

HOPEX COMMON FEATURES

User Guide



HOPEX V2

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A stylized, light blue globe with a yellow outline, centered on the Atlantic Ocean. The continents are represented by white shapes. The text "Using HOPEX" is overlaid on the globe.

Using HOPEX

THE HOPEX WEB FRONT-END DESKTOP



This section presents the **HOPEX Web Front-End** interface and explains how to navigate in desktops.

The points covered are:

- ✓ "Accessing HOPEX Web Front-End", page 22
- ✓ "Interface Presentation", page 25
- ✓ "Navigating in Web Front-End desktops", page 33
- ✓ "Customizing your desktop Web Front-End", page 40

ACCESSING HOPEX WEB FRONT-END

Starting HOPEX (Web Front-End)

To connect to **HOPEX** (Web Front-End):

1. Start the **HOPEX** application using its HTTP address.

☛ If you do not know this address, contact your administrator.

The connection page appears.

2. In the **Login** field, enter your identifier.
3. (If you have a password) In the **Password** field, enter your password.

☛ If you have lost your password, click **FORGOT PASSWORD**, see ["Reinitializing Your Password"](#), page 23.
4. In the drop-down menu for environments, select your work environment.

☛ If you can access one environment only, this is automatically taken into account and the environment selection field does not appear.
5. Click **SIGN IN**.
When you have been authenticated, a new dialog box appears.
6. (If you belong to a person group) In the group drop-down menu, select the group with which you want to connect or "My assignments" to connect with one of your own assignments.

7. In the repository drop-down menu, select your work repository.
 ☛ If you can access only one repository, this is automatically taken into account.
8. In the profile drop-down menu, select the profile with which you want to work.
 ☛ If you have only one profile assigned, this is automatically taken into account.
 ☛ The profile you select defines the applications you can access.
9. In the application drop-down menu, select the application to which you want to connect.
 ☛ If you can access only one application with the selected profile, this is automatically taken into account and the application selection field does not appear.
10. Click **Privacy Policy**, read the confidentiality policy, then select **I have read and accept the privacy policy**.
 The **LOGIN** button is active.
 ☛ When you have read and accepted the confidentiality policy, a certificate is automatically linked to your person and this step is not required again.

11. Click **LOGIN**.
 ☛ Click **BACK** if you want to return to the authentication dialog box.
 Your desktop home page appears and a session is opened.
 ☛ After a certain period of inactivity, you are disconnected from your desktop. To reconnect, repeat the steps of the above procedure. This inactivity period is configured by the portal administrator.

Reinitializing Your Password

If you have lost your password to access HOPEX on the Web, you can reinitialize it.

To reinitialize your password:

1. Open the connection page.
 ➤ See *"Starting HOPEX (Web Front-End)", page 22.*
2. Click **Forgot Password**.
 The **Lost password** page appears.
3. In the **Environment** field, select your work environment.
 ➤ *If you have access to only one environment, this is automatically selected and this field does not appear.*
4. In the **Login** field, enter your login.

Lost password

Environment	Demonstration
Login	wws

Continue

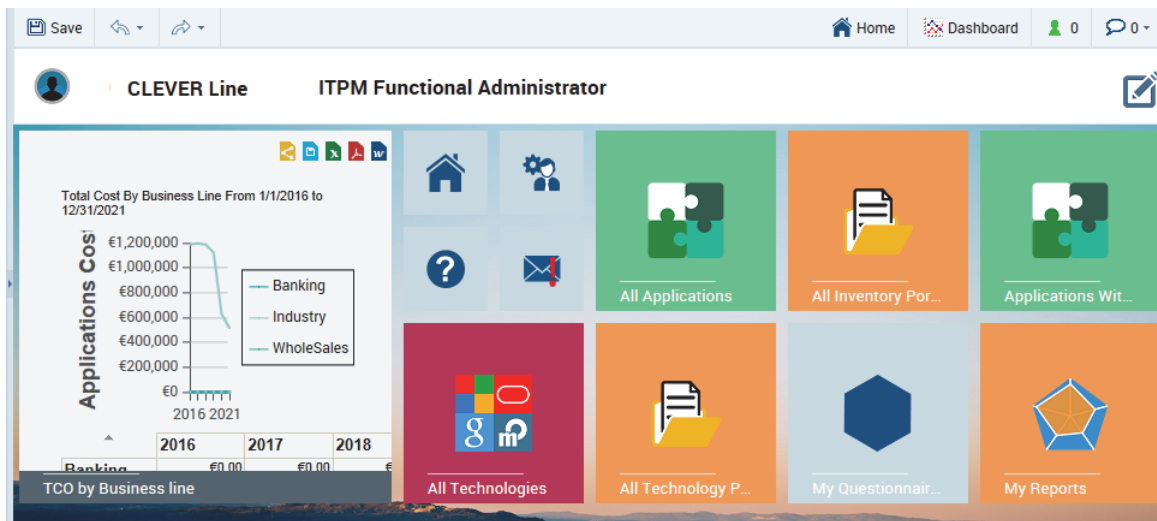
5. Click **Continue**.
6. Answer the security question.
7. Click **Reinitialize**.
 An e-mail containing a link with limited validity period is sent to you.
8. Click this link.
 The **Change password** page appears.
9. Enter your password and answer the security question.
 ➤ *Your password must contain between 8 and 16 characters, with at least one letter, at least one figure and at least one special character.*
10. Click **Apply**.

INTERFACE PRESENTATION

The desktop is the user's workspace; the elements presented in the interface depend on the solution as well as the profile with which you are connected.

Home page

The home page appears in the form of tiles that represent shortcuts to the repository data.



Example of the Home Page for the HOPEX Information Architecture Solution desktop

Depending on the solution, the home page of your desktop contains:

- tiles specific to your profile.

☺ When you roll the mouse over the tile, the number of objects contained in the list appear on the tile. To permanently display the number of objects contained in the list, see ["Resizing a tile", page 42](#).

Example: the HOPEX IT Portfolio Management home page for the functional administrator includes, by default, tiles that

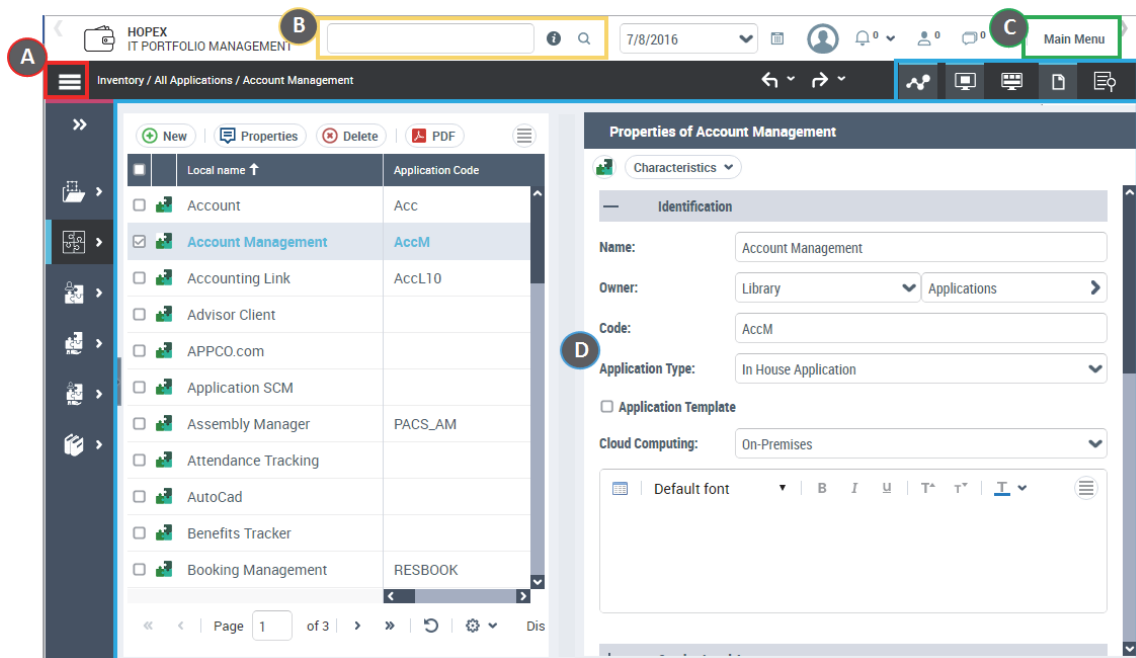
provide access to the list of all inventory portfolios as well as the list of repository applications.

- a **Help**  button to access **HOPEX** online documentation
- an **Options**  button to access your options
 - For more details on options, see the **HOPEX Administration - Supervisor** guide, "Managing Options" chapter.
- an **Alert management**  button to access your alert management
 - See "Managing Your Alerts on Object Modification", page 261.

See also: "Customizing the home page of your desktop", page 40.

The Interface Elements

The interface presents the elements specific to the profile with which you are connected.



A/ Navigation menu and panes, B/ Query toolbar, C/Main menu, D/ Edit Area and associated toolbars

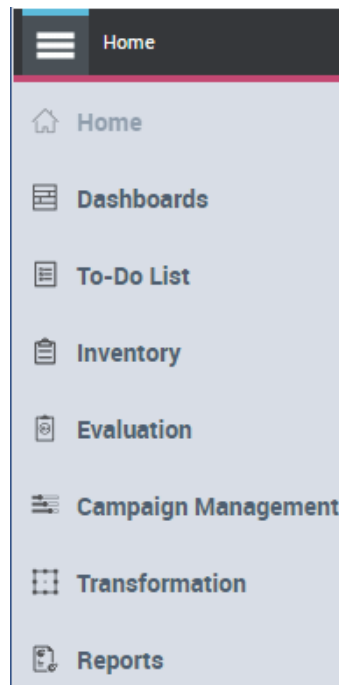
Navigation menu and panes

The navigation  menu gives access to navigation panes that vary according to the solution and the connection profile.

The navigation panes correspond to the various types of objects or various steps of a project.

Example

In **HOPEX IT Portfolio Management**, the desktop visible to the application portfolio manager presents the navigation panes for the main steps of application portfolio management: inventory, evaluation, , etc.



When you select a navigation pane, a list of specific objects appear in the pane.

Example

For example, click on the **Inventory** pane to access the types of objects that make up the application assets: applications, technologies, portfolios, etc., categorized according to different criteria:

- All applications of the repository
- The applications outside of a portfolio
- Applications without owner
- etc.

Navigation panes common to HOPEX profiles

Most HOPEX profiles have access to the following navigation panes:

- **Home** : provides quick access to user objects. See ["Customizing the home page of your desktop", page 40.](#)
- **Dashboards** : displays the list of indicators required to steer objects such as processes, applications or org-units. See ["Customizing your Dashboard", page 42.](#)
- **List of tasks**: displays the tasks assigned to the user.
- **Reports**: presents a set of dynamic reports that enable repository data analysis according to different perspectives.

Query toolbar

The query bar enables simple searches of the entire repository. For more detailed information, see ["The Quick Search \(Windows Front-End\)", page 197.](#)

Main menu

The **Main Menu** gives access to actions that concern:

- dispatch
 - ☞ *You can dispatch or refresh your work at any time. For more details on dispatching and refreshing, see ["Managing workspaces", page 117.](#)*
- collaborative work
 - ☞ *This function is available with **HOPEX Collaboration Manager**. For more details, see ["Communicating in HOPEX", page 239.](#)*
- the advanced search
 - ☞ *See ["Querying Using the Query Assistant", page 202.](#)*
- import/export tools
 - ☞ *See the documentation related to each of them.*
- the mapping editor
 - ☞ *See ["Data Model Mapping", page 47.](#)*
- user options
 - ☞ *For more details on options, see the **HOPEX Administration - Supervisor** guide, ["Managing Options" chapter.](#)*
 - ☞
- Online documentation, which enables access to user and technical **HOPEX** documentation as well as a search tool

Edit Area

The edit area is used to perform business and technical operations proposed by the selected Solution.

In the edit area, you can display the list of objects, the detail of objects, their diagrams, analysis reports, etc.

See also: ["Managing Windows and Panes", page 29.](#)

Managing Windows and Panes

Arranging windows in the edit area

In the edit area, five windows are available to display different types of information:



Navigation

Displays the list of objects in the selected window pane



View

Central page that displays the diagrams and reports of selected objects



Multiple view

Authorizes the display of several views in the page, for example different diagrams, in the form of tabs.



Properties

Displays the properties of selected objects

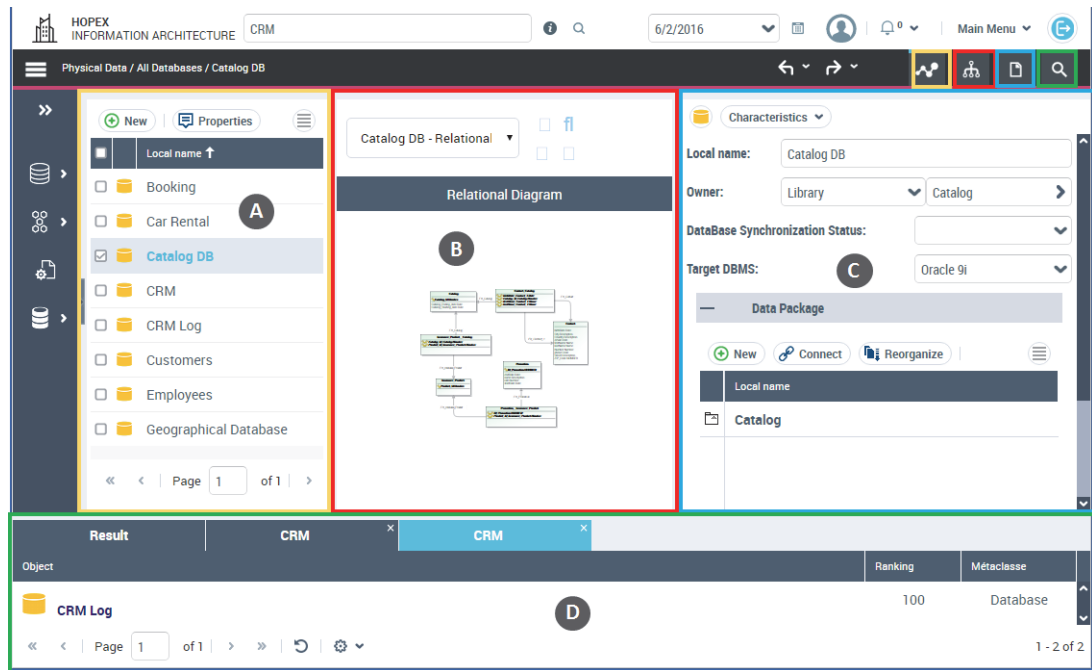


Result

Displays the results of searches

☛ You can also open a pop-up properties window on a specific object.
See ["Accessing Commands Associated with Objects", page 33](#).

For better readability, the toolbar associated with the edit area can be used to display or hide the windows.

