *Note the values are those created initially in SAP Solution Manager.*

When data is exported, the documentation classification value is modified accordingly in SAP Solution Manager.

ALIGNING SAP PROJECT LIFECYCLE WITH HOPEX

When a project changes statuses during its SAP lifecycle, new objects are created. The issue here is that **HOPEX** mapping is lost.

As a consequence, it may not be possible to use the initial documentation produced.

☛ *For more information about mapping and documentation, see :*

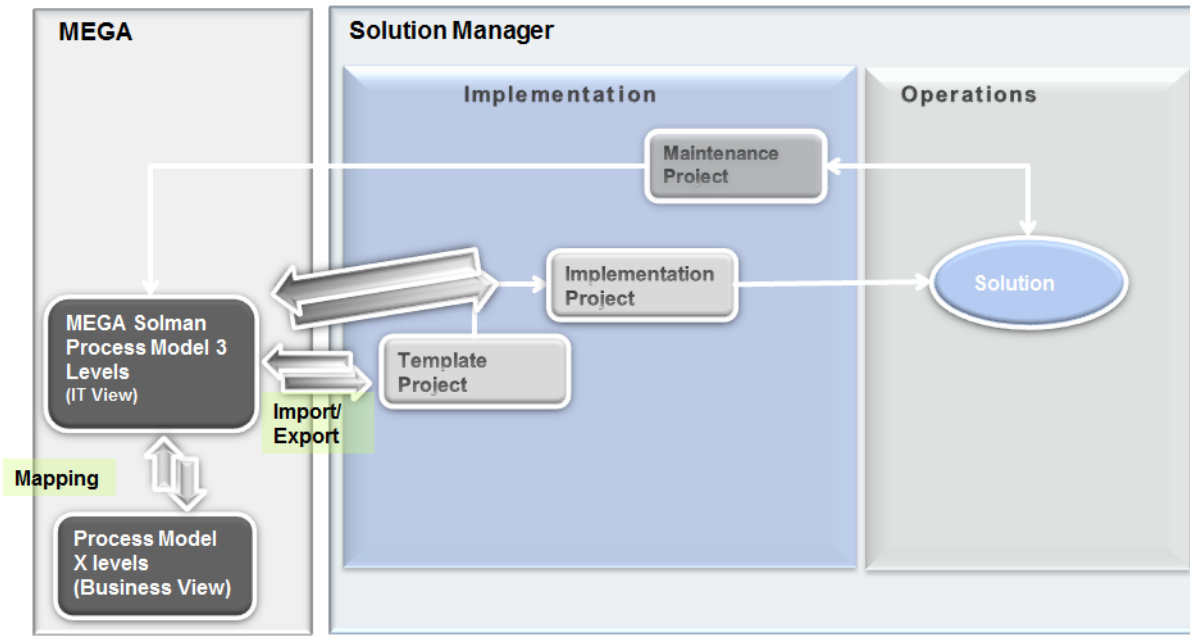
- *"Mapping SolMan Objects with Business Objects", page 35*
- *"Exchanging Documents Between HOPEX SAP Blueprint and SAP", page 44.*

HOPEX SAP Blueprint provides a means to trace the changes back to the initial implementation projects through versioning.

☛ *Versioning is a **HOPEX** platform feature that is fully described in the **HOPEX Common Features** user guide. For more information, see chapter "Handling Repository Objects", paragraph "Object Versions". See also "Viewing project versions", page 53.*

Overview of SAP Solution Manager Lifecycle

The following summarizes the main project types found in SAP Solution Manager.



✓ "Managing Implementation Projects", page 49
✓ "Managing Maintenance Projects", page 52
✓ "Managing Template Projects", page 55

Managing Implementation Projects

The lifecycle of an SAP solution typically starts with an ***implementation project*** for blueprinting, customizing, developing, testing and roll-out (which is reusing existing implementation in a new location).

> 🕮 *An implementation project is used to implement business processes in an SAP landscape.*

After an implementation project is carried out, it becomes a solution in SAP Solution Manager.

Importing a project

For more information on project import, see "Importing/Exporting", page 14.

Viewing the differences with the template project

If the implementation project is based on a template project, **HOPEX SAP Blueprint** allows you to view the differences between them.

When importing the implementation project, versions of the project are created to track the changes made in relation to the originating template project.

Technically speaking, versioning involves:

- creating variations
- locking the versioned object.

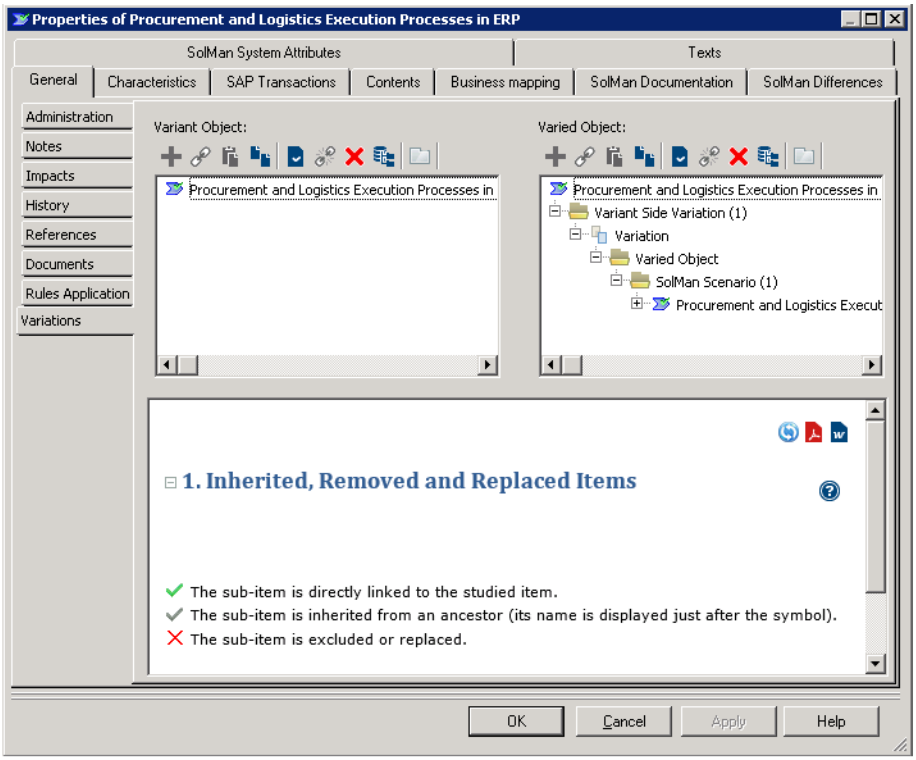
You therefore need to be able to view variations.

Viewing variations

To be able to view versions, you need to activate variations (as versioning relies partly on variations). For more information, see "Activating Variations", page 12.

To view an object version:

- In the property page of a the SolMan project select the **General** tab then the **Variations** sub-tab.



Viewing the differences via a report

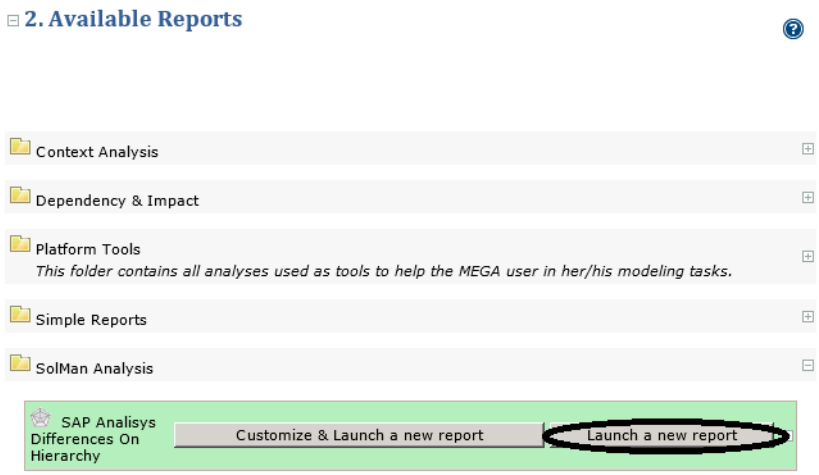
Versioning makes immediate change impact analysis possible.

Reports make it easier to view the differences between objects.

To access a report from the implementation project level:

1. Right-click the implementation project and select **Report Discovery**.
2. In the **Available reports** section, select **SolMan Analysis**.

3. Alongside the **SolMan Analysis Differences on Hierarchy** report, select **Launch a new report**.

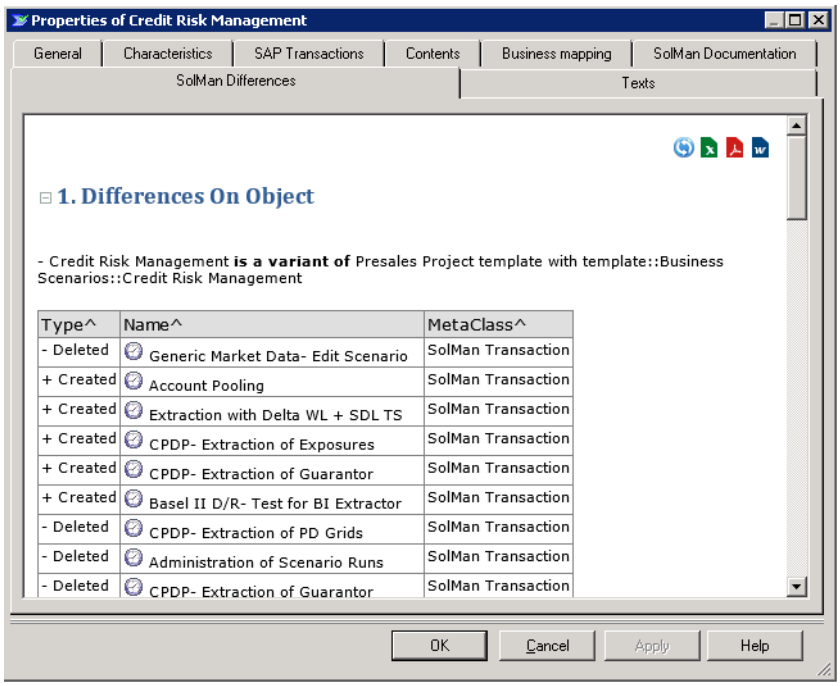


4. Click the title "Differences on Hierarchy" to refresh the report.
The implementation project is a variant of the corresponding template project. The report shows the differences between them and their sub-elements.

> ☛ *For more information onthe contents of this report, see "Hierarchy Differences Report", page 75.*

To access a report from a lower level element, for example from a a SolMan Business scenario:

- Open the properties dialog box of the object and click the **SolMan Differences** tab.
  The report shows the differences for the object and its first-level children.



☛ *For more information on the contents of this report, see "Object Differences Report", page 74*

☛ *If you want a more global report on the whole project, see "Hierarchy Differences Report", page 75.*

Managing Maintenance Projects

In the lifecycle of an SAP Solution Manager project, any change to the solution has to be managed by a separate ***maintenance project***.

☛ *A maintenance project is used to maintain changes in the productive environment (solution).*

The branches of the business processes that need to be changed are checked-out from the solution into the maintenance project.

The project is then modified according to the required changes. After all changes have been implemented, corresponding maintenance projects are checked-in back to the solution.

Maintaining a SAP Solution Manager project therefore requires importing the maintenance project into **HOPEX SAP Blueprint**.

HOPEX SAP Blueprint keeps tracks of the changes to be able to update the implementation project that gave birth to the solution.

Note that the objects of a scenario that are not checked-out are locked.

Importing a project

For more information about project import, see "Importing/Exporting", page 14.

Viewing project versions

When importing the maintenance project, versions of the project are created to keep track of the changes made in the maintenance phase.

Technically speaking, versioning entails:

- creating variations
- locking the versioned object.

You therefore need to be able to view variations. For more information, see "Viewing variations", page 49.

> ☛ *A report makes it easier to view the differences between objects. For more information, see "Object Differences Report", page 74*

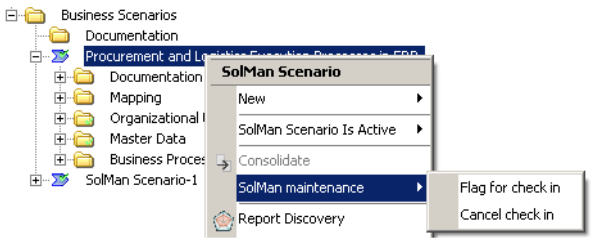
Flagging objects for check-in

After you have modified an object in the project, you need to specify it is ready for check-in in order to link it to the maintenance project.

> ☛ *This step is necessary so that when concluding the maintenance project the objects are traced back to the corresponding implementation project.*

To flag the object for check-in:

1. Right-click the object modified and select **SolMan maintenance > Flag for check-in**.



Check-out status

The object must be in a proper check-in status to be flagged for check-in.

The statuses that are entitled for flagging for check-in are as follows:

- Check-in confirmed
- Check-in ready
- Check-out confirmed
- Check-out requested
- Checked-out

If the object has a different status, a warning indicating that the check-out status does not allow flagging for check-in appears.

☛ *You can view the **SolMan Checkout status** in the **Characteristics** tab of the object property page.*

Canceling check-in

You may decide later on that the object is not ready for check-in.

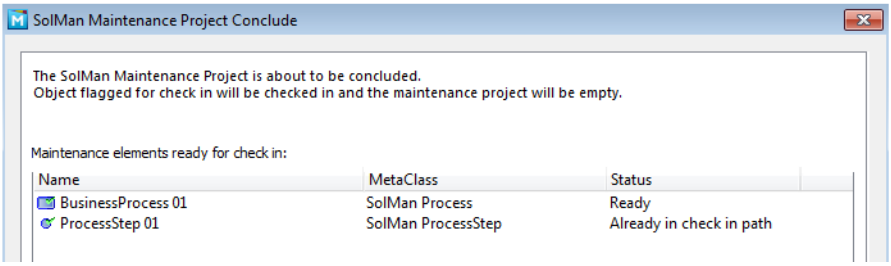
To cancel check-in:

- Right-click the object that was flagged for check-in and select **SolMan maintenance > Cancel check-in**.

Concluding a project

To conclude a maintenance project:

- Right-click a project and select **Conclude**.



The objects that have been flagged for check-in are checked to the solution.

☛ *The objects that are already in the check-in path (meaning their parent is already flagged for check-in) are not processed here.*

Impact of maintenance project conclusion on the implementation project

The implementation project is updated with the elements that were flagged for check-in during the maintenance phase.

The maintenance project in **HOPEX SAP Blueprint** is emptied.

When you update an implementation project from a maintenance project:

- varied objects are disconnected
- variants are connected

☛ *Traceability is kept in case you need to produce reports following project conclusion.*

Managing Template Projects

In complex environments with for instance several locations with country-specific differences, several implementation projects may derive from a common ***template project***.

> 🕮 *A template project is used to create and distribute a template defining the project structure.*

Deploying a template project is a way to transform a project into a solution. When a template project is deployed, the global processes defined in the templates are said to be "localized".

> ☛ *Managing SAP template projects and maintenance projects is very similar, except that the scope is larger when managing template projects.*

Importing a template project

When you need to modify a template project in SAP Solution Manager after it has been deployed (that is to say used for other projects), you have to import it into **HOPEX SAP Blueprint**.

Here is what occurs in **HOPEX SAP Blueprint** when the template project is imported.

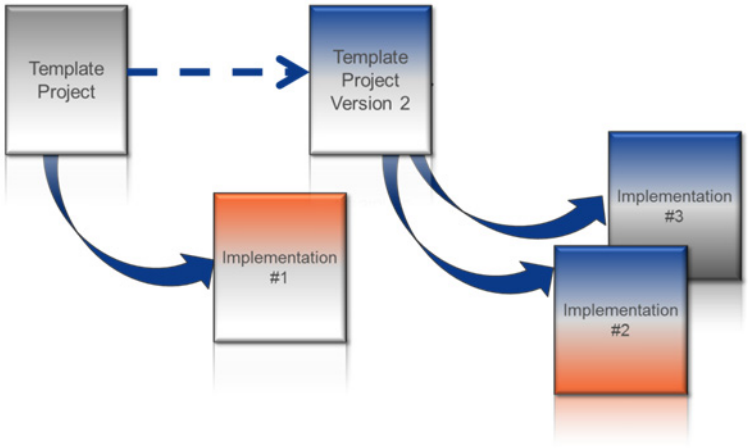
- **HOPEX SAP Blueprint** detects the template project has been used for an implementation project.
- The template project is locked against changes made in other projects.
- A new version of every object of the template is created.

Then you can make changes to the template project without impacting the original implementation project.

> ☛ *For more information about project import, see "Importing/ Exporting", page 14.*

Project template versions

In **HOPEX SAP Blueprint** you obtain multiple levels of versions, as shown in the figure hereafter.



A new version of the project template is created when:

- you import or synchronize a project template that has given birth to an implementation project
- you import an implementation project based on a template project

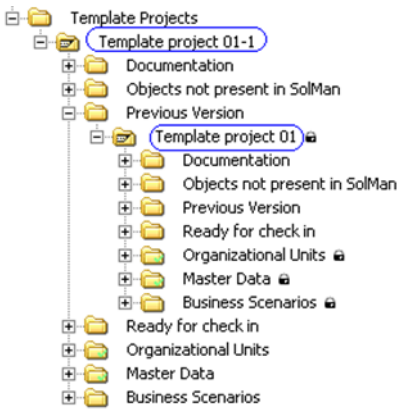
> ☛ *In the latter case, **HOPEX SAP Blueprint** connects the implementation project objects to the processes initially described in the template project. **HOPEX SAP Blueprint** creates new versions of the objects for each modification made in the new project.*

Accessing previous versions of template projects

Template contents is versioned in **HOPEX SAP Blueprint** after each new implementation, that is to say after you have re-imported the project template into **HOPEX SAP Blueprint**.

To access the initial template project :

1. see "Viewing SolMan Projects in HOPEX", page 23.
2. In the **Template project** folder, unfold the **Previous version** folder.



DOCUMENTATION IN HOPEX SAP BLUEPRINT

When company projects include a lot of information, it is important to be able to consult this information easily and if possible in different formats. **HOPEX** offers the possibility of generating different documentation for the different projects in the company. The documentation can then be managed and distributed as desired.