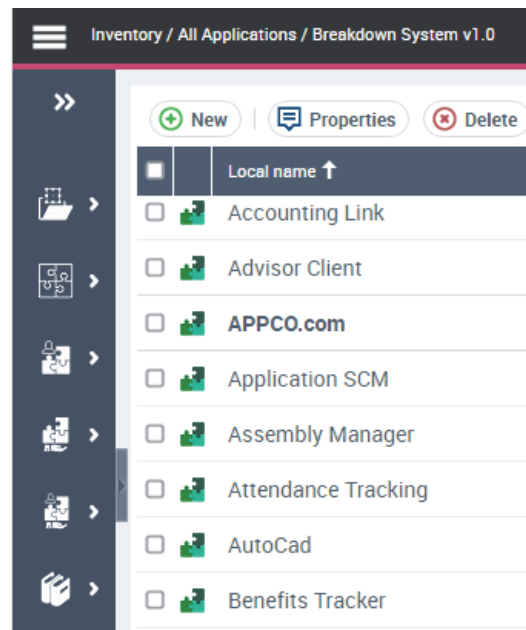


A : Navigation / B : View and multiple view / C : Properties / D : Result

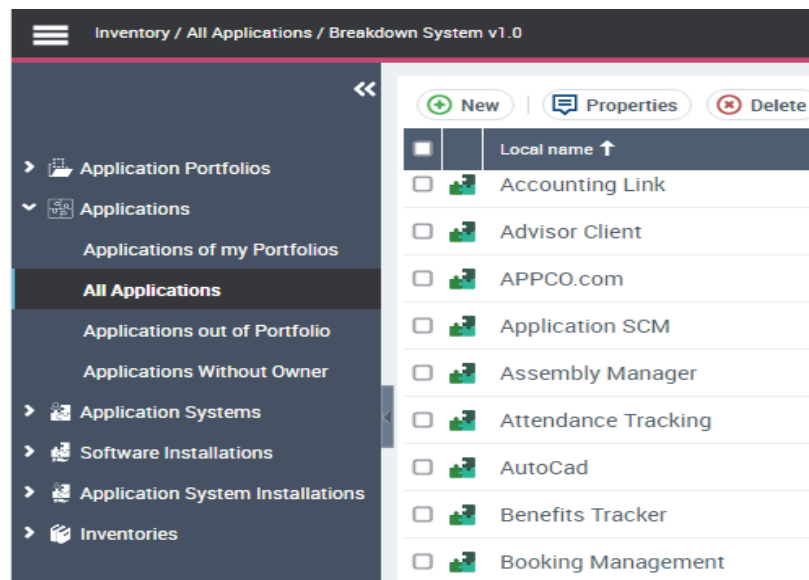
Folding and expanding navigation panes

You can reduce the navigation panes to icon size to unclutter your workspace. In certain cases, the panes are folded by default.

Folded navigation pane



Expanded navigation pane



Organizing folders in navigation trees

You can organize folders in navigation trees the same way as in **HOPEX Windows Front-End**.

For more information, see "[Organizing folders in navigation trees](#)", page 59.

NAVIGATING IN WEB FRONT-END DESKTOPS

Accessing Commands Associated with Objects

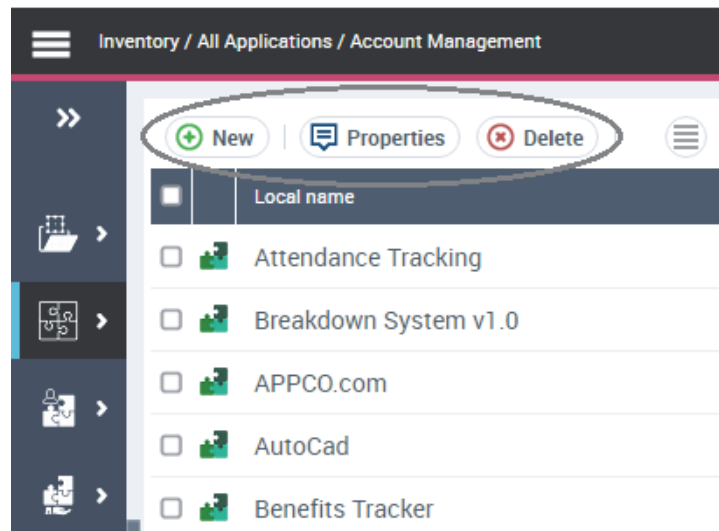
On an object list

Commands are associated with an object list.

Below, for example, from the list of repository applications you can:

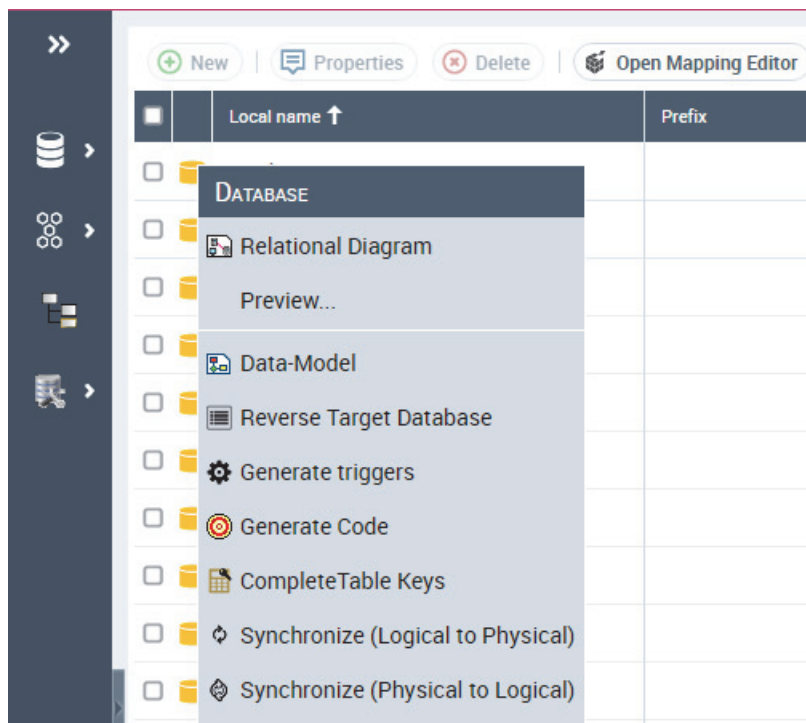
- create an application
- view the properties of an application
- delete an application
- etc.

The  button displays other hidden commands.



On the object of a list

You can access commands specific to an object by clicking on the icon of the object in question.



In a diagram

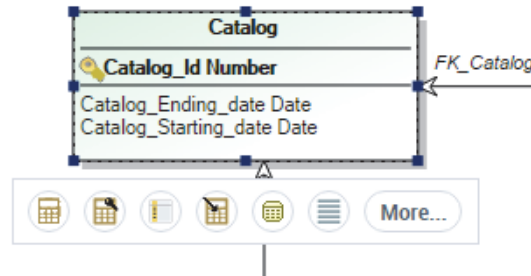
Depending on the diagram display mode (edit mode or preview mode), you can access different commands on the objects in the diagram.

To access commands available on an object:

- In the diagram, click the object in question.

Example

In a relational diagram in edit mode, from a table, you can create a table, a column, an index, etc. You can also access the table pop-up menu.



For more details on opening diagrams, see ["Opening a Diagram"](#), page 68.

See also: ["Handling Objects in Diagrams"](#), page 71.

Using Lists

Repository objects are often presented as lists of objects of the same type.

Using columns

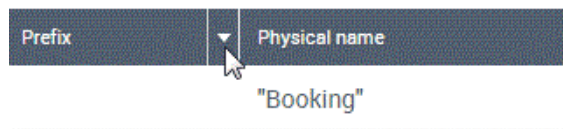
In lists, you can configure columns in different ways.

Configuring column display

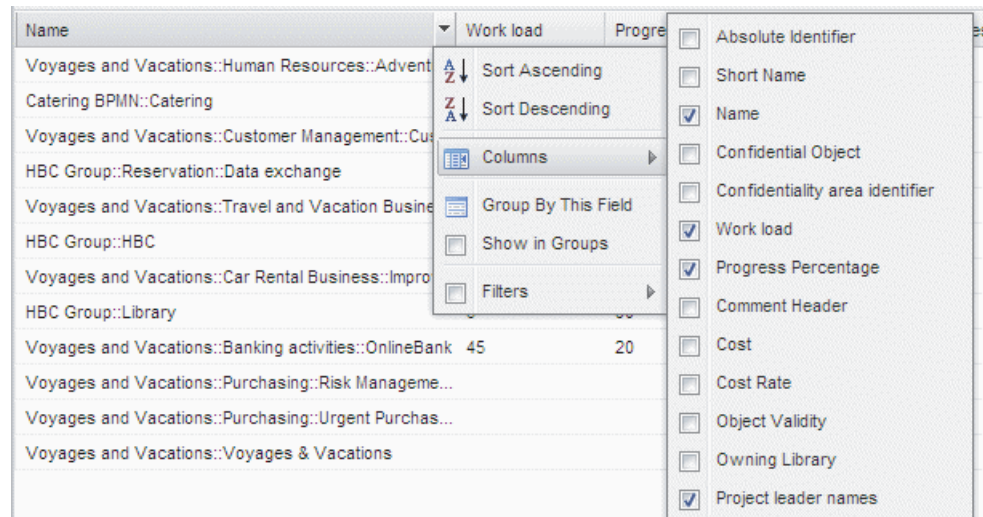
Each column corresponds to an object characteristic.

To display or hide one or several columns:

1. Move the mouse to the right in a column header.
The cursor takes the form of a hand.
2. Click the arrow to display the drop-down menu, as below:



3. In the drop-down menu, click **Columns** and select the columns you wish to display.

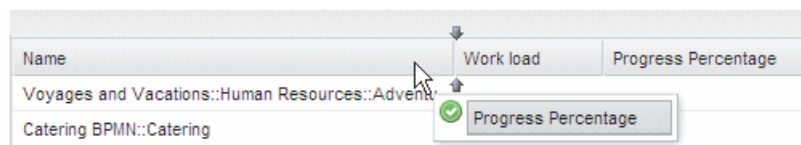


➡ To hide a column, clear the corresponding check box.

Configuring column order

To modify the order of columns:

1. Click the column header and drag the column to the required location.



Filtering data

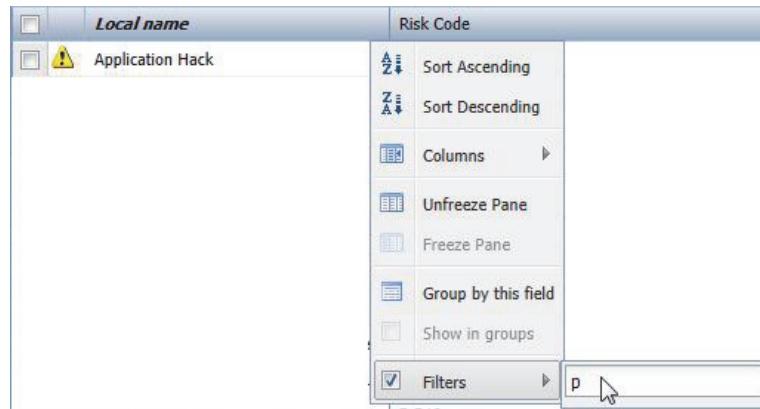
In an objects list you can rapidly filter data of one or several columns.

You can for example filter objects of a list to show only those objects containing a certain character string.

To define a filter:

1. Move the mouse to the right in a column header. The cursor takes the form of a hand.
2. Click the arrow to display the drop-down menu.

3. Pass the cursor over **Filters**, then in the box that appears, enter a character string that will enable filtering of objects on the page.



The objects list is restricted, for example to objects beginning with a given string.

The titles of filtered columns appear in bold italic.

☛ To deactivate the filter and redisplay all objects, clear the **Filters** check box.

Grouping data by field

In an objects list, you can group data with a common field value.

You can, for example, group all risks that have the same Owner.

To group objects:

1. Move the mouse to the right in the header of the column corresponding to the attribute that interests you.
The cursor takes the form of a hand.
2. Click the arrow to display the drop-down menu.
3. Pass the cursor over **Group by this Field**.
The objects list appears in a new classification. The **Display in Groups** box is selected.

☛ To deactivate group presentation, simply clear the **Show in Groups** option.

Locking a column

You can position one or several columns of a list on the left of the edit pane. To do this, you must lock the column.

You can, for example, place the local name at the left of the list to be able to keep it displayed even when consulting other fields.

To lock a column:

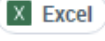
1. Move the mouse to the right in the header of the column that interests you.
The cursor takes the form of a hand.

2. Click the arrow to display the drop-down menu.
3. Click **Freeze Pane**.
The column appears on the left and the scrolling cursor is positioned after this column.

☛ To deactivate this presentation, select **Unfreeze Pane**.

Exporting mass data

You can select objects of a list and export these objects and their characteristics:

- to Excel 
- to Pdf 

Modifying mass data

HOPEX can be used to assign the same attribute value to several objects in a list.

To assign the same value to several objects:

1. In a list, select the objects concerned.
2. Position the mouse on the field you want to modify and specify the new value.

The new value of the field is assigned to all selected objects.

Triggering Workflow Transitions

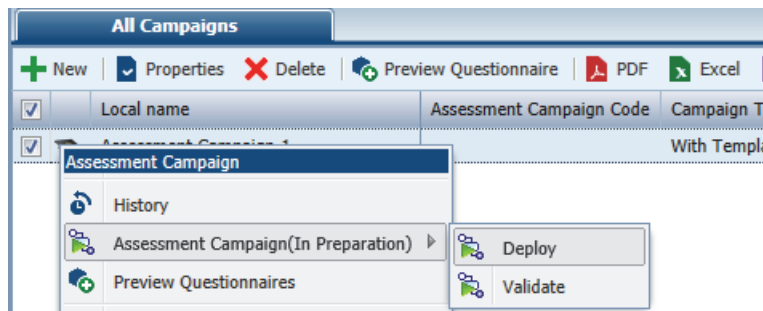
HOPEX solutions are based largely on workflows to manage interactions between different stakeholders.

☛ For more details on workflow transitions, see the **HOPEX Collaboration Manager - Workflows** guide, chapter "Using Workflows".

To trigger a workflow transition on an object:

1. Select the object in question (in a list of objects for example).

2. Right-click the icon of the object and select the appropriate workflow command.



The workflow then progresses. The object passes to another workflow state and a new participant can intervene in the workflow.

CUSTOMIZING YOUR DESKTOP WEB FRONT-END

Customization can vary depending on the interface of your solution.

See:

- ["Modify the theme of your desktop", page 40](#)
- ["Modify your password", page 40](#)
- ["Customizing the home page of your desktop", page 40](#)
- ["Customizing your Dashboard", page 42](#)
- ["Navigating in Web Front-End desktops", page 33](#)

Modify the theme of your desktop

You can modify the default style sheet for your Web Front-End desktop.

To modify the theme of your Web Front-End desktop:

1. Click **Main Menu**.
2. From the drop-down list, using the name of the current style sheet, select the name of the style sheet you want to apply.

Example of current style sheet: HOPEX V2 Style.

Modify your password

To modify your Web Front-End password:

1. Click **Main Menu > Settings > Modify password**.
2. Enter your new password twice.
3. Click **Apply**.

 Only the administrator can delete your password. For security reasons, you cannot leave the **New Password** field empty.

Customizing the home page of your desktop

The home page appears in the form of tiles that provide access to repository data.

 See ["Home page", page 25](#).

You can customize your home page.

Accessing your home page in edit mode

You can modify the home page in edit mode.

To access your home page in edit mode:

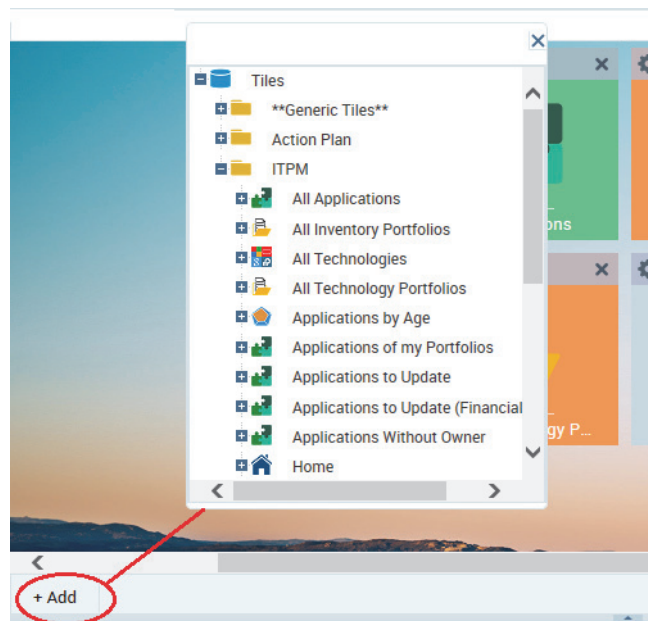
1. Click the navigation menu then **Home**.
Your home page appears in the edit area.

2. Click **Edit Homepage**  .
Your home page is in edit mode.

Adding a tile to your home page

To add a tile to your home page:

1. Access your home page in edit mode.
 See ["Accessing your home page in edit mode", page 40.](#)
2. In your home page, in the bottom left, click **Add**.
A window displays the list of tiles available linked to the product and your business role.



3. Select a tile and drag and drop it in your home page.
 Expand folders if necessary.
 To delete the tile from your home page, see ["Deleting a tile from your home page", page 41.](#)

Deleting a tile from your home page

To delete a tile from your home page:

1. Access your home page in edit mode.
 See ["Accessing your home page in edit mode", page 40.](#)

2. In the tile title bar, click .

The tile is deleted from your home page.

☛ To add the tile to your home page, see *"Adding a tile to your home page", page 41*.

Resizing a tile

A larger tile displays more information.

To enlarge the size of a tile:

1. Access your home page in edit mode.

☛ See *"Accessing your home page in edit mode", page 40*.

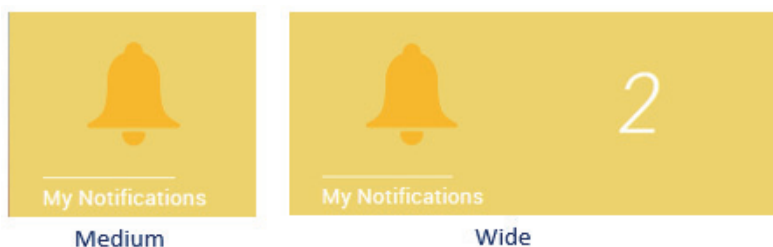
2. In the tile title bar, click .

3. Select **Wide**.

The tile enlarges and displays more information.

☛ To return to the average size, select **Medium**.

You can for example display the number of your notifications or the diagram of a report.



Adding an object to your home page

All the business objects in the repository can be added to your home page. Other objects such as diagrams or reports can also be added to the home page.

To add an object to your home page:

1. Right-click the object and select **Add to Home Page**.

This command creates a shortcut to the properties of the object or a diagram of the object depending on the size of the tile.

Customizing your Dashboard

The **Dashboard** of your desktop (**Web Front-End**) is made up of widgets, which use formatters in the form of reports or other HTML pages. They enable fast access to repository information.

Accessing the dashboard

To access your dashboard and widgets:

- 1 From the navigation menu, select **Dashboard**.

Widget types

A widget can be of type:

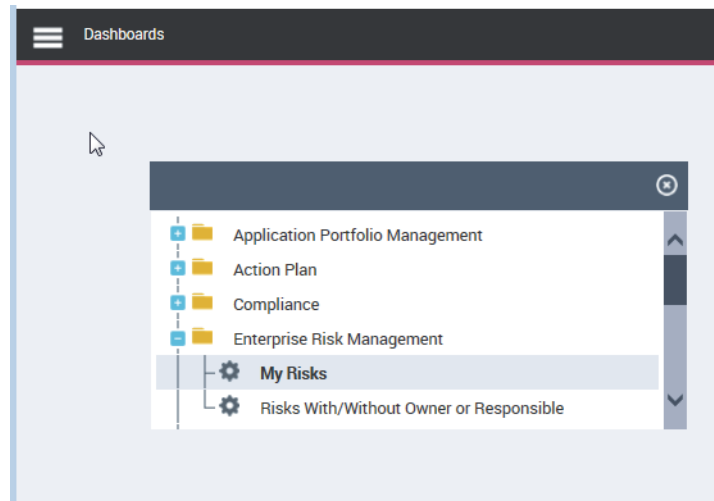
- private
A private widget is connected to a user. It is visible in the dashboard of the user who added it.
 See ["Adding a widget in your dashboard", page 43.](#)
- public
A public widget is displayed in the dashboard of all the users.

Adding a widget in your dashboard

 See ["Sharing an instant report as a Widget", page 386.](#)

To add a widget in your dashboard:

1. Click on the navigation window then on **Dashboard**.
2. In your dashboard, at the bottom left, click **Add**.
A window displays the available widgets.
3. Select a widget and drag-and-drop it to your dashboard.
 *Expand folders if necessary.*



The widget is displayed in your dashboard.

You can add several widgets to your dashboard.

 See ["Managing your widget display", page 44.](#)

Managing your widget display

Enlarging/Folding a widget window

If you added a large number of widgets in your dashboard, in the widget title bar click  to reduce the widget.

 Click  to expand the widget.



Deleting a private widget

A private widget is connected to a user.

To delete a private widget from your dashboard:

- 1 In the widget title bar, click . The widget is deleted from your dashboard. It is not displayed at your next connection.

Managing User Options (Web Front-End)

To configure your desktop and access certain functionalities, you may need to configure the user options.

To configure the user options from the desktop:

- 1 In the menu bar, select **Main Menu > Settings > Options**. The user options window opens.

 For more details on options, see the **HOPEX Administration - Supervisor** guide, "Managing Options" chapter.

THE HOPEX WINDOWS FRONT-END DESKTOP



This section presents the **HOPEX Windows Front-End** interface and explains how to navigate in desktops.

The points covered are:

- ✓ ["Accessing HOPEX Windows Front-End", page 46](#)
- ✓ ["Introduction to the Windows Front-End Interface", page 48](#)
- ✓ ["Customizing your Windows Front-End Desktop", page 54](#)
- ✓ ["Exiting HOPEX", page 61](#)

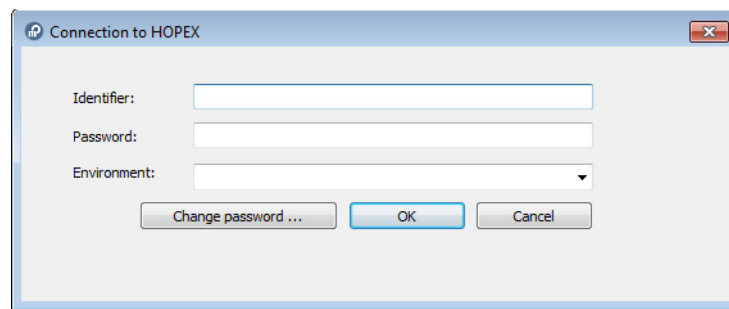
ACCESSING HOPEX WINDOWS FRONT-END

You can start **HOPEX** from your workstation:

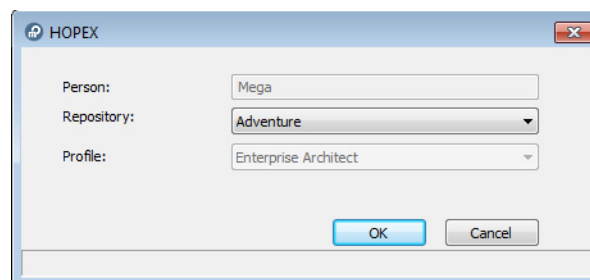
- directly with **HOPEX** installed on your machine.
- via a server or another machine to which you can connect.

To start **HOPEX**:

1. Double-click the **HOPEX** icon . The connexion dialog box appears.



2. In the **Environment** field, select your work environment.
 - ✎ If you can access only one environment, this is automatically taken into account and the environment selection field is grayed.
 - ✎ For more details on environments and users, see the chapters **Managing Environments** and **Managing Users** in **HOPEX Administration - Supervisor**.
3. In the **Identifier** field, enter your identifier.
4. In the **Password** field, enter your password if necessary.
5. Click **OK**.
When you have been authenticated, the workspace selection dialog box appears.



The **Person** field is defined automatically; it indicates the name of the person associated with the identifier defined in the connection dialog box.

6. In the **Repository** field, select your work repository.
 - ☛ The drop-down menu  opens the list of repositories available in the environment. Before you begin modeling the data of your company, it is recommended that you create a new repository in a new environment.
 - ☛ If you can access only one repository, this is automatically taken into account.
7. In the **Profile** field, click the arrow and select the profile with which you want to work.
 - ☛ If you can access only one profile, this is automatically taken into account.
8. Click **OK**.
Your desktop appears.

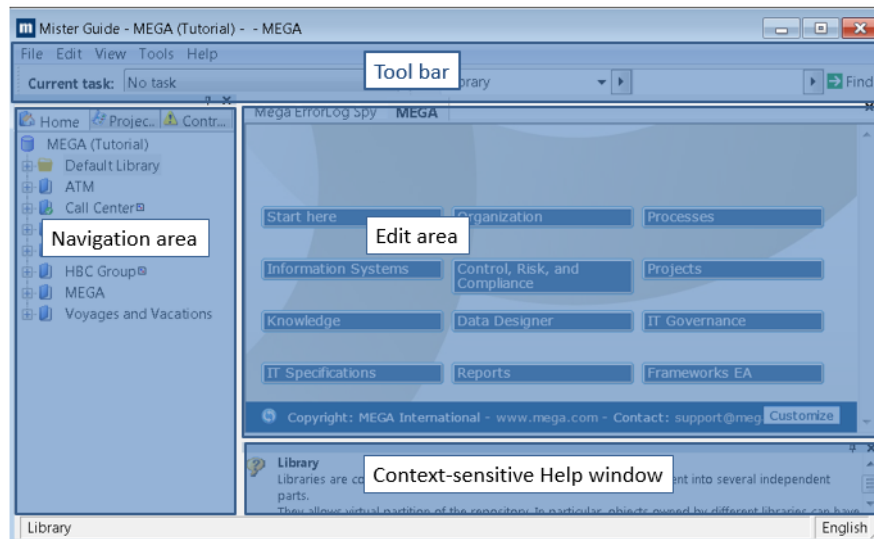
INTRODUCTION TO THE WINDOWS FRONT-END INTERFACE

By default, the **Enterprise Architecture desktop** available in Windows Front-End comprises:

- a [Toolbar and Query Bar](#)
- a [Navigation Area](#)
- a [Edit Area](#)

You can also display:

- the [Help Window](#)
- the [Properties Window](#)
- the [Comment Window](#)



☛ The object types available depend on the **HOPEX** products you have at your disposal.

☛ For more details on organizing and customizing desktop windows, see "[Customizing your Windows Front-End Desktop](#)", page 54.

Toolbar and Query Bar

The toolbar enables fast access to:

- main objects.
- certain actions available from the desktop.



The query bar enables simple searches of the entire repository. For more detailed information, see ["The Quick Search \(Windows Front-End\)", page 197](#).

The following table describes the toolbar buttons.

Icon	Definition	Description
	Save All	Saves all your actions in your desktop Shortcut of File > Save All
	Dispatch	Dispatches your work in the HOPEX repository. This action allows other users to access your work Shortcut of File > Dispatch
	Refresh	Updates your desktop with the latest modifications made by other repository users Shortcut of File > Refresh
	Cut	Cuts an object in the navigation or edit areas Shortcut of Edit > Cut
	Copy	Copies an object in the navigation or edit areas Shortcut of Edit > Copy
	Paste	Pastes an object in the edit area Shortcut of Edit > Paste
	Navigation window	Opens a new navigation window Shortcut of View > Navigation Windows See "Navigation Area", page 50 .
	Properties	Opens the properties window of the selected object Shortcut of View > Edit Windows > Properties See "Properties Window", page 53 .
	Comment	Opens the comment window in the edit area Shortcut of View > Edit Windows > Comment See "Comment Window", page 53 .
	Favorites	Adds the Favorites tab in the navigation area Shortcut of View > Favorites See "Managing Favorites", page 149 .
	Deep history	Adds the History tab of actions executed in HOPEX in the navigation area Shortcut of View > History See "Using the History", page 151 .
	Undo	Cancels chronologically the latest actions executed. You can delete actions singly or several at one time Shortcut of Edit > Undo See "Undoing and Redoing Actions on Objects", page 150 .