*For more information about documentation exchanged between **HOPEX SAP Blueprint** and SAP Solution Manager, see "Exchanging Documents Between HOPEX SAP Blueprint and SAP", page 44*

MS WORD REPORT GENERATION

In **HOPEX**, you have the possibility of generating reports (MS Word) of your SolMan Project.

To create a report (MS Word) of a SolMan project:

1. In the SAP Solution Manager navigation window, right-click the folder of the project concerned and in the pop-up menu that appears, select **New > (MS Word) Report**.
   The creation dialog box appears.
2. In the **Name** field, specify the name of the report (MS Word) to be created and select **From report template (MS Word)**.
3. Select "SolMan Project Documentation" and click **Next**.
   The created report (MS Word) is based on this template.
4. Specify the location in which the created report (MS Word) is to be stored and click **Next**.

   ☛ *If you so desire, in the dialog box that appears, you can enter the report (MS Word) distribution list. For more details on creating distribution lists, see the "HOPEX Common Features" user guide, "Generating Documentation" chapter, "Creating a Distribution List" paragraph.*
5. Click **Finish**.

The report (MS Word) is created in the **Documentation** navigation window, **Reports (MS Word)** folder.

It is automatically generated when created and opens. A specific toolbar and a **HOPEX** menu appear in the report (MS Word).

You can do several things to the generated report (MS Word):

- Update it
- Revise it
- Distribute it for Review or Validation
- Detach it from MEGA

☛ *For more details on these options, see the "**HOPEX Common Features**" user guide, "Generating Documentation" chapter.*

STATIC WEB SITES IN HOPEX SAP BLUEPRINT

HOPEX offers the possibility of generating static web sites of the SolMan project. This allows you to distribute the content of projects to enable people without access to **HOPEX** to consult the objects of a project.

The generated web site is based on a web site template.

☛ *Web sites can be generated in **HOPEX Windows Front-End** only.*

Creating a Web Site

☛ *This feature is not available in **HOPEX Web Front-End**.*

To create a web site of a SolMan project:

1. In the **HOPEX** desktop, select the **Documentation** navigation window.

   ☛ *(Windows Front-End) If the Documentation navigation window is not visible in the workspace, in the **HOPEX** menu bar select **View > Navigation Windows > Documentation**.*

2. In the tree, right-click the "Web Sites" folder and select **New > Web Site**.
   The Create Web Site dialog box appears.
3. Enter the name of the Web site to be created.
4. Select a folder for generation by clicking the ... button.
   By default, the Web site is generated in the "Intranet" folder. You are advised to create a sub-folder for each generated Web site, for example by creating folders with the same name as your Web site in the "Intranet" folder.

   ☛ *The content of the "Intranet" folder is deleted at each generation so when you have obtained a site with which you are satisfied and want to keep, copy it to another folder.*

5. In the **From Web site template** list box, click the button.
6. Select the "Enterprise Portal" Web site template and click **Finish**.

The new web site appears in the **Documentation** navigation window in the **Web Sites** folder.

The new Web site has been created but not generated.

Before generating the Web site, you have the option of restricting the type of objects to be included in the Web site. For example, you can decide to only generate a project. If not, the Web site generation will include the entire repository and the generation time will be lengthy.

Generating a Static Web Site

To generate the static Web site:

1. In the **Documentation** navigation window, right-click the new web site.
2. In the pop-up menu that appears, click **Generate**.

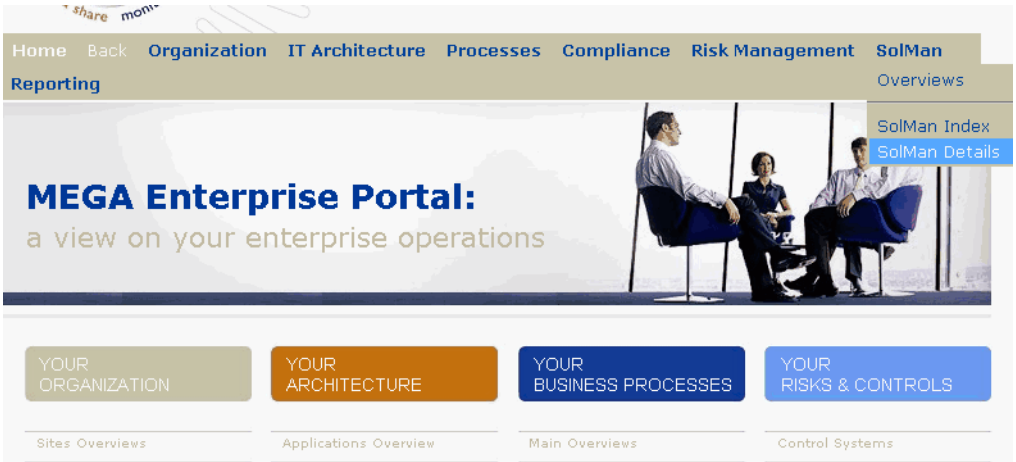
A dialog box indicates the progress of the generation. When the web site has been generated, a dialog box proposes opening the web site.

> ☛ *You can open the generated Web site at any time from the **Documentation** navigation window. In the **Web Sites** folder, right-click the Web site and in its pop-up menu select **Open**.*

Accessing the Web Site

To access SolMan project information:

- From the generated Web site click the SolMan tab.



The generated Web Site presents a view of the objects in the repository at the time of the generation. Objects cannot be modified in the Web site. You can however regenerate the Web Site at any time to include modifications made to objects in MEGA repository.

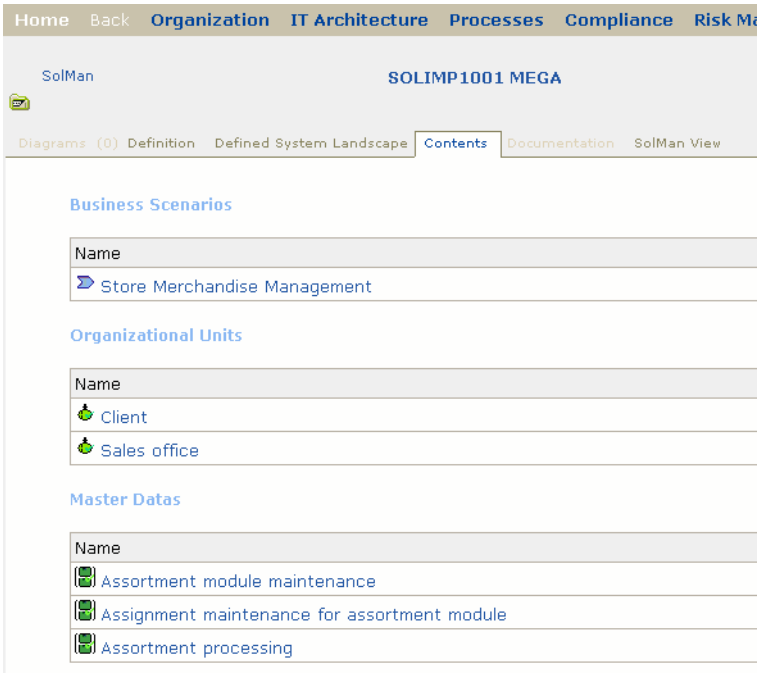
To navigate the Web site:

- Click on the links of each object which gives access to the corresponding pages.

To return to the page previously consulted:

- Use the **Back** button in the main menu.

Example of a static web site with a SolMan project



REPORT GENERATION

In **HOPEX**, you can group sets of repository objects and study the interactions of these objects to produce different reports. Reports are created from predefined report templates.

Several report templates are provided with **HOPEX SAP Blueprint**.

> ☛ *You can also create your own reports using the templates provided by **HOPEX**. The templates are available in **HOPEX Windows Front-End** in the **Utilities** navigation window of the **HOPEX** workspace.*
>
> ☛ *For more information on creating reports, see :*
>
> - *"Managing reports (Windows Front-End)", page 314*
> - *"Managing reports (Web Front-End)", page 325*

To access a SolMan report from an object:

1. In the **Solution Manager** navigation window, right-click the object on which you want to base the report (SolMan Project or mapped Organizational Process for example) and select **Report Discovery**.
   A page appears with the list of all the reports available for the object.
2. Select the **SolMan Analysis** folder.
3. Click the **Launch** button next to the name of the report.

The report is launched.

☛ *You can also modify the report by clicking the **Customize and Launch a new report** button.*

The report appears in the central window of the **HOPEX** workspace.