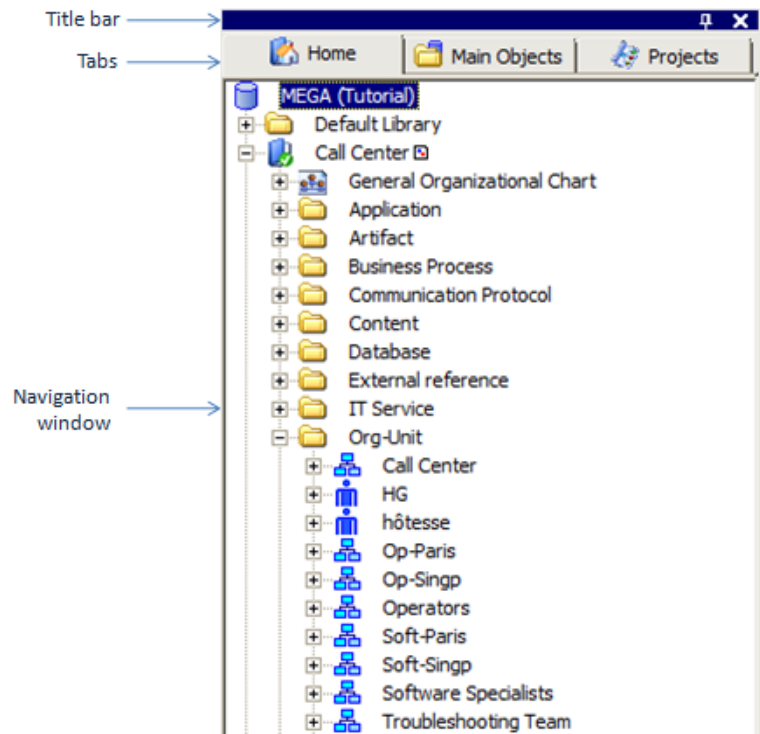
Icon	Definition	Description
	Redo	Restores chronologically the latest actions canceled. You can redo actions singly or several at one time Shortcut of Edit > Redo See "Undoing and Redoing Actions on Objects", page 150.
	Explore	Opens the explore window Shortcut of Diagram > Explore See "The Explorer", page 224.
	Options	Opens the options window of the current user Shortcut of Tools > Options
	Query	Opens the advanced query tool Shortcut of Tools > Query See "Querying Objects", page 185.

Navigation Area

The navigation area contains tabs that allow you to navigate in the repository and easily access objects.

The navigation area comprises:

- an active navigation window, including the tree used to access repository objects.
- tabs, which allow navigation in the navigation area windows.
 ➤ At first connection, the **Home** and **Projects** tabs are present by default. You can add or delete tabs according to your needs.
- a title bar, which enables organization of the display of windows in the desktop.
 ➤ You can for example move or dock a window.



At access to the repository in read-only, a padlock alongside an object indicates that it cannot be modified.



Edit Area

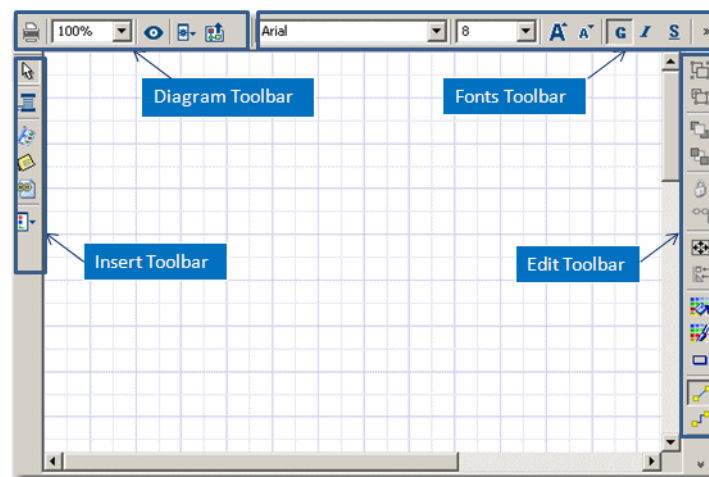
The edit area is mainly used to open and edit diagrams.

The start page in the edit area allows you to:

- build your diagrams using the diagram creation wizard.
- create your projects based on methods proposed by **HOPEX**.
- rapidly access the different **HOPEX** modules.

☛ *At first connection, the edit area opens on the home page. To reopen the home page, in the **HOPEX** menu bar, select **? > Start Page**.*

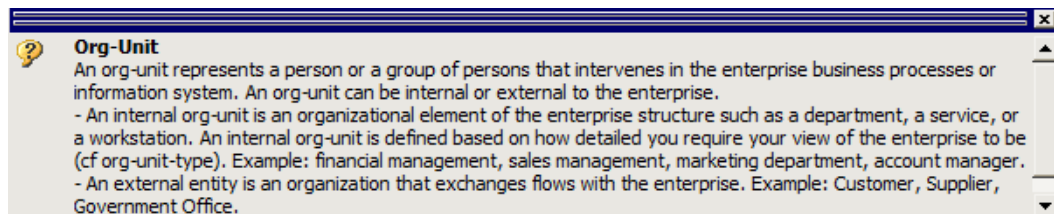
Here is the diagram editor:



Help Window

The context-sensitive help window provides basic information on each concept or repository object type selected.

To display the context-sensitive help window, in the **HOPEX Windows Front-End** menu bar, select **View > Help Window**.



☛ *The title bar enables customization of window display in the desktop. You can for example move or dock a window. For more details*

on window display, see ["Positioning Windows", page 54.](#)

Properties Window

The properties window presents all the information relating to the selected object. It allows you to consult and modify information on this object.

To display the properties window:

- Click **Properties**  or select **View > Edit Windows > Properties**.

☺ *Displaying the comment window is useful when you want to successively enter the comments of several objects. So, when you select an object in a navigation window, in a diagram or in a query result dialog box, you can easily modify its properties in this window docked in the workspace, then move on to those of another object. This saves you having to activate the pop-up menu of the object each time you wish to access its properties.*

For more details on object properties, see ["Defining Object Properties", page 138.](#)

Comment Window

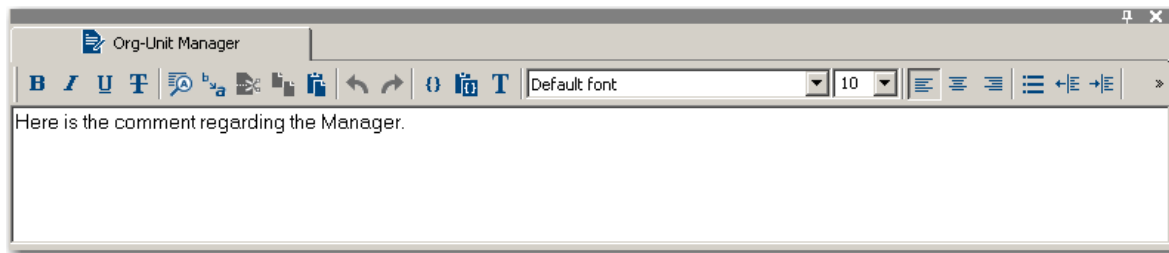
The comment window enables specification of information on the selected object.

To display the comment window:

- Click **Comments**  or select **View > Edit Windows > Comment**.

☺ *Displaying the comment window is useful when you want to successively enter the comments of several objects. When you click an object in a navigation window, in a diagram, or in a query result dialog box, the comment of the selected (active) object appears in this window. You can therefore easily modify the comment of the object then pass to that of another object.*

For more details on how to enter the comment of an object, see ["Naming Objects", page 155.](#)



☞ *The title bar enables customization of window display in the desktop. You can for example move or dock a window. For more details on window display, see ["Positioning Windows", page 54.](#)*

CUSTOMIZING YOUR WINDOWS FRONT-END DESKTOP

The **HOPEX** desktop (Windows Front-End) comprises various windows enabling repository access:

- a navigation window that contains navigators dedicated to objects, projects, diagrams, utilities, etc.
- an Edit windows (comment and properties)

You can customize the display of these windows.

Organizing your Desktop (Windows Front-End)

To organize your desktop, you can:

- add or close a window
- define position of a window
- create folders in navigation trees

Adding Windows

To add a window in your desktop (Windows Front-End):

1. In the **HOPEX** menu bar, select:
 - **View > Navigation Windows**
 - **View > Edit Windows**
2. Select the window you want to add.

Positioning Windows

You can organize your desktop as you like. You can show/hide/move navigation and edit windows.

You can:

- float, dock, fix, auto hide or enlarge navigation windows.
- merge several windows and access these via tabs.
- integrate a navigation window in the main edit window.

☛ If you wish to modify the desktop default arrangement, see frequently asked questions, section ["The Windows Front-End Desktop", page 500](#).

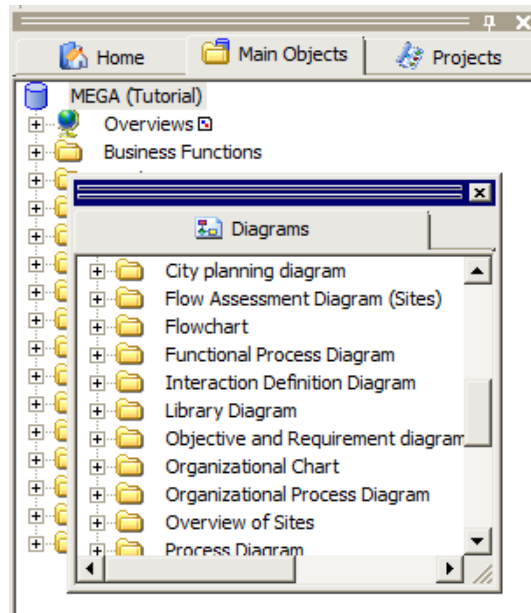
Floating a window

You can detach a window then move it to make it "float" on the desktop.

You can for example detach the navigation tabs (such as **Home** and **Main Objects**)

To float a window:

1. Right-click the navigation area title bar and clear **Fixed**.



☛ To float a window, you can also clear the **Docked** option from the window title bar pop-up menu.

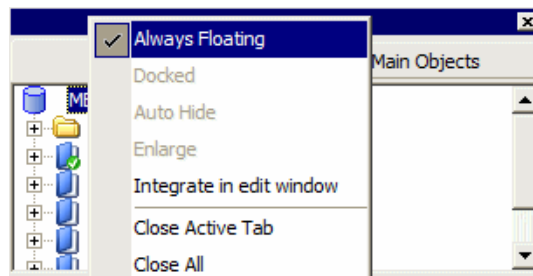
2. Select the window and drag it to where you want.

☛ Position the window outside "sensitive areas" (when the mouse pointer passes close to sensitive areas, the window will dock in the desktop, which is a situation you do not want here).

Permanently floating a window

You may decide that a window should always float and never be docked. To do this:

1. Right-click the pop-up menu of the floating window title bar, then click **Always Floating**.



Docking a window

You can dock windows in the desktop. A window is said to be **Docked**, as distinct from floating, when it is integrated in the desktop.

To dock a window:

1. Select the floating window and move it in the desktop.
When the mouse pointer passes close to a sensitive area, a colored frame appears indicating future positioning of the window when docked.
2. When you have found a satisfactory position, release the mouse button.
The window is docked.

☛ To dock a window, you can also select **Docked** in the window title bar pop-up menu.

Fixing a window

You can fix a docked window so that it always remains in the same position in the desktop.

To fix a window:

- 1 In the pop-up menu of the floating window title bar, select **Fixed**.

☛ If the **Fixed** command is cleared, the window can become floating, in other words not fixed to the edge of another window.

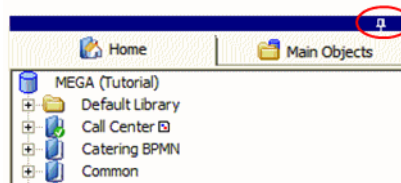
Automatically hiding a window

A pushpin in window title bars facilitates switching to "Auto Hide" mode. This function allows you to increase viewable display and editing space by auto hiding navigation and edit windows.



To automatically hide a window:

- 1 In the title bar, click the pushpin icon .



The window is automatically hidden and is positioned at the edge of the application.

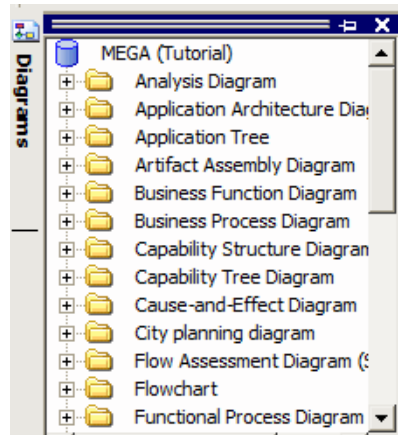
To access an auto-hidden window:

- 1 Click the tab of the hidden window.
The window appears.

To hide a window again:

- 1. Click its icon.

Clicking outside the active window also has the effect of hiding it.



To deactivate auto hide:

- 1. Click on the pushpin icon in the title bar.
- The window reappears and can be used.

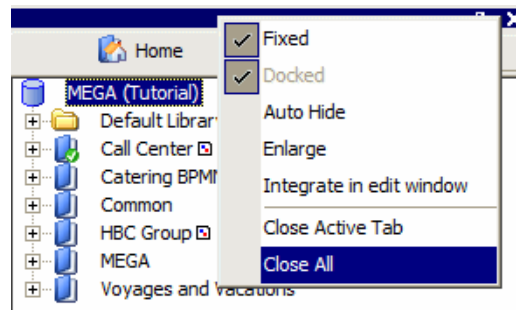
Closing a tab

To close a tab:

- 1. Right-click the tab concerned and select **Close**.

To simultaneously close all tabs of the navigation area:

1. Right-click in the navigation title bar.
2. Select **Close All**.



Integrating a navigation tab in the edit window

To integrate a navigation tab in the edit window:

1. Right-click the tab you want to move and select **Integrate in edit window**.

The tab is moved into the edit window.

☛ To reintegrate the tab in the navigation area, right-click the tab and select **Remove from edit window**.

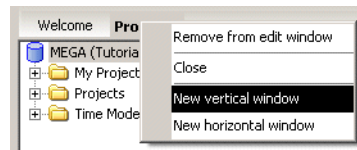
Creating several edit windows

When you have moved a navigation window into the edit window, you can organize this desktop as you wish:

- create new windows
- move tabs in edit windows
- return tabs to the navigation area.

To create a new edit window:

1. In the edit window, right-click the desired tab and select:
 - **New vertical window** or
 - **New horizontal window**.



The new window appears.

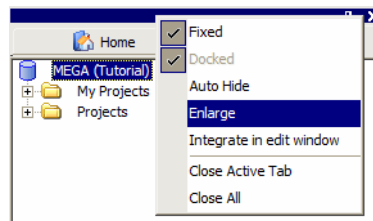
☛ When you have created several edit windows, you can move a tab from one window to another by selecting **Move in previous window** (or **next window**).

Enlarging a navigation window

You can enlarge a navigation window so that it occupies the entire desktop.

To enlarge a navigation window

1. Right-click in the title bar.
2. Select **Fixed**.
3. Select **Enlarge**.



The window now occupies the entire desktop.

Organizing folders in navigation trees

Folders are used in encyclopedic trees to organize the objects in the tree. For this, **HOPEX** offers two possibilities:

- you can create and name your folders
- you can use the encyclopedic classification options

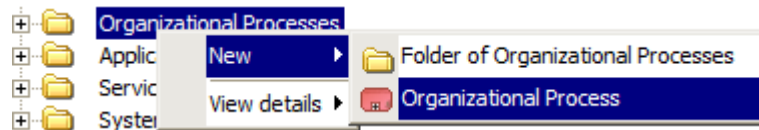
Creating Folders in Navigation Trees

To find your objects more easily in navigators you can create your own groups.

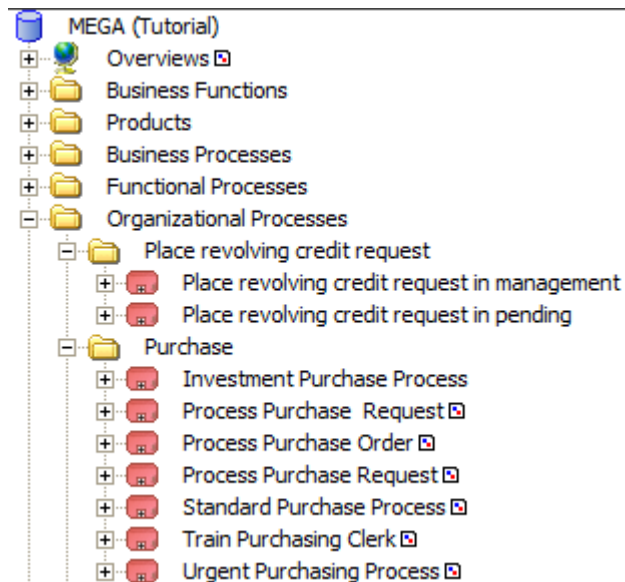
To do this, **HOPEX** proposes creating object folders. You can for example create folders grouping your objects to classify them according to your own criteria.

To create folders:

- 1 Right-click the object type for which you wish to create a folder and select **New > Folder of**.



You can move your objects to the folder or folders created so that you can find them more easily.

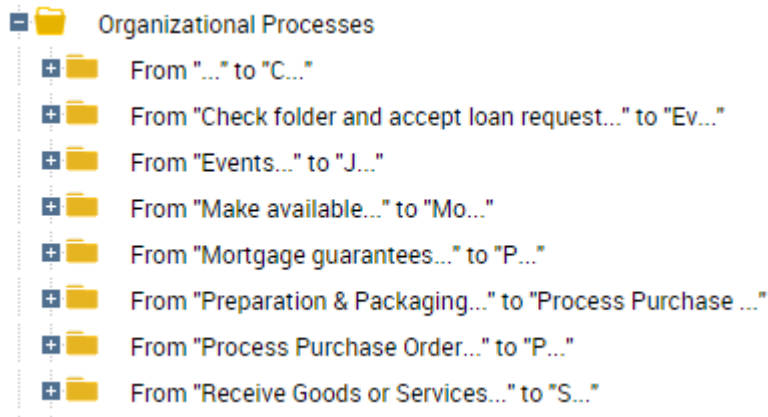


Using the encyclopedic classification options

The display time of a folder that contains a large number of objects can be long.

To reduce this time, you can use these options to classify your objects in alphabetical order in "volumes" represented by folders created and updated automatically by **HOPEX**.

The name attributed to each volume comprises the name of the first object in the volume and the first letter of the last object.



To activate these options:

1. In the following desktop:
 - (**HOPEX Windows Front-End**) select **Tools > Options**.
 - (**HOPEX Web Front-End**), select **Main Menu > Settings > Options**.
2. In the tree on the left, click **Workspace**.
3. On the right side, complete the following fields:
 - **Trigger threshold for Encyclopedic Classification in the Browser**: this is the number of objects from which automatic classification is triggered within each folder concerned. By default this perspective is set to 200.
 - ☛ *If the threshold is equal to zero, the encyclopedic classification is disabled.*
 - **Number of Elements per Encyclopedic Volume**, by default set to 200.

Managing User Options (Windows Front-End)

To configure your desktop and access certain functionalities, you may need to configure the user options.

To configure the user options from the desktop:

1. In the menu bar, select **Tools > Options**.
The user options window opens.

☛ *For more details on options, see the **HOPEX Administration - Supervisor** guide, "Managing Options" chapter.*

EXITING HOPEX

- Before exiting **HOPEX**, remember to save your data, see ["Saving Your Data"](#), page 61.
["Exporting Your Private Workspace Log"](#), page 61
- Exiting **HOPEX**, see:
 - ["Quitting the application"](#), page 63

Saving Your Data

Your data is preserved in the repositories.

You should regularly perform backups of your repository to avoid loss of your data due to unforeseen circumstances such as hard disk failure.

You should keep these backups in a safe location, on a different site from that containing the data.

Backup frequency will vary depending on how quickly the data changes. Weekly backups are generally sufficient when one user is involved. Backups should be more frequent when multiple users are working every day. You should back up your repository before and after important modifications are made to it.

For more details on repository back-up, see chapter "Managing Repositories" in the **HOPEX Administration - Supervisor** guide.

☛ *You can also export the log of your private workspace if required.*

*For more information, see chapter "Managing Workspaces" in the **HOPEX Administration - Supervisor** guide.*

💡 **Remember to regularly back up your data and to keep several backups.**

Exporting Your Private Workspace Log

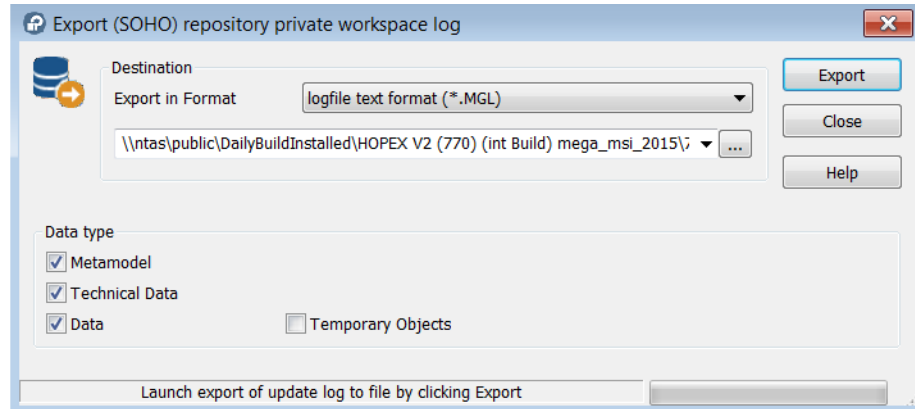
You can create an export file and save it in your work folder.

The export file can be exported in format:

- **logfile text** (.mgl).
Name format of the exported file is "LOGmmdd.mgl", where "mmdd" represents logfile export date month and day.
- **XML MEGA** (.xmg)
The exported file is in the form of an XML file containing commands or data (objects and links).

To export the work done in the current private workspace in the form of a command file:

1. Click on the **Tools > Manage > Export Updates Logfile**.
The **Export Repository Private Workspace Log** dialog box opens.



2. Select export format.
3. (Optional) If necessary, modify the data export file name and save folder proposed as default. The **Browse** button  allows you to browse the folder tree and select the folder in which the file will be placed.
4. In the **Data Type** frame, select the type of exported modifications:
 - **Metamodel** if you want to extract the metamodel from the system repository. This is useful if the standard metamodel has been modified.
 - **Technical Data** if you want to include in your file the changes made to data such as descriptors and queries.
 - **Data** if you only want to export changes made to repository data, particularly the workspace.
 - **Temporary Objects** - these objects are created when you execute requests, when you consult objects (stored in the history), etc. Generally you will not need to export these objects.
5. (Optional) If you want to export only those commands that correspond with a defined period, select **Commands from / to** and specify the dates.
6. Click **Export**.
The **Execution Report** appears.
7. Click **OK**.
The file is exported and saved in the specified folder.

The user can subsequently import this logfile, for example into a new private workspace.

Quitting the application

If one does not already exist, a private workspace is created when a user requests repository access: **HOPEX** saves a view of the state of the repository at the moment the user is connected.

The user can add his/her own modifications without being disturbed by any concurrent modifications of other users: in the case of a network installation, each **HOPEX** user has his/her own view of the repository.

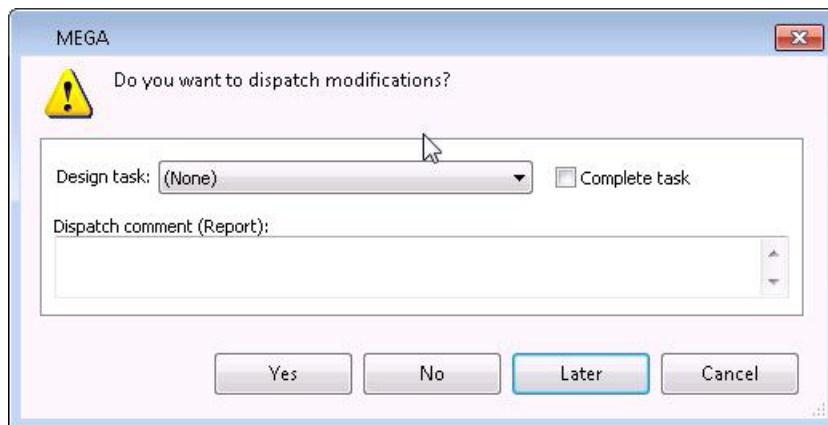
To save your latest modifications at any time, in the **HOPEX** menu bar, click **Save**

All  or select **File > Save All**.

☛ To exit your work session from a collaborative workspace (available with option **HOPEX Collaborative Pack**), see: "[Exiting a session from a collaborative workspace](#)", page 257.

To exit your work session:

1. In the menu bar, select **File > Exit**.
The **HOPEX** exit dialog box appears.
If **HOPEX** is installed on a network, a dialog box will ask you if you want to dispatch the modifications you made.



2. (Optional) In the **Dispatch comment (Report)** frame, enter a comment to remind you of modifications made in your private workspace.
3. (Optional, with **HOPEX Collaboration Manager**) Select a design task and click **Complete task** if necessary.
4. Click:
 - **Yes**
Modifications you have made in your private workspace are saved in the repository.

☺ In order to work effectively as a team, it is recommended that you dispatch frequently and regularly. Other users can update their own

*private workspace without dispatching their work (menu **File > Refresh**).*

☛ *This exit mode also allows the user to select a different repository the next time he/she logs in.*

- **No**

All modifications you made since your last dispatch will be lost. You can use this option if you want to view data quickly and exit without impacting the repository.

☛ *Modifications to your desktop are also lost.*

- **Later**

This option allows you to keep your changes without impacting the repository. You can open your session later and continue working but other users are not yet seeing the changes you have made.

☛ *Click **Cancel** to not exit your private workspace.*

HANDLING DIAGRAMS



This chapter gives some tips to make best use of diagrams.

Differences between **HOPEX Windows Front-End** and **HOPEX Web Front-End** are indicated.



A diagram is a representation of an object. It is also a repository object.

- ✓ "Creating Diagrams", page 66
- ✓ "Opening a Diagram", page 68
- ✓ "Diagram Toolbar", page 69
- ✓ "Handling Objects in Diagrams", page 71
- ✓ "Handling Links Between Objects", page 89
- ✓ "Managing Texts", page 92
- ✓ "Managing Drawing Objects", page 95
- ✓ "Handling Lines", page 103
- ✓ "Modifying Shape Colors and Borders", page 111
- ✓ "Zooming and Moving Around in Diagrams", page 115
- ✓ "Displaying Diagram Preview", page 118
- ✓ "Diagram Setup and Printing", page 124
- ✓ "Exporting Diagrams to PowerPoint", page 122
- ✓ "Modifying Performance Characteristics (Web Front-End)", page 130
- ✓ "Functionalities Specific to Windows Front-End", page 131

CREATING DIAGRAMS

You can create a diagram:

- directly from an object
See ["Creating a Diagram from an Object"](#), page 66.
- using a wizard, in Windows Front-End
See ["Creating a Diagram Using the Wizard \(Windows Front-End\)"](#), page 66.

Creating a Diagram from an Object

To create a diagram from a navigation tree object:

1. In the navigation pane, right-click the object from which you wish to create a diagram, for example an org-unit.
2. Pass the mouse over **New** and select **Org-Unit Organizational Chart**. The diagram describing the object is created. It is initialized with the org-unit concerned.

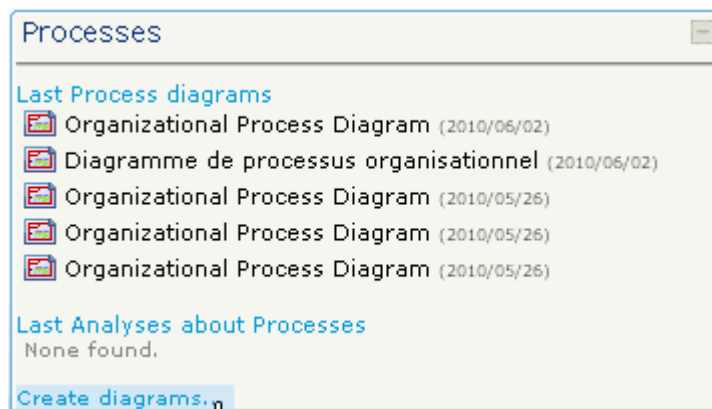
☞ Initialization automatically positions the org-unit in the diagram.

Creating a Diagram Using the Wizard (Windows Front-End)

In the edit area of the desktop, the start window allows you to easily create your diagrams with the help of a diagram creation wizard.

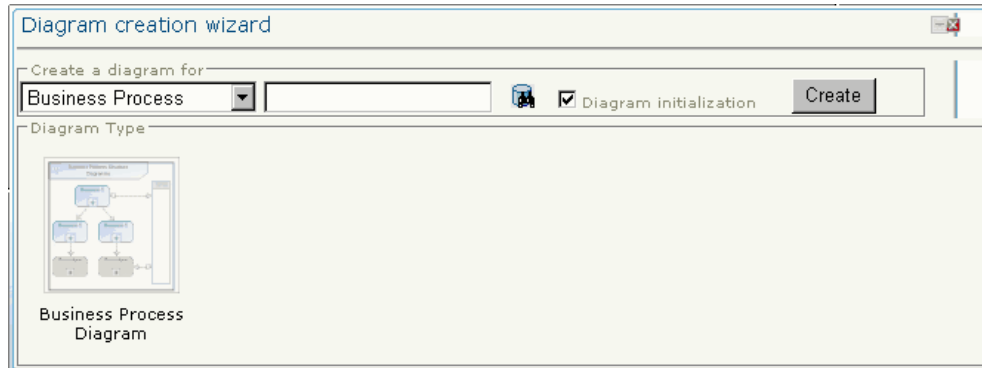
To create a diagram using the wizard:

1. Click the category of diagram that interests you, for example "Process".



A dialog box proposes different diagram types belonging to this category and to the object type serving as entry point.

2. In the drop-down list, select the object type for which you want to create a diagram, for example "Organizational Process".



3. Enter the name of your diagram in the box on the right of the object type.
4. Select "Flowchart", the only available choice in this example. Click the **Diagram Initialization** check box if required.
5. Click **New**.
Your new diagram opens.

OPENING A DIAGRAM

You can open a diagram:

- from an object
- directly from the diagrams navigation tree.

To open a diagram from an object:

1. In a navigation pane tree, right-click the object and select the command corresponding to the diagram.
The diagram appears.

 If no diagram exists describing the selected object, the **New** command is proposed. See "[Creating Diagrams](#)", page 66.