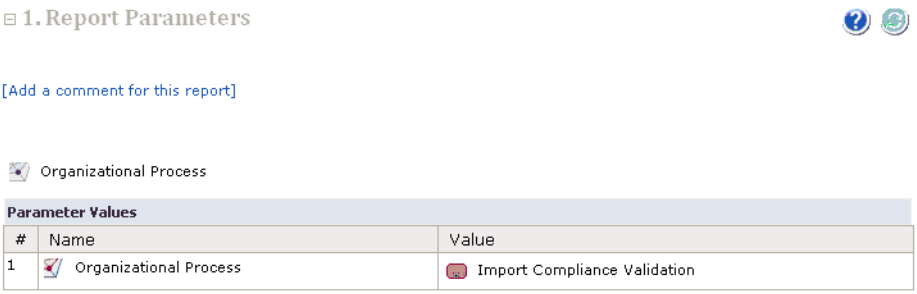
Reports for Organizational Processes

There are four reports available:

- Report Parameters
- SAP coverage rate
- Services of the organizational process
- SAP coverage

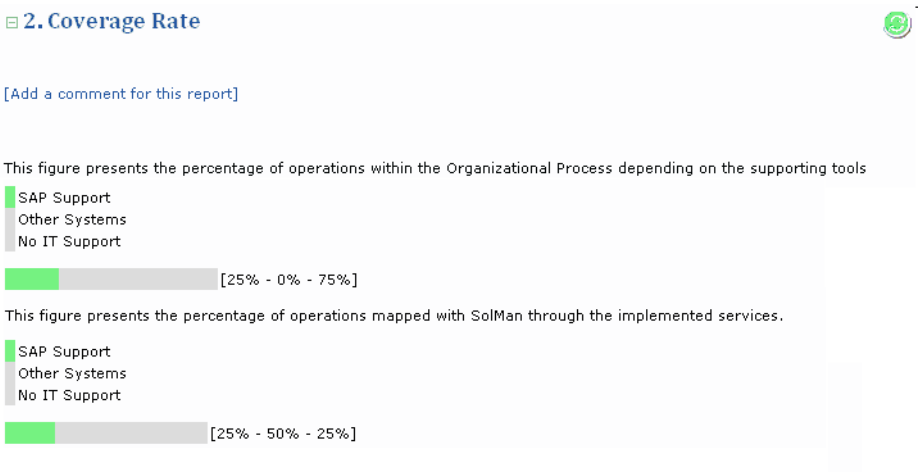
You can open a report by clicking on its name.

Report parameters



This report indicates the input data used for the report. In this example, this data comes from the Import Compliance Validation organizational process.

SAP coverage rate



This report indicates the percentage of operations mapped to the SolMan project through implemented services.

There are two parts to this report. In the first part, the legend is interpreted as follows:

- SAP Support: percentage of operations that implement a service and are mapped with a transaction
- Other Systems: percentage of operations that implement a service but which are not attached to a transaction
- No IT Support: percentage of operations that do not implement a service

In the example above, there are four operations. One operation implements a service (SAP Support = 25%) while three operations do not (No IT Support = 75%). There is no operation that implements a service and is not attached to a transaction (Other Systems = 0%).

The second part of the report has a different interpretation:

- SAP Support: represents the operations that are mapped with a SolMan object and implements a service which is mapped with a transaction
- Other Systems: represents all the operations that are mapped with at least one SolMan object
- No IT Support: represents all the operations of the organizational process that are not mapped with a SolMan object (process, process step, etc.)

Services of the organizational process


3. Services of an Organizational Process

[Add a comment for this report]

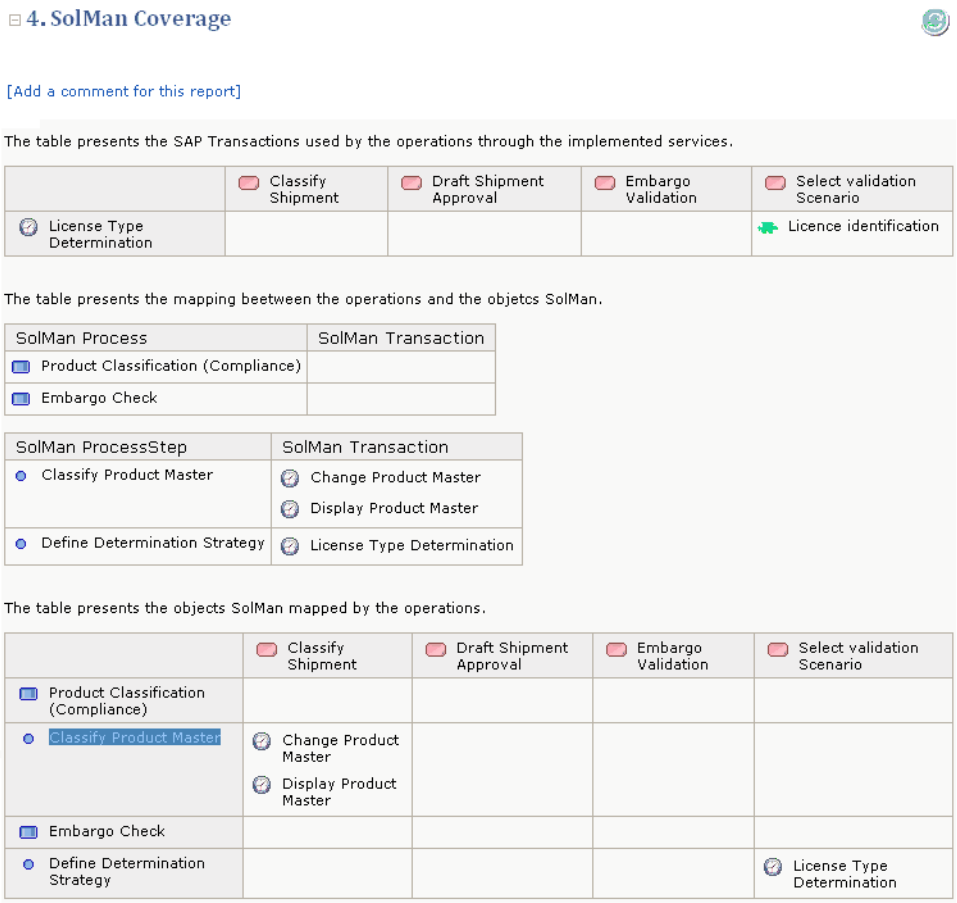
Issue Purchase Order

Operation	IT Service
Embargo Validation	
Select validation Scenario	Licence identification
Classify Shipment	
Draft Shipment Approval	

This report lists all the operations of the organizational process and indicates the services implemented by each of these operations.

SAP coverage

The information of this report is arranged in tables.



4. SolMan Coverage

[Add a comment for this report]

The table presents the SAP Transactions used by the operations through the implemented services.

	Classify Shipment	Draft Shipment Approval	Embargo Validation	Select validation Scenario
License Type Determination				Licence identification

The table presents the mapping beetween the operations and the objetcs SolMan.

SolMan Process	SolMan Transaction
Product Classification (Compliance)	
Embargo Check	

SolMan ProcessStep	SolMan Transaction
Classify Product Master	Change Product Master Display Product Master
Define Determination Strategy	License Type Determination

The table presents the objects SolMan mapped by the operations.

	Classify Shipment	Draft Shipment Approval	Embargo Validation	Select validation Scenario
Product Classification (Compliance)				
Classify Product Master	Change Product Master Display Product Master			
Embargo Check				
Define Determination Strategy				License Type Determination

This report is divided into three parts:

- a table that indicates the services implemented by operations and the SAP transaction to which the services are mapped.
- a list of the SolMan processes that are mapped with an operation. It also lists the processes mapped with an operation the transactions of these processes.
- a table that recapitulates the first two parts of the report by displaying mappings between the SolMan objects and the operations.

SolMan Updating Report

The SolMan Updating Report displays the changes made to SolMan projects from a particular point in time in the current **HOPEX** transaction.

Two parameters are considered for the report:

- A particular SolMan project
- A schedule (optional). If the schedule parameter is not defined, the report will show all modifications of the current transaction. All modifications will be displayed as "New" objects if the SolMan project was created in the current transaction.

The updates presented in the updating report therefore relate to:

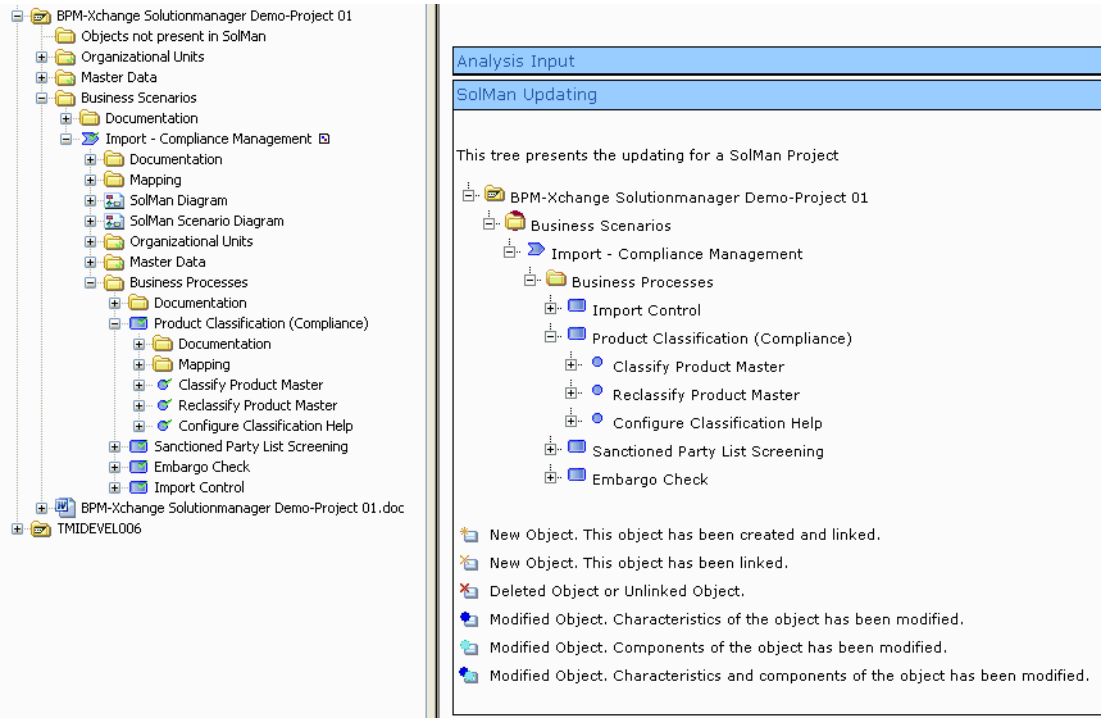
- A MEGA object, in this case the SolMan project
- A dispatch: in this case only the updates relating to the dispatch are presented
- A schedule: this is used to define a period for the data extraction. If no end date is specified, the extraction concerns all updates from the start date. If a dispatch takes place the period defined by the schedule is not taken into account.