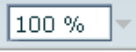
To open a diagram from the diagrams navigation tree.

1. In the **Diagrams** navigation tree, expand the diagram type you want to access.
2. Right-click the diagram that interests you and select **Open**.

The diagram appears in the edit area.

DIAGRAM TOOLBAR

Below are the main icons available (in **HOPEX Web Front-End**).

Icon	Description
	Move - Move diagram in the page See "Moving diagrams" , page 117. - Zoom using mouse wheel See "Zooming" , page 116.
	Refresh diagram
	View list Enables configuration of object types to be displayed in diagrams See "Restricting and Extending Managed Object Types" , page 75.
	Quality and performance options To be used if your diagram takes time to be displayed See "Modifying Performance Characteristics (Web Front-End)" , page 130.
	Fit to page Fits diagram to the page: - Fit to height - Fit to width
	Zoom in/Zoom out Zoom in/Zoom out
	Zoom value Zoom with indication of zoom factor See "Zooming" , page 116.
	Display page boundaries Enables display in the workspace of the boundaries of diagram pages.
	Layout properties Enables diagram layout See "Defining Diagram Setup (Web Front-End)" , page 124.
	Print diagram Display diagram as a PDF file, enabling printing See "Printing Diagrams (Web Front-End)" , page 128.

Icon	Description
	Saving an image under Used to save the diagram image
	Word wrap text Select word-wrap text to automatically wrap the text to a new line if it does not fit on one line
	Automatic width adjustment Enables automatic resizing of the frame according to the text
	Group Enables grouping of several elements
	Ungrouping Cancels Group function.
	Lock Prohibits moving the object
	Simple line
	Perspective line Technical architecture diagram
	Orthogonal line
	Bring to front See "Bringing Objects to Front/Sending Them to Back" , page 99.
	Send to back See "Bringing Objects to Front/Sending Them to Back" , page 99.
	Align See "Aligning Drawing Objects" , page 98.

HANDLING OBJECTS IN DIAGRAMS

Described here are the operations you can execute on objects modeled in **HOPEX**.

Creating objects

You can create objects in two ways:

- from the insert toolbar on the left of the diagram
- from an insert toolbar available on each object (**HOPEX Web Front-End**)

Creating an object from the diagram insert toolbar

To create an object:

1. In the diagram insert toolbar, click an object button, for example an organizational process .

When you move in the diagram, the cursor takes the following form:



2. Click on the diagram.
A creation wizard appears depending on the object type.
The object is created.

Using the Object Insert Toolbar (HOPEX Web Front-End)

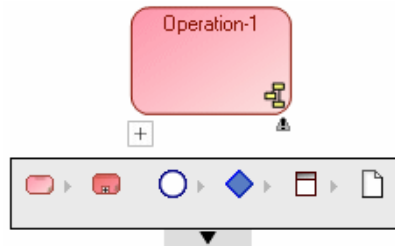
An insert toolbar available on each object simplifies object creation by proposing object selection help. It proposes only those objects that can be connected to the current object.

To create an object:

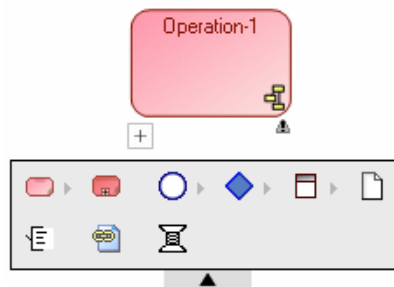
1. Position the mouse cursor on a diagram object.
A sign  appears below the shape.

2. Click sign .

The bar containing the objects you can insert at this stage appears.



The arrow at the bottom of the insert toolbar scrolls to display other object types.



3. Click the icon that represents the object you wish to create.

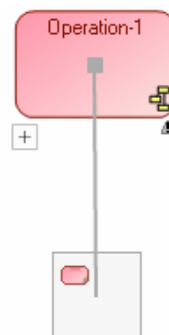
For example: **Operation** .

The link selection dialog box appears.

4. In the link selection dialog box, select the desired link type.

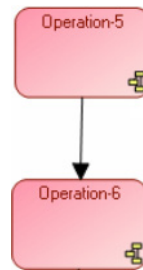
For example: **Sequence Flow** in a BPMN organizational process diagram.

You preview the object that will be created, as well as the link to the previous object.



☞ To cancel the operation, click the <Esc> key.

- Click in the diagram at the point where you wish to place the object.
The object is created, with the link to the previous object.



Adding Objects

To add an object to a diagram:

- In the insert toolbar on the left, click the button corresponding to the type of object required, then click in the diagram where you want the object to appear.

☞ If you cannot find the appropriate button, see ["Restricting and Extending Managed Object Types"](#), page 75.

The **Add object** window appears.

- Enter the name of the object (or select **Query** or **List** from the menu opened by the arrow  to search for the required object).
- Validate.

☞ The validation button will be titled differently depending on the particular case:

If the object...	... the validation button will be called
does not exist in the repository	Create
exists in the repository but is not connected to the diagram	Connect
exists in the repository and is already connected to the diagram (the same element can appear several times in the same diagram)	Duplicating

☞ When you create an object in a diagram, it is automatically connected to the diagram.

Removing and Deleting Objects

Removing Objects

To remove an object from a diagram:

- 1. Select the object and press the <Del> key.
The object no longer appears in the diagram, but it still exists in the repository.

A **HOPEX** repository object is not simply graphic. It can exist in the repository without being present in the diagram.

 **if you select a link between two objects, pressing the <Del> key deletes the link from the repository (and not just from the diagram).**

Deleting Objects

To delete an object from the repository:

1. In the object pop-up menu, select **Delete**.
The **Delete Objects** dialog box opens.
It indicates the object you wish to delete together with its dependent objects, if any (operations of an organizational process, for example).
Check boxes alongside each object allow you to select the objects you wish to delete.
2. Select the objects you wish to delete and click **Delete**.
Selected objects are deleted.

Deleting objects in diagrams

The deleted objects are removed from the repository and consequently from all diagrams that use them.

If you try to delete an object that appears in a diagram, the  icon is displayed alongside the object in the **Delete Objects** dialog box.

The pop-up menu of each object allows you to view the diagrams in question.

To view these diagrams:

- 1. Right-click the object and select **Diagrams Containing Object**.
The dialog box that opens allows you to view the diagrams that contain the object concerned.

If you have deleted an object in error, you can restore it by using the function that enables undo and redo of actions. See ["Undoing and Redoing Actions on Objects"](#), page 150.

Resizing Objects

To modify the dimensions of an object:

1. Select the object concerned.

2. Point to a handle.
The pointer shape changes to a double-headed arrow. The direction of the arrow indicates whether you can resize the drawing object horizontally, vertically, or both: .
3. Hold the mouse button down: a selection rectangle appears around the drawing object.
4. Drag the mouse.
The rectangle indicates the new size of the object.



5. Release the mouse button when the desired dimensions are obtained.

Restricting and Extending Managed Object Types

The **Views and Details** window details presents a list of views (object types to be displayed) which varies according to diagram type.

Activating the Views and Details window

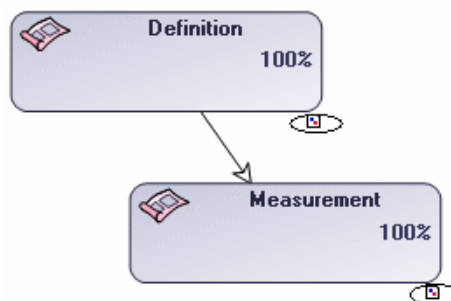
To activate the views window:

1. In a diagram, click button .
The list of views (object types to be displayed) appears.
2. Select or clear the views you wish to display or not.
A red triangle on the view check box indicates a modified view.

☛ The **Drawing Objects** check box allows you to show or hide purely graphical elements representing neither object nor link.

☛ When an object in a diagram is described by one or more other diagrams, a status indicator appears below the object shape. This status indicator takes the form of an icon corresponding to the diagram type. It reminds you that you can zoom on the object. The **Status Indicators** check box allows you to display this indicator or not. For more details,

see *"Object status indicators", page 76.*



Example of state indicators (objects described by a diagram)

3. Click **OK**.
The window closes.
Diagram display and the modeling insert toolbar are updated according to the configuration specified.

Object status indicators

You will note the presence of icons below certain objects in your diagrams. These icons give indications on object status.

- ◆ the object is owned by the parent object
- ◇ the object is not owned by the parent object
- 📄 the object is described by a diagram
- 📄 the object is described by a document
- 🔒 the object cannot be modified (not authorized and/or locked)
- 🔓 the object can be modified (authorized and not locked)
- 📁 the object has variants
- 📁 the object is a variant

➡ In **HOPEX Windows Front-End**, it is possible to configure display of these icons. To do this, in the desktop select **Tools > Options**, then click the **Status Indicators** icon. In the dialog box that opens, select or clear the desired options.

Adding Notes

If you want to highlight a particular point in your diagram, you can create a note and attach it to an object.

To create a note:

1. In the insert toolbar, click **Note** .

 If **Note**  does not appear in the insert toolbar, click **Views and Details**  in the diagram toolbar. In the dialog box that opens, select the **Notes** check box then click **OK**.

2. Click in the diagram at the position where you wish to add the note. The **Creation of Note - Characteristics** dialog box appears.
3. Enter a name for the note in the **Name** box, or retain the name automatically generated by **HOPEX**.

 A note is unique in the repository. If you give an already existing name for the note, you cannot finish the procedure.

4. In the **Type** box, click the drop-down menu arrow and select a note type.

 Note types are for example: Warning, Correction, Improvement, Question, Remark, Justification, Example, etc.

5. Enter your text in the **Comment** area.
6. Click **Create**.
Your note appears in the diagram.

7. In the insert toolbar, click  and connect the note to the object concerned.

Object Display Options (Windows Front-End)

 Procedures described are valid for **HOPEX Windows Front-End**. For **HOPEX Web Front-End**, see "[Object Display Options \(Web Front-End\)](#)", page 80.

HOPEX objects are represented in a diagram by graphical shapes. Each object is represented by a default shape. Several shapes are available for each object.

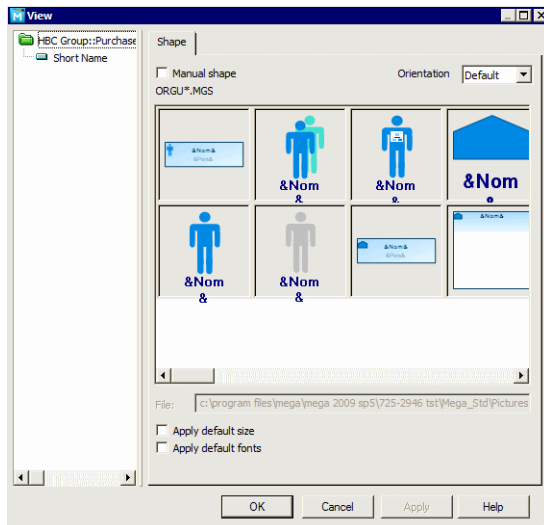
You can modify:

- the object shape
- the object default shape

Modifying object shape

To modify, for example, the shape representing an org-unit in a diagram:

1. In the diagram, right-click the org-unit and select **Shapes and Details**. The Display dialog box opens.



2. In the **Shape** frame, select the desired shape, then click **Apply**.
 ➤ The **File** box indicates the file path of the selected shape.

Modifying object default shape

To modify the default shape of an object:

Eg: the shape of an org-unit:

1. Right-click the object and select **Shapes and Details**. The Display dialog box opens.
2. In the **Shape** frame, clear the **Manual Shape** check box to display the default shape of the object.
In the grayed **File** box, the name of the default shape is displayed.
3. Note the name of the default shape of the object.

orgu_bg.mgs (for org-unit)

4. In the **Shape** frame, select the shape you wish to display by default.
5. In the **File** box, note the path of the new shape.
 ... \Mega_Std \Pictures.7220 \Method \orgud.mgs
6. Under the path indicated, select the file orgud.mgs and copy this in the ... \Mega_Usr folder.
7. Change the name of the copied file to the default name.

orgud.mgs par orgu_bg.mgs

The default shape of the object (eg: org-unit) is modified.

Shape modification default parameters

In the **Display** window, two options are used when customizaing the shape:

- **Apply default size**
If you have customized the shape size, by selecting this option you can apply a default size to the selected shape on modification.
If this option is not selected, shape size will remain unchanged on shape modification.
- **Apply default fonts**
If you have customized the shape font, by selecting this option you can apply a default font to the selected shape on modification.
If this option is not selected, shape font will remain unchanged on shape modification.

☛ For more details on display options of objects that can be placed in swimlanes, see ["Display mode of objects in a swimlane", page 85](#).

Shape characteristics

In the left pane of the **Display** dialog box, select one of the characteristics listed below the object name (for example **Name**).

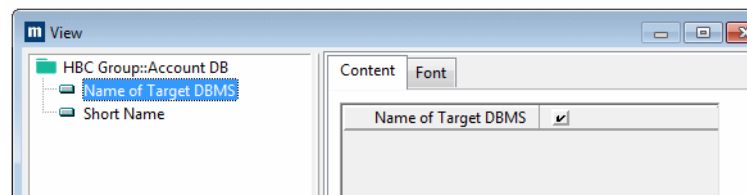
The right pane displays two tabs:

- The **Content** tab enables selection of the fields that are displayed in the shape.
- The **Font** tab enables modification of characteristics of the font used by the shape.

Display object characteristics

To modify the display of characteristics proposed by default:

1. Right-click the object in question.
2. Select **Shapes and Details**.
3. In the window that appears, click in the tree on the left, on an object type characteristic.



You can for example choose to display or not display the name of the target DBMS of database object type.

4. Select the corresponding check box and click **OK**.

☛ The characteristics appear or disappear according to the choices made. These values can be modified in the **Characteristics** tab of the **Properties** dialog box of the object.

Modifying text field positions (Windows Front-End).

You can modify the position of object text fields that can be placed in a diagram.

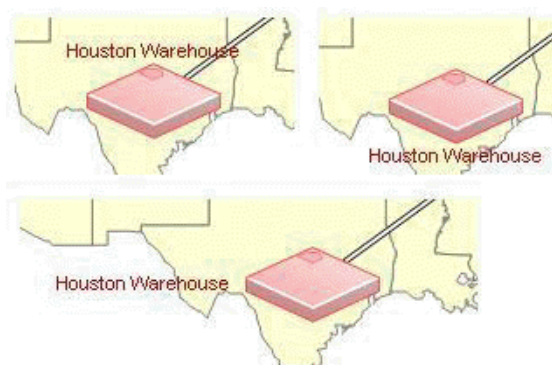
 In this way, the position is no longer defined as static in the .mgs file.

To modify the position of a the text field of an object:

- 1. Right-click the text field, select **Position** and the desired position.

Eg: the text field of a site.

You can thus choose to position the text box on top, on the bottom, to the left, etc.



Object Display Options (Web Front-End)

The command **Shapes and Details** allows you to customize object display.

To modify the shape of an object in **HOPEX Web Front-End**:

1. In a diagram, select an object.
2. Right-click the object and select **Shapes and Details**.
3. In the right pane of the window, select **Manual shape**.
4. Select a shape from those proposed and click **OK**.

 To return to the default shape, clear **Manual shape**.

Using Swimlanes

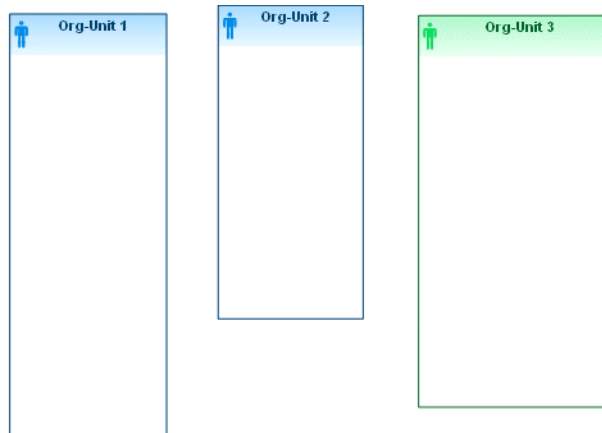
The swimlane is a tool that enables graphical presentation of certain diagram types. The table below shows examples of objects that can be placed in a swimlane (according to diagram type).

Diagram type	Objects that can be placed in swimlane
Flowchart	org-unit, role
Business Process Diagram	org-unit, role
Operating mode	org-unit, role
Workflow Diagram	org-unit, role, application
objective and requirement diagram	perspective
Activity Diagram (UML)	partition

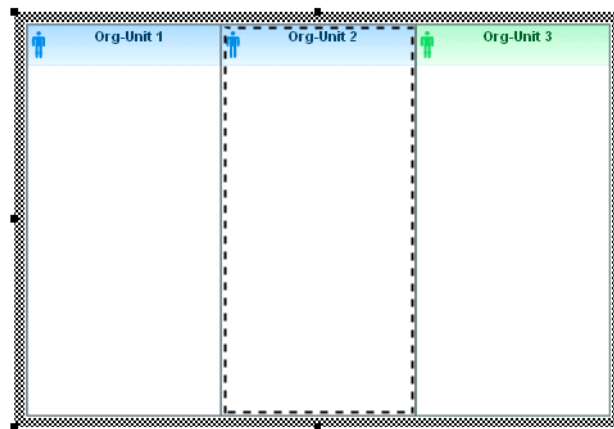
Operating principle

If you insert several org-units of different dimensions in a diagram, by inserting them in a swimlane they automatically take identical dimensions and are automatically aligned.

The objects concerned can be arranged automatically in vertical or horizontal swimlanes.



Org-unit arrangement without use of swimlanes

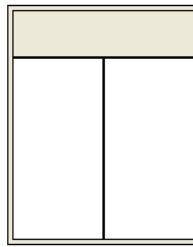


Org-unit arrangement in swimlanes

Creating swimlanes

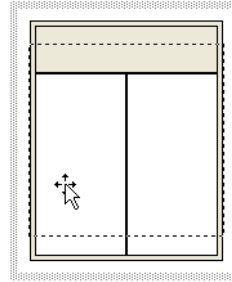
To create a swimlane:

1. In the toolbar of a diagram, for example a flowchart, click on one of the two buttons in the toolbar for swimlane creation.
 -  enables creation of a vertical swimlane.
 -  enables creation of a horizontal swimlane.
2. Click on the diagram.
The swimlane (in this case vertical) is placed in the diagram.

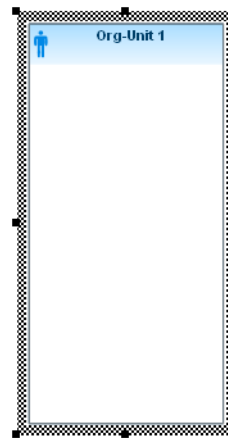


To place an org-unit in the swimlane:

- 1 Click on the org-unit and holding the mouse button down, move the org-unit into the swimlane.



The swimlane adapts to the size of the org-unit.



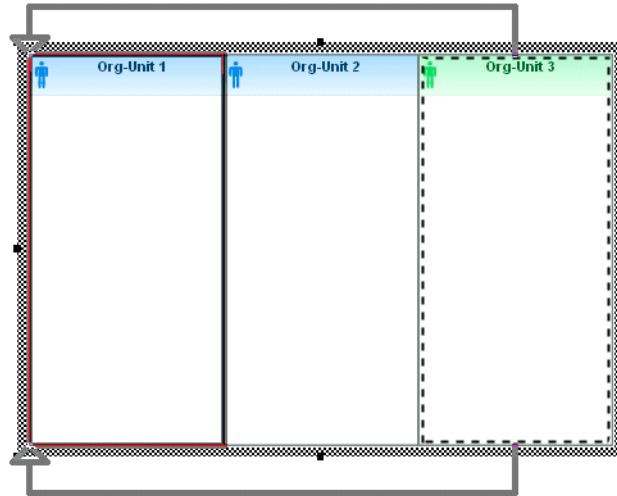
If other objects are linked to the org-unit (operations, organizational processes, etc.), these will remain attached to the org-unit during its movement.

Modifying the order of objects in a pool

A zone comprising several swimlanes is called a "pool".

To change the order of objects:

- 1 Using the mouse, move the object to the required position.
An arrow indicates the direction of movement and the new position of the object.



To remove an object from a pool:

- 1 Using the mouse, drag it outside the zone.

Creating a new object in a swimlane

When creating a new org-unit in a diagram containing a swimlane, the org-unit can be added inside or outside the swimlane.

To create a new object inside the swimlane:

1. In the insert toolbar, click the icon corresponding to the object you want to create.
2. Then click inside the swimlane.
The object creation dialog box appears.
3. Enter the name of the object and click OK.

Display mode of objects in a swimlane

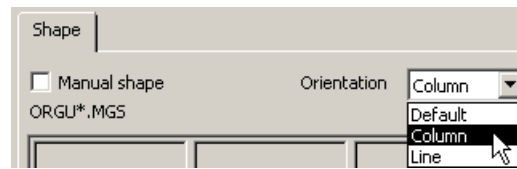
Objects that can be placed in a swimlane have an additional characteristic enabling determination of object display mode (in lines or columns).

 This function is available with **HOPEX Windows Front-End** only.

To view this characteristic:

1. Right-click the object and select **Shapes and Details**.
2. In the dialog box that opens, select **Orientation**, which allows selection of object display mode:
 - **Default**
 - **Column** (vertical)
 - **Line** (horizontal)

If you originally created a vertical swimlane, objects placed in the swimlane will have column display mode.

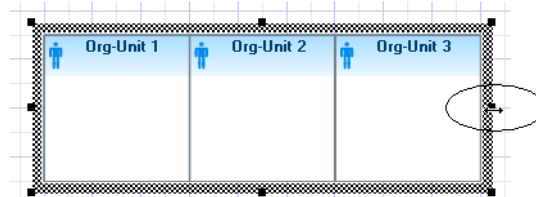


Globally modifying size of objects in a pool

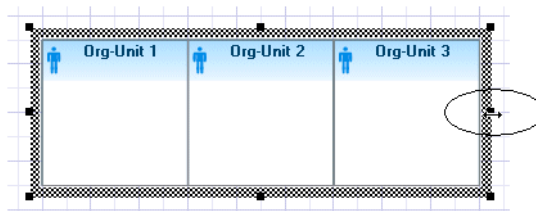
You can modify the size of all objects placed in a pool in a single operation.

To globally modify size of objects in a pool:

1. Select the pool and position the cursor on a handle on the desired outside edge, changing the shape of the cursor to a small arrow.



2. Holding the mouse button down, move the cursor to modify size of the selection.



The size of all objects in the pool is modified in identical proportion.

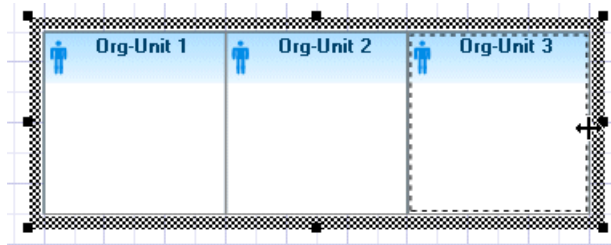
Modifying size of a single object in a pool

You can modify the size of just one object in a pool.

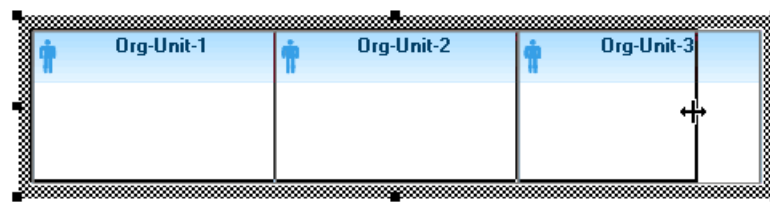
To do this:

1. Select the object you wish to modify.
A dotted line frame appears around the object.

- Position the cursor on the dotted line frame.
The cursor changes shape to an arrow.



- Holding the mouse button down, change the size of your selection.



Only the selected object is modified.

Changing Shape Sets

As standard, you have several sets of shapes which correspond to:

- versions earlier than 5.2
- version 5.2 and later versions (except version 2005)
- version 2005
- version 2009
- Version HOPEX V1R3 and higher

To modify the shapes version used in a diagram:

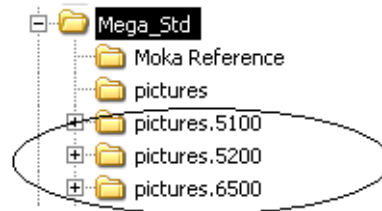
- In a diagram, select **Diagram > Properties**.
*In HOPEX Web Front-End, in the diagram pop-up menu, select **Properties**.*
- In the **Characteristics** tab of the diagram properties, select a value in the **Shapes Version** field.
 - "Before MEGA 5.2"
 - "From MEGA 5.2"
 - "From MEGA 2005"
 - "From MEGA 2009"
 - "From HOPEX V1R3"
- Open the diagram.
- Click **Drawing > Initialize Shapes** (Windows Front-End).
The appropriate shapes are then loaded.

If you are using a version of **HOPEX** later than 5.2:

- New diagrams will use the new shapes by default.
 ➤ If you want to use the old shapes, you must select the value "Before HOPEX 5.2" or "After MEGA 5.2" in the **Shapes Version** list box.
- For compatibility, old diagrams always use the old shapes.
 ➤ If you want to use the more recent shapes, you must select the value "After HOPEX 2005" in the **Shapes Version** list box.

Shapes storage folder

Versions	Shapes storage folder
Earlier than 5.2	MEGA_STD\Pictures.5100
Version 5.2 or later except version 2005	MEGA_STD\Pictures.5200
Version 2005	MEGA_STD\Pictures.6500
Version 2009	MEGA_STD\Pictures.7220
HOPEX V1 and higher	MEGA_STD\Pictures.7600



HANDLING LINKS BETWEEN OBJECTS

Described here are the operations you can execute on links between modeling objects in **HOPEX**.

Creating Links

Connecting Objects

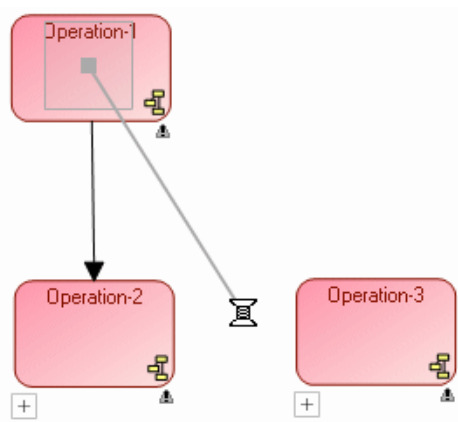
1. In the diagram insert toolbar, click the **Create Link** icon .
2. Click on the first object and, keeping the mouse button pressed down, draw a line to the second.

Changing Target of a Link

You can easily modify the target of an object, that is the object to which an object is connected.

To change target of an object:

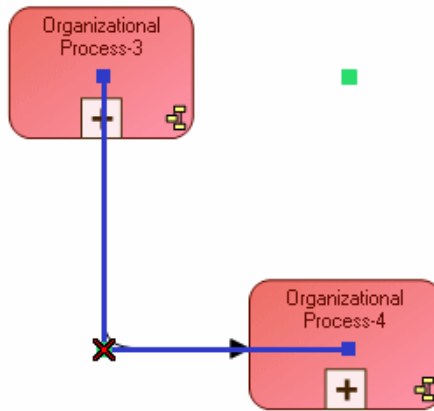
- 1. Select the end of the link, then holding the <Shift> key down, move the link to another target object.



☛ This action allows you to retain the characteristics of the link.

Managing Link Joints

The <Ctrl> key enables action on link joints.



Link joint example

Context of use	Effect of <Ctrl> key
Click a free link and move it, holding the <Ctrl> key down.	A joint is created.
When several joints exist, click one of these holding the Ctrl key down.	The selected joint is deleted.
Double-click the joint of an orthogonal link.	The position of the orthogonal link is reversed.

☞ To delete a link joint when only one joint exists, select the joint and click button . The link becomes straight.

Modifying Links

Making a link orthogonal

Having created a link between two objects, you can easily modify its presentation to make it orthogonal.

To make a link orthogonal:

1. Open the dialog you have just created.

2. Click .
The link becomes orthogonal.

Perspective links

In technical architecture diagrams of **HOPEX IT Architecture**, links can be in perspective ().