The SolMan Updating Report is generated on SolMan projects. You must launch the generation from the SolMan project folder in the SolMan navigation window.

There are two reports available:

- Report Parameters
- SolMan Updating

The SolMan Updating Report displays the project information in a tree.



The updates carried out on the SolMan project are indicated by specific icons. The icons displayed depend on the type of changes made. The changes can include:

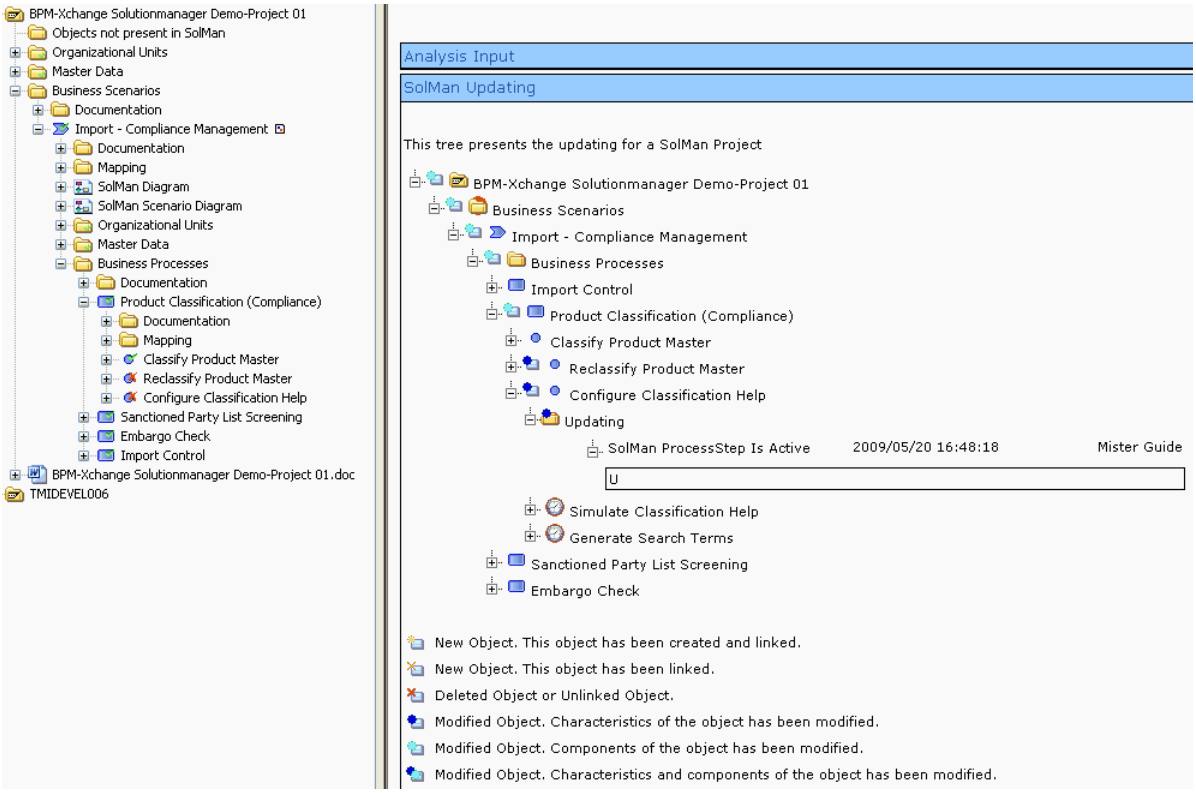
- Component and/or characteristic modifications to objects
- Creation or linking of objects
- Deletion or unlinking of objects

The icons are displayed in front of the object that has been modified.

If an object in a project has been modified, an icon indicating that a change has occurred appears in front of the project folder. Expand the project until you reach the object that has been modified/created/deleted.

When an object has been modified, an "Updating" folder is displayed under the name of this object. This folder contains specific details relating to the modification:

- The attribute that was modified
- The date of the change
- The user who made the change



Example of SolMan Updating Report with Updates

In the above example, the "Reclassify Product Master" and "Configure Classification Help" transactions were altered in the project. They were made inactive.

This is indicated in the "Updating" folder. The value for the "SolMan ProcessStep Is Active" attribute is set at "U" for inactive. When the attribute is set to "Active" the value is "A".

Using the schedule

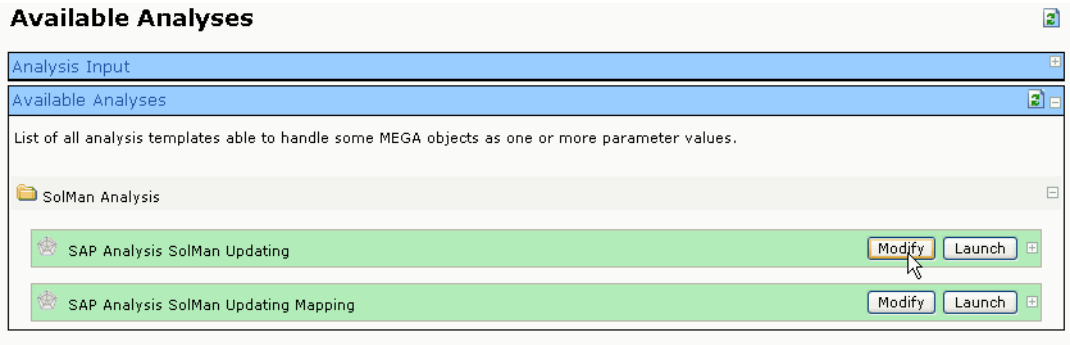
Using the schedule in the SolMan Updating report allows you to:

- Attach a dispatch to your report. This shows everything that was done in the current transaction.
- Base the report generation on a specific time period. This allows you to see what was done during the specified time period.

> ☛ *By default the report is based on what happened during the current transaction.*

To set the schedule parameter for the updating reports:

1. From the SolMan project pop-up menu, select **Report Discovery**.
2. In the **Available reports** section, select **SolMan Analysis**.
3. Next to the report for which you want to set the calendar parameter select **Customize and Launch a new report**.



4. In the **Properties** dialog box of the report and in the **Parameters** tab, select the **Schedule** sub-tab.
5. In the Schedule section, click **Connect** and in the query dialog box that appears select the schedule desires and click **OK**.
6. In the list of results, select the desired schedule and click **OK**.

> ☛ *You can also create your own calendar. See "Creating a schedule", page 69.*

The Schedule appears in the **Properties** dialog box of the report.

Creating a schedule

> ☛ *To create a schedule, you must first ensure that you at least have "Advanced" Metamodel Access rights to the repository you are using (**Tools > Options**).*

> ☛ *You can create schedules in **HOPEX Windows Front-End** only.*

To create a schedule:

1. In the **Utilities** navigation window, right-click the **Schedule** folder and select **New > Schedule**.
2. Name your Schedule and click **OK**.
   The new Schedule appears in the **Utilities** navigation window in the **Schedule** folder.

3. Open the **Properties** dialog box of the schedule and in the **Characteristics** tab indicate the Start date and if required, the End date of the schedule.
4. Click **OK** when finished.
   Your schedule (calendar) is ready for use.

SolMan Updating Mapping Report

When you launch the SolMan Updating Mapping Report, two reports are available:

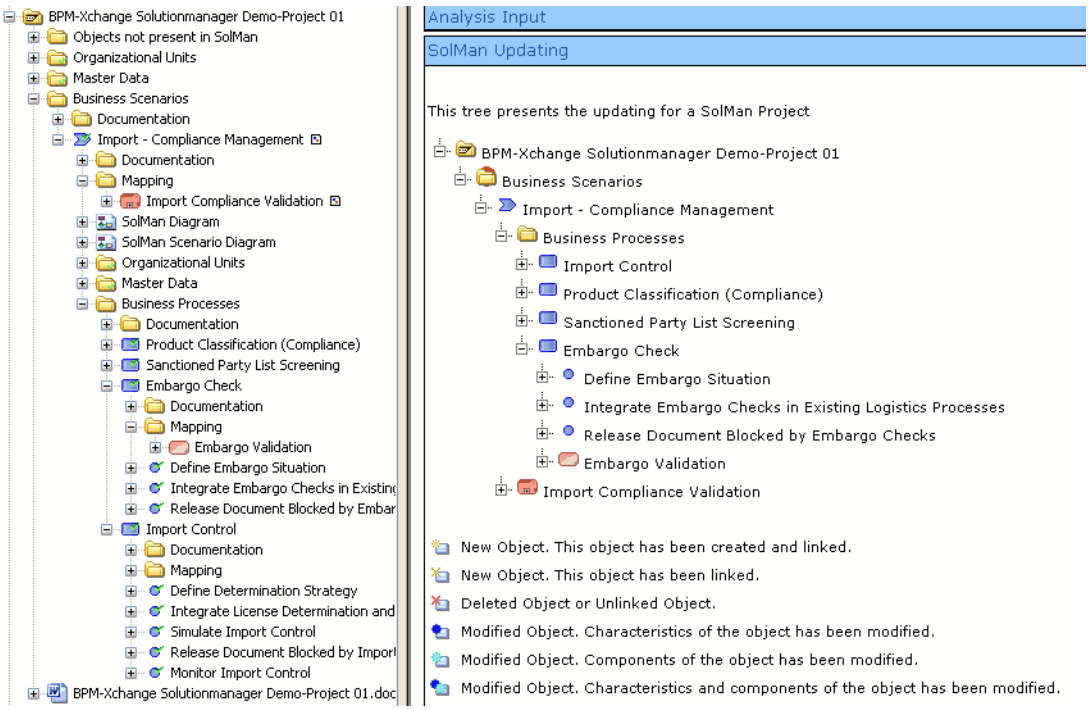
- Report Parameters
- SolMan Updating

Similarly to the SolMan Updating Report, the SolMan Updating Mapping report presents the updates made to SolMan projects from a particular point in time in the current **HOPEX** transaction.

This report also displays the mapping relations in the SolMan project and the impact of the different updates on the mappings between:

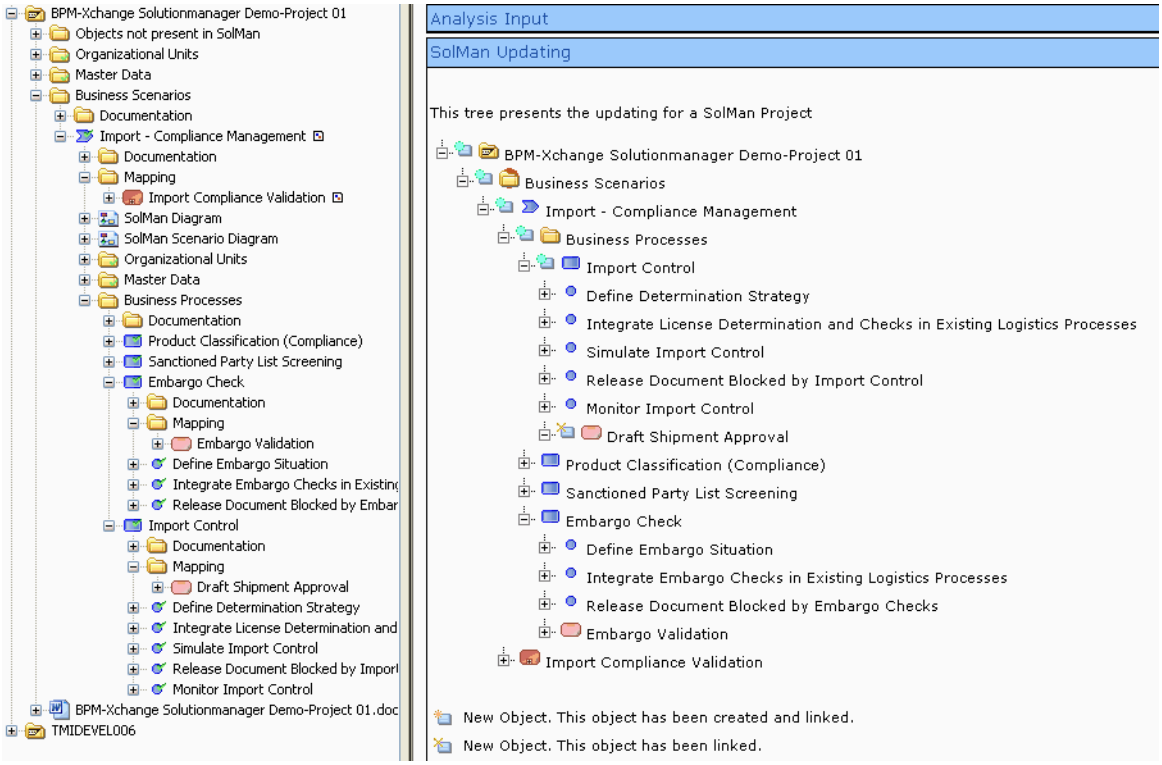
- **HOPEX** objects
- SolMan objects.

The mapped **HOPEX** objects appear in the tree in the list under the SolMan object with which it is mapped.



Example of a SolMan Update Mapping Report without updates

The SolMan project information is displayed in a tree.



Example of a SolMan Update Mapping Report with updates

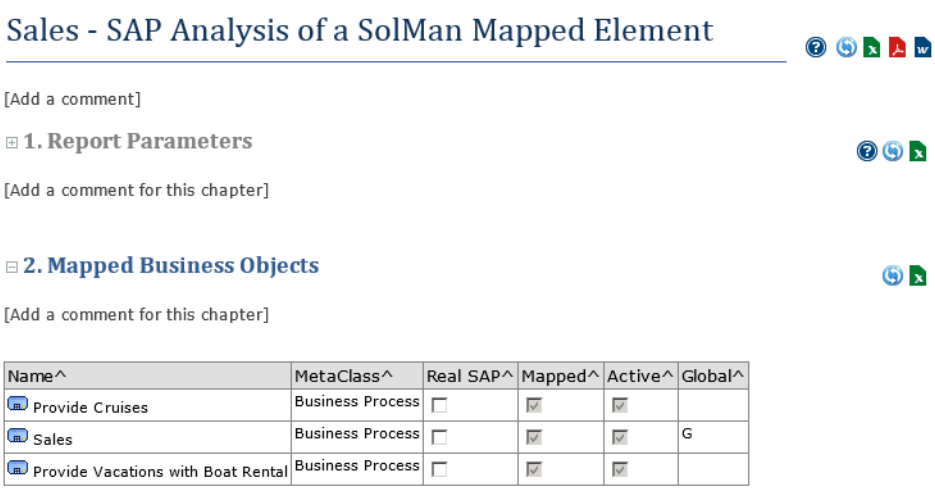
As can be seen in the SolMan Updating Mapping report example above, changes and updates are not displayed in an "Updating" folder. They are simply added to the tree.

This report simply indicates the mapping updates/changes that have been made but offers no details.

Solman Project Mapped Element Report

This report displays a list of business objects mapped totally or partially with a set of objects originating from a SolMan project.

☛ *You can use this report when intializing a SolMan structure from a BPMN diagram. For more information, see "Initializing a SolMan Project from Business Objects", page 39.*


Sales - SAP Analysis of a SolMan Mapped Element

[Add a comment]

1. Report Parameters

[Add a comment for this chapter]

2. Mapped Business Objects

[Add a comment for this chapter]

Name^	MetaClass^	Real SAP^	Mapped^	Active^	Global^
Provide Cruises	Business Process	☐	☑	☑	
Sales	Business Process	☐	☑	☑	G
Provide Vacations with Boat Rental	Business Process	☐	☑	☑	

Accessing the report

You can launch this report from a SolMan mapped element.

☛ *For more information about how to generate the report, see "Report Generation", page 62.*

Displayed attributes

For each object, the following properties are displayed:

- Object **Name**
- **MetaClass**
- **REAL SAP**: specifies whether the mapped SolMan element is a real SAP object.

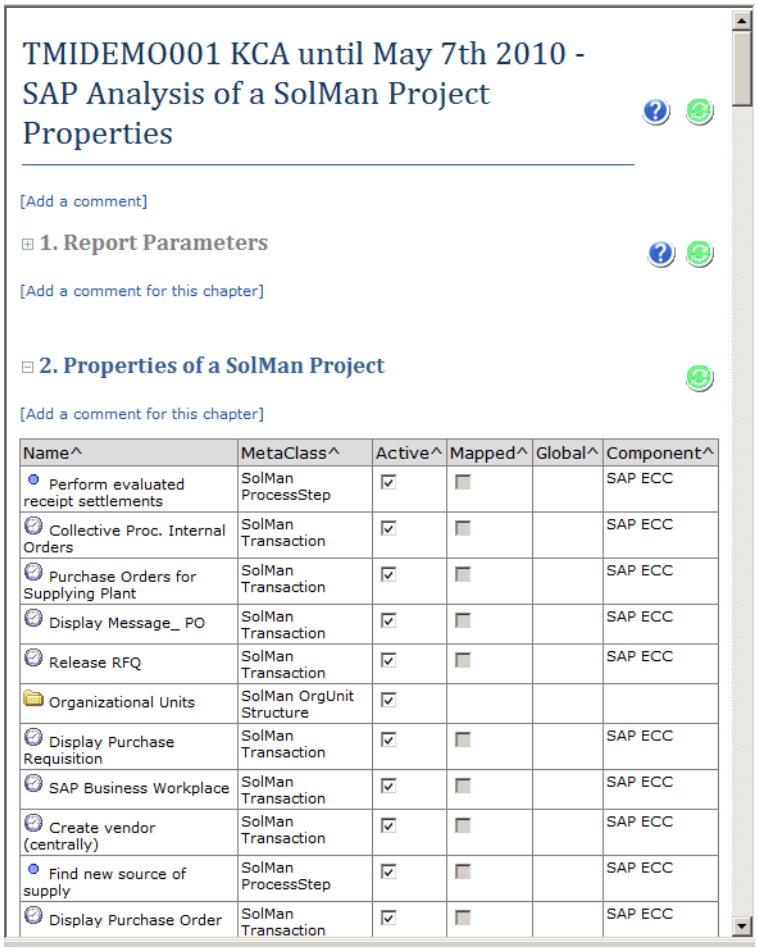
  ☛ *This attribute can be edited.*
- **Mapped**: indicates whether a SolMan element is mapped to this object. The cell can be entered with:
  - a check mark: the object is mapped with one SolMan element
  - no check mark: the object is NOT mapped with a SolMan element.
  - "X": the object is mapped with several SolMan elements.
- **Active**: indicates if the mapped SolMan element is active in SAP Solution Manager. It refers to the "In scope" concept.