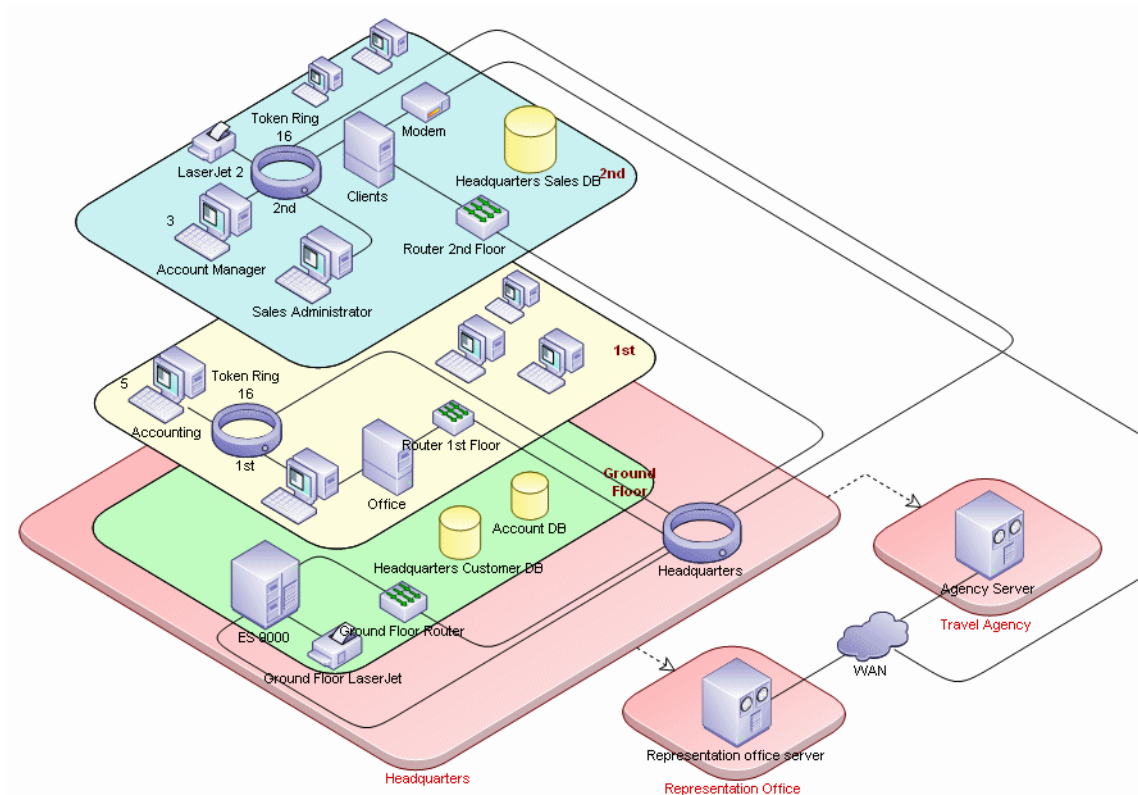


Diagram with links in perspective

MANAGING TEXTS

In diagrams, texts enable informal documentation of diagrams.

Creating Texts

To create a text in a diagram:

1. Click  then **A Text**.
2. Click where you want to create your text and move the pointer to indicate the size of the rectangle that will contain the text.

Fields can be used to insert variable information such as page numbers and dates into your diagram (see ["Inserting Fields", page 93](#)). These fields are updated automatically.

A text box is created under the shape of the element, containing the cursor for text entry.

Modifying Texts

To modify a text:

- 】 Select the text and press the <F2> key.

The pointer shape changes to a cursor. You can then move the cursor using the keyboard arrow keys or by clicking in the text where you want to position the cursor.

The characters you type are inserted where the cursor is positioned. The <Backspace> and <Delete> keys are used to delete characters. You can use **Copy**, **Cut** and **Paste** after selecting text. Simultaneously pressing <Ctrl> and <Enter> enables insertion of line breaks.

Selecting Texts

To select text into a diagram:

- 】 Position the cursor before the first character to be selected and, holding the mouse button down, drag the cursor to the last character you want to select.

The standard Windows arrow keys for moving the cursor can be used.

Specifying Fonts

To specify the text font:

- 1. In the pop-up menu of the text, select **Font**.
In the window that appears, you can:
 - Specify the style, size and font of text characters.
 - Styles and sizes available vary as a function of the font selected.
 - Specify text alignment.
 - Specify text color and text background.
 - Specify a color using the proposed color selector.
 - Select **Word-wrap text** to automatically wrap the text to a new line if it does not fit on one line.
 - Select **Automatic width adjustment** to resize the text box according to the actual size of the text.

 If you do not select this option, you may have to resize the text box using the handles in order to see all of your text.

Positioning Texts Vertically

To position text vertically:

- 1. Right-click the text and select **Rotation > Rotation left 90°**  or **Rotation right 90°** .

 This text can then be reused in a shape.

Inserting Fields

Fields provide you with a rapid means of inserting date, title, and page number in a diagram. Fields are updated continually, and therefore when printing your diagram, you need not manually update your diagram to print the correct date.

To insert a field in a diagram:

1. Click  then **Field**.
The **Insert Field** dialog box appears.
2. Select the desired field in the **Field Type** box.
The contents of the **Format** box are determined by the type of field you selected.

Field formats

Formats appear as follows:

- **Date and time**
 - JJ: day
 - MM: month number (1-12)
 - MMMM: month name
 - YY: year in two numbers (01)
 - YYYY: year in four numbers (2001)
 - hh:mm: hour and minutes on 24 h (14:45)
 - hh:mm AM/PM: hour and minutes on 12 h (2:45 AM)
- **Title/short title**
 - AAAAA AAAAA AAAAA: Uppercase
 - Aaaaa Aaaaa Aaaaa: First letter in uppercase
 - aaaaa aaaaa aaaaa: Diagram name all lowercase
- **Page number**
 - 1 2 3 : Arabic numerals
 - A B C: Letters
 - I II III: Roman numerals
 - 1/x 2/x 3/x: Page number in Arabic numerals followed by total number of pages
 - 1A 1B 1C 2A 2B 2C : Numbering in rows and columns.
- Diagram creator
- Diagram modifier
- Diagram creation date / time
- Diagram modification date / time
- Diagram nature
- Short name of object described
- Long name of object described

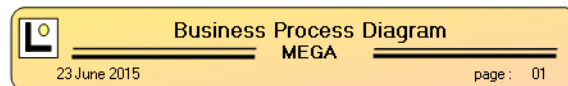
Inserting a Title Block



A title block is an area and a set of data used to visually identify the diagram more easily.

To insert a title block in your diagram:

- 1 Click  **Title Block** then the area where you want to insert the title block.



☛ You can access the shape of the title block easily from the diagram in **HOPEX Windows Front-End**. For this, in your diagram, right-click on the shape of the title block and select **Shape**.

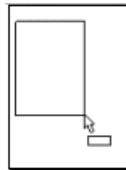
MANAGING DRAWING OBJECTS

Described here are the operations you can execute on drawing objects in **HOPEX**.

Creating Drawing Objects

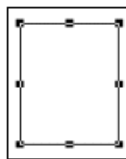
To create a basic drawing object (square, circle, polygon, etc.) :

1. Select the type of element using button  .
An icon follows the mouse pointer, indicating the type of drawing object selected. This icon resembles the icon on the button in the drawing objects toolbar 
2. Click at the location where you want to anchor one of the angles of the drawing object.
3. Holding the mouse button down, drag the mouse to where you want the opposite angle to be:



4. Release the mouse button.

The handles around a drawing object indicate that it is selected.



After the drawing object is created, the pointer returns to its usual shape. You can now select and move elements.

To create a line or a text, see ["Handling Lines", page 103](#), and ["Creating Texts", page 92](#).

Tips for creating drawing objects

To create several drawing objects of the same type without having to select the type each time:

- Click  then double-click the required type of drawing object.

The type remains selected until you press the <Esc> key.

To create a drawing object with height equal to width (circle, square, etc.):

- Hold the <Shift> key down while moving the mouse.

To create a drawing object based on its center:

- Hold down the <Ctrl> key while dragging the mouse.

 Hold down the <Shift> and <Ctrl> keys to create a regular geometric shape for the object, based on its central point.

Selecting Drawing Objects

After you create a drawing object, you can modify it (size, colors, etc.), duplicate it, move it, align it with another drawing object and change how it is displayed on the screen.

To modify an element, it is first necessary to select it.

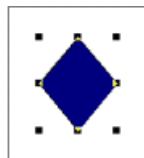
Selecting an element

To select an element:

- Position the pointer on the element and click.

 If a drawing object type is already selected, press the <Esc> key, or select the pointer button in the toolbar.

The element is surrounded by small squares called “handles”. These handles allow you to modify dimensions of the element.

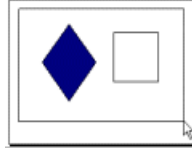


If the drawing object selected is a line or a link, then small squares or “joints” mark the end of each section (see ["Handling Lines", page 103](#)).

To select several elements at the same time, drag the mouse to enclose the drawing objects in a selection rectangle:

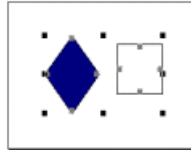
1. Move the mouse holding the button down.
A rectangle appears. One of the angles of this rectangle is where you first pressed the mouse button, and the opposite angle is where the pointer is presently.

2. Release the mouse button.



Note that the drawing objects have to be completely enclosed by the rectangle in order to be selected.

☛ If you have only partially enclosed a drawing object, it will not be



selected. Therefore, a group of drawing objects or a shape whose elements are not close to each other, would not be selected even if it was apparently part of the selection.

Drawing object selection shortcuts

You can select several drawing objects by holding down the <Shift> key while clicking on each drawing object.

When several drawing objects are selected, you can deselect one or more of them by holding down the <Shift> key and clicking on them.

To select all of the objects in the diagram:

- ☛ Simultaneously press keys <Ctrl> and <A>.

Cutting, Copying, Pasting, Deleting and Duplicating Drawing Objects

These menu commands of the drawing object pop-up menu enable deletion, moving one or several diagram elements.

Cut

Select **Cut** to delete the selected drawing objects and to place them on the clipboard (the previous clipboard contents are overwritten).

☛ Only graphical drawing objects and links are actually deleted when you use the **Cut** command. If you delete element, they are no longer displayed in the diagram, but they still exist in the repository.

Copy

Select **Copy** to put your selection on the clipboard (the previous clipboard contents are overwritten).

Paste

Select **Paste** to put the contents of the clipboard in the diagram at the position you clicked last. Note that the clipboard is not emptied and you can repaste its contents multiple times.

Clear

Select **Clear** to delete your selection from the diagram. This command does not affect the clipboard contents.

Duplicating

Select **Duplicate** to copy your selection and place it next to the original.

 *This function is available with **HOPEX Windows Front-End** only.*

To duplicate you can also:

- Hold down the <Ctrl> key and select the drawing object(s) you want to duplicate.
- Keep the <Ctrl> key down and drag the selection to the place in the diagram where you want the duplicate to be.
- Release the mouse button, then the <Ctrl> key.

The selection is still at its original location, but its copy is placed where you dragged it.

Aligning Drawing Objects

To align drawing objects:

1. Select the objects to be aligned, holding the <Ctrl> key down.
2. Click the arrow at the extreme right of the **Align** button.
3. Select an alignment mode in the list proposed.

Alignment by selection rectangle

When you select elements using a rectangle traced with the mouse, the commands **Top (Bottom, Right, Left)** align the selection on the top edge of the highest element (or bottom, right, left).

Centering is on the vertical or horizontal median.

 *You must then select the reference element by clicking it while holding down the <Shift> key.*

Alignment by successive clicks

When you successively select elements with <Shift> key held down, the last element selected serves as reference: the selection is aligned on the top (bottom, right, left) edge of the element.

Centering is with respect to the last element selected.

Alignment on the grid

To align the selected object on the grid, see ["Activating the grid", page 101](#)

Note that the size of objects created without a grid or using a finer grid is modified to become a multiple of grid spacing (the object is either slightly enlarged or reduced to minimize modifications).

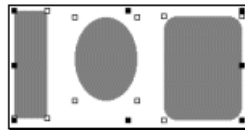
Spacing the Elements

To equally space selected drawing objects:

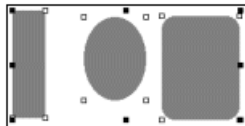
1. Select the drawing objects by holding down the <Shift> key and clicking on them.
2. Right-click the object selection and select a command from the **Space** sub-menu according to the direction required.

So that these commands are available, it is necessary to select at least three elements.

Using the commands **Space > Horizontally** and **Vertically**, the space between the three drawing objects becomes identical.



Using the commands **Space Horizontal Centers** or **Vertical Centers**, the distance between centers of the three drawing objects becomes identical.



Bringing Objects to Front/Sending Them to Back

If you place several drawing objects at the same location, they will be superimposed. Drawing objects cover each other in the order you create them: the latest created drawing object covers the previous one. You can modify this order.

To put an object behind another:

1. Select the drawing object(s).
2. In the drawing object pop-up menu, select **Order > Bring forward** or **Order > Send backward**.

To put a drawing object in front of all the others:

- In the **Edit** toolbar, click .

To put a drawing object behind all the others:

In the **Edit** toolbar, click .

In this way the drawing objects can be completely reordered by successively applying these various commands.

Resizing Objects

To modify the dimensions of an object:

1. Select the object concerned.
2. Point to a handle.
The pointer shape changes to a double-headed arrow. The direction of the arrow indicates whether you can resize the drawing object horizontally, vertically, or both: .
3. Hold the mouse button down: a selection rectangle appears around the drawing object.
4. Drag the mouse.
The rectangle indicates the new size of the object.
5. Release the mouse button when the desired dimensions are obtained.

Shortcuts concerning resizing

You can change both the height and width of a drawing object proportionally:

- 】 By holding down the <Shift> key and dragging one of the handles at a corner of the object.

To create a drawing object based on its center:

- 】 Hold down the <Ctrl> key while dragging the mouse.

☛ These shortcuts exist in **HOPEX Windows Front-End** only.

Resizing drawing objects to the size of another object

To resize one or more drawing objects to the size of a reference object:

1. Select objects to be resized.
2. Select the reference object by holding down the <Shift> key and clicking it.
3. In the pop-up menu, select the desired option of **Make Same Size: Height, Width, Both** (height and width).

The drawing objects now have the same height and/or width as the reference object.

Moving Objects

To move an object or a group of objects:

1. Select them.

2. Click an object in the selection, avoiding a handle.
3. Holding the mouse button down, drag the selection to the desired location, then release the mouse button.

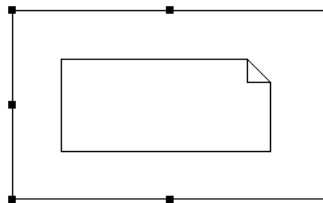
☛ When the grid is enabled (see ["Using the Grid", page 101](#)), the drawing objects you move are automatically aligned with the grid.

If you move the drawing object beyond the current diagram area, the diagram area automatically scrolls to keep it in view. Note that you cannot move elements outside a diagram.

Moving nested elements

When a drawing object is contained within another graphic element, there are two possibilities:

- Move the two elements together.
- Move only one of the two elements.



To move the two elements together:

- 】 Click the element that contains the other and move it. The second element will follow.

To move the containing element without moving the contained element:

- 】 Move the containing element holding down the <Shift> key.

☛ This procedure can be useful in flowcharts (for example to move an org-unit with or without its attached operations).

Using the Grid

Showing the grid

To show the grid:

1. Right-click the workspace and select **Grid**.
2. In the dialog box that opens, select **Show grid**.

☛ The fact that the grid is shown does not mean that it is active. To activate the grid, the **Snap objects to grid** option must be selected.

Activating the grid

When the grid is activated, the drawing objects you create are automatically aligned to the grid lines. The size of drawing objects is a multiple of grid spacing. When you move drawing objects, they will move by increments equal to grid spacing.

To activate the grid:

1. Right-click the workspace and select **Grid**.
2. In the dialog box that opens, select **Snap objects to grid**.
Objects created before the grid is activated