  ☛ *This column is relevant only when the object is mapped with one SolMan element only.*
- **Global**: corresponds to the Global attribute which indicates if in SAP Solution Manager this attribute is:
  - local to the project
  - global (defined and inherited from a more general project such as a template project).

  ☛ *This attribute is read-only.*

Solman Project Properties Report

This report displays the list of objects of a Solman project or part of a project.



TMIDEMO001 KCA until May 7th 2010 - SAP Analysis of a SolMan Project Properties

[Add a comment]

1. Report Parameters

[Add a comment for this chapter]

2. Properties of a SolMan Project

[Add a comment for this chapter]

Name^	MetaClass^	Active^	Mapped^	Global^	Component^
Perform evaluated receipt settlements	SolMan ProcessStep	☑	☐		SAP ECC
Collective Proc. Internal Orders	SolMan Transaction	☑	☐		SAP ECC
Purchase Orders for Supplying Plant	SolMan Transaction	☑	☐		SAP ECC
Display Message_ PO	SolMan Transaction	☑	☐		SAP ECC
Release RFQ	SolMan Transaction	☑	☐		SAP ECC
Organizational Units	SolMan OrgUnit Structure	☑			
Display Purchase Requisition	SolMan Transaction	☑	☐		SAP ECC
SAP Business Workplace	SolMan Transaction	☑	☐		SAP ECC
Create vendor (centrally)	SolMan Transaction	☑	☐		SAP ECC
Find new source of supply	SolMan ProcessStep	☑	☐		SAP ECC
Display Purchase Order	SolMan Transaction	☑	☐		SAP ECC

Accessing the report

You can launch it from a:

- SolMan Project
- SolMan Solution
- SolMan Scenario
- SolMan Process

☛ *For more information on how to generate the report, see "Report Generation", page 62.*

Result

For each object, the following properties are displayed:

- the **Name** of the object with the corresponding icon
- the name of the **MetaClass**
- **Active**: indicates if the object is active or not in **SAP Solution Manager**. It refers to the "In scope" concept in SAP.

  ☛ *This attribute can be edited.*
- **Mapped**: indicates if a mapping exists for this object of the Solman project hierarchy.

  ☛ *This attribute is read-only.*

  ☛ *For more information about mapping, see "Mapping SolMan Objects with Business Objects", page 35.*
- **Global**: corresponds to the Global attribute which indicates if in **SAP Solution Manager** this attribute is:
  - local to the project
  - global (defined and inherited from a more general project such as a template project).

  ☛ *This attribute is read-only.*
- **Component**: displays the name of a Solman component linked to:
  - a Solman Transaction
  - a Solman Process Step
  - a Solman Master Data
  - a Solman OrgUnit

Object Differences Report

This report gives a detailed view of the differences that exist between:

- the current object (the current object from which the report is displayed)
- its originating object (the varied object).

It allows you to determine which elements have been added and/or deleted.

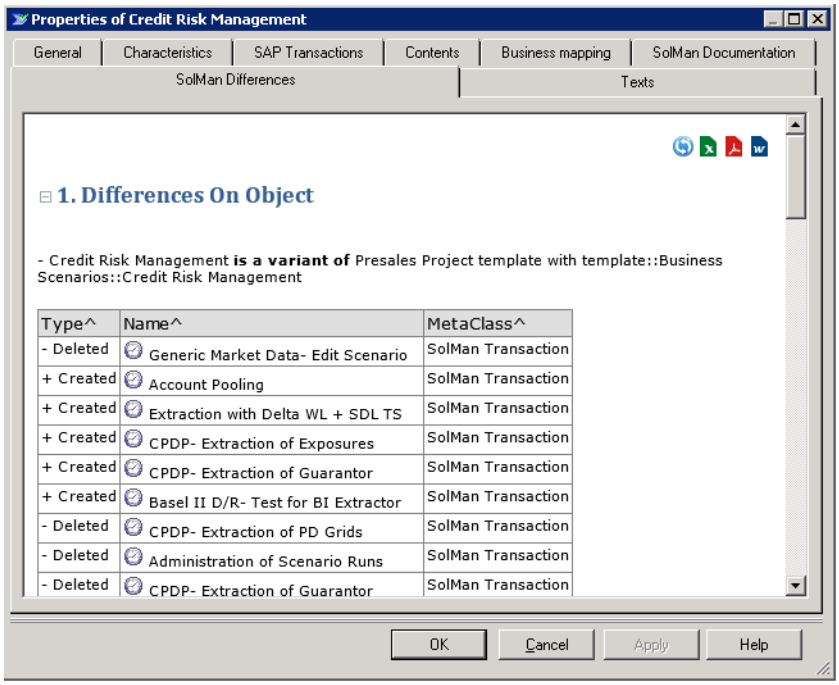
```
The report can indicate the differences between a
ProcessStep (the current object) in an implementation
project and its equivalent (the varied object) in a template
project.
```

☛ *This report serves as a basis for generation of the following global report: "Hierarchy Differences Report", page 75.*

Accessing the report

To access this report on object differences:

❱ In an object properties dialog box, click the **SolMan Differences** tab.



Result

The report comprises two parts:

- the varied object in relation to the current object.

  ☛ *The current object is the one from which the report is displayed.*

- a table recapitulating the objects which have been:
  - added

    ☛ *The added objects are the objects owned by the current object and which do not exist in the varied object.*

  - deleted

    ☛ *The deleted objects are the objects owned by the varied object and which do not exist in the current object.*

Hierarchy Differences Report

This report lists all the differences existing within a project or hierarchy. The differences are listed object by object.

☛ *It aggregates the results of the following report: "Object Differences Report", page 74.*

Accessing the report

you can launch this report from a:

- SolMan project
- SolMan scenario
- SolMan process

☛ *For more information on how to generate reports, see "Report Generation", page 62.*

Result

If you launch the report from a SolMan scenario, the following data is collected:

- First, data concerning this scenario.
- Second, data concerning all Solman processes, SolMan process steps and SolMan transactions.

The report is divided into several chapters:

- SolMan Project differences
- SolMan Solution differences
- SolMan Scenario differences
- SolMan MasterData differences
- Solman OrgUnit differences
- SolMan Process differences
- SolMan ProcessStep differences
- SolMan Transaction differences

HOPEX SAP BLUEPRINT GLOSSARY

The glossary presents the main concepts used in **HOPEX SAP Blueprint**.

business process	More often referred to as Processes in SAP Solution manager, these objects are used to group Business steps.
business process step	More often referred to as Process Step. In SAP Solution Manager, this object is used to represent business activities.
business scenario	More often referred to as Scenarios in SAP Solution Manager, scenarios are used to group sets of business processes. They may be used to represent types of models such as value chains, functions and business domain object types.
implementation project	An implementation project is used to implement business processes in an SAP landscape.
maintenance project	A maintenance project is used to maintain changes in the productive environment (solution).
master data	Master data refers to data objects which contain control data that are relatively constant over time. This data does not change very often. Master Data may be assigned at the project-level as well as at the scenario level. At the project level, they are used within the scope of the entire project. At the scenario level, they are responsible for the corresponding business scenario and all its related business processes.
organizational unit	In SAP Solution Manager, an Organizational Unit can refer to a business object used to define the financial and logistic structures within a specific SAP component.
process step	A process step is an elementary activity performed to accomplish a process.

system landscape	A system landscape is composed of an arbitrary number of components which are referenced by process steps and transactions.
template project	A template project is used to create and distribute a template defining the project structure.
transaction	In SAP Solution Manger, a transaction is actually a dialog or a form and can therefore be compared to a business transaction. For Master Data and Organizational Units, transactions are used to maintain the corresponding master data or organizational unit.

MEGA SolMan Interface Installation Guide HOPEX VIR2-V1R3 – Installation

INSTALLING THE MEGA / SOLMAN INTERFACE

Although the MEGA / SolMan interface is installed with HOPEX SAP Blueprint it requires installing additional components.

Making MEGA/Solution Manager interface fully operational requires:

- Unzipping installation files
- Installing the transport order
- Installing the SAP Java Connector
- Installing additional shapes
- Copying the HOPEX SAP Blueprint generation parameter file (if you need to generate SolMan objects from business objects as well as the associated report).

Unzipping installation files

The MEGA / SolMan CD contains the following files:

- **mega_solman interface installation.doc**: This document.
- **transport_order_xxx.zip**: Transport Order files to import to the SAP System.
- **patch_xxx.zip**: An update to the Transport Order if necessary.
- **solman-shape.zip**: Contains additional shapes for BPMN elements mapped to HOPEX SAP Blueprint objects.

Installing the transport order

The transport order (and its update if necessary) must be installed on the SAP server.

Installing the SAP Java Connector

To install the SAP Java connector component (SAP JCo):

1. Download it from SAP web site with your SAP customer identifier.

2. Copy sapjco3.dll and sapjco3.jar files to the “java/lib directory” of MEGA installation path.

Installing additional shapes

Additional shapes are available for BPMN diagrams to identify objects mapped to a MEGA SolMan element.

To install these shapes:

1. Copy all .mgs files from “solman-shape.zip” to the “Mega_Usr” folder.
2. Import the .mgl file to the system database of your environment.

Copying the generation parameter file

The wizard for generating SolMan objects from business objects and the associated report “SolMan Project Mapped Element report” require creation of a parameter file.

> For more information on the contents of the parameter file, see the HOPEX SAP Blueprint user guide, chapter “Designing for SAP Projects”, paragraph “Initializing a SolMan project from business objects”.

This mapping file must be copied to the following folder:

<Environment folder>\Db\<Repository Name>\USER\<User Name>\megasolmanbusinessimport.ini

HOPEX SAP Blueprint Architecture Overview HOPEX V1R2-V1R3 EN

Summary

This document describes the system requirements and deployment types for MEGA Solman. HOPEX SAP Blueprint has an interface with SAP Solution Manager.

This document applies to
- HOPEX V1R2 CP8.0 and higher CPs.
- HOPEX V1R3 CP8.0 and higher CPs.

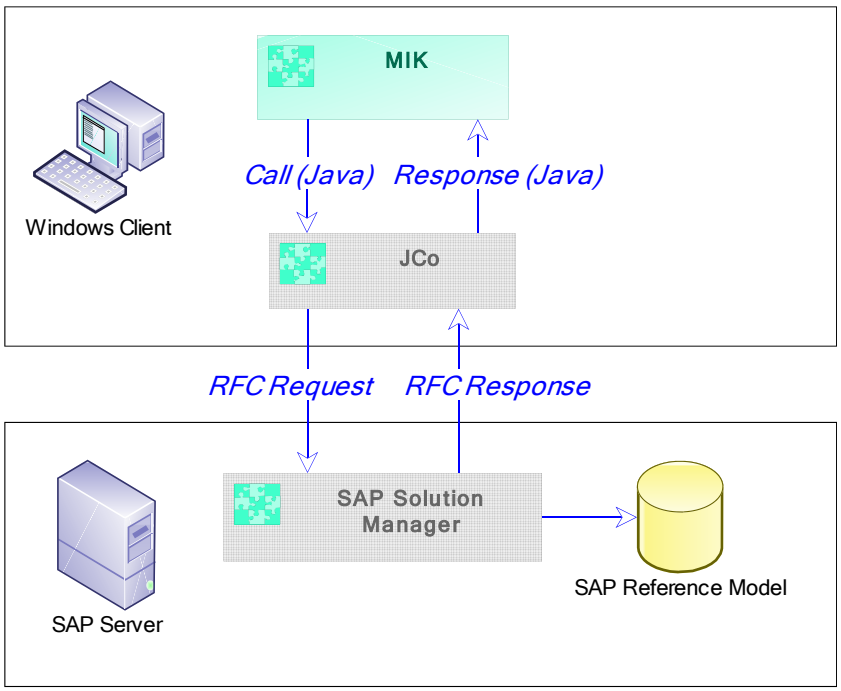
It does not describe:
- How to perform installations (see installation documentation).
- How to upgrade installations (see CP/SP upgrade documentation).
- How to manage installations (see administrator manuals).
- How products are licensed (see licensing documentation).
- How to use features (see user manuals).

DEPLOYMENT

Here is a short description of the most common deployment model, recommended for standard requirements.

2 main nodes are involved:

- Windows Client (HOPEX Windows Front-End).
- SAP Server (SAP Solution Manager Server).



Note that other components (SQL Server Native client, Flash player) can be required on the Windows client depending on the situation. See the article 'Windows Front-end Architecture Overview HOPEX V1R2-V1R3 EN'.

DEPLOYMENT REQUIREMENTS

Windows client

Client System (1)	Windows 7.0 SP1 (32-bit or 64-bit) Windows 8 (32-bit or 64-bit) Windows 8.1 (32-bit or 64-bit) Windows Server 2008 R2 SP1 Windows Server 2012 SP2 Windows Server 2012 R2
MEGA Version	HOPEX V1R2-V1R3 (2)
Hardware	**Processor** multi-core **RAM** 2 GB minimum 4.0 GB or higher recommended **Resolution and colours** 16 M colors Screen resolution 800 x 600 minimum 1024 x 768 or better recommended **Disk space** 4 GB for MEGA Kernel
JCo	3.x (version 3.0.9 and higher)

(1) System supported by HOPEX V1R2-V1R3 Windows Front-End.
(2) HOPEX V1R2-V1R3 installs and runs a private JRE version 7 (32-bit).

Verify that the version of JCo is compatible with:

- **The client system used.**
- **The JRE used.**

SAP Server

SAP Version	SAP Solution Manager version 7.1 Transport order build 900879 and higher (3)

(3) The version of transport order may vary with the CP number. The appropriate version of transport order is installed in the subfolder '\Utilities\Solman' of the HOPEX installation. See also compatibility table later in this document.

COMMUNICATION

Between Windows Client and SAP Server

Protocol	RFC protocol
Port	Refer to you SAP Administrator (*)

(*) See also this web page
http://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/4e515a43-0e01-0010-2da1-9bcc452c280b?QuickLink=index&overridelayout=true

GLOSSARY

Term	Definition
Environment, MEGA environment	A MEGA Environment is a working area, storing data of a user group. Within a MEGA environment, a set of data repositories share within a system database a metamodel definition, users and profiles. An environment is thus made of a single system database and of one or multiple data repositories.
HOPEX SAP Blueprint	HOPEX SAP Blueprint is a specific product supported by MEGA and is sold separately from SAP Solution Manager. It enables the import/export of data into/from SAP Solution Manager and the mapping of imported data with MEGA Process BPMN data.
JCo	SAP JCo (Java Connector) is a SAP component that enables to build interfaces between SAP software and other tools The product HOPEX SAP Blueprint uses an interface with SAP Solution Manager. The technology of the interface varies with the version of MEGA: • MEGA 2009 SP5 CP9.0 and lower: BPM-X technology is used • HOPEX: JCo technology is used
MEGA License, license	Licence used to run MEGA Software (Product, Module or Bundle). There are different technologies available. The most common one is the MEGA Must licence.
SAP Solution Manager	Solution Manager is a SAP tool provided with the Netweaver platform to design, implement, manage and monitor SAP system implementation.
SAP User Account for HOPEX SAP Blueprint	SAP User account used to exchange data between HOPEX SAP Blueprint and SAP Solution Manager.
Transport Order Package	Installation package provided by MEGA. It uses the Transport Program of the SAP system.

FAQs

Can HOPEX SAP Blueprint run with Citrix?

Yes. The Windows client can be a Citrix Server.

Do I need to install C++ runtimes to run on Windows for JCo?

No. These runtime components are already installed with MEGA Windows Front-end.

How can I get JCo?

MEGA does not distribute this component. Use a valid account on SAP Service Market Place to download it. See your SAP administrator.

What are the system requirements for SAP JCo?

MEGA does not distribute this component. Use a valid account on SAP Service Market Place to download it. See your SAP administrator

How can I install JCo?

Refer to 'MEGA SolMan Interface Installation Guide HOPEX V1R2-V1R3' in HOPEX SAP Blueprint user guide.

How can I get the Transport order?

The appropriate transport order is installed in the subfolder '\Utilities\Solman' of the installation.
Ex: C:\Program Files (x86)\MEGA\MEGA HOPEX V1R2\Utilities\Solman

Compatibility table

Depending on the version of MEGA, certain versions of the client and server layers are required. It may not be possible to use different versions of MEGA with the same SAP Server.

The appropriate transport order is installed in the subfolder '\Utilities\Solman' of the installation.

Version of MEGA	Interface client layer	Interface server layer	SAP Compatibility
HOPEX V1R2 HOPEX V1R2 CP1.0	3.x (version 3.0.9 and higher)	Transport order build 900478	Compatible with SAP Solution Manager 7.1
HOPEX V1R2 CP2.0	3.x (version 3.0.9 and higher)	Transport order build 900605	Compatible with SAP Solution Manager 7.1
HOPEX V1R2 CP4.0	3.x (version 3.0.9 and higher)	Transport order build 900879	Compatible with SAP Solution Manager 7.1
HOPEX V1R2 CP8.0 HOPEX V1R3 CP8.0	3.x (version 3.0.9 and higher)	Transport order build 900879	Compatible with SAP Solution Manager 7.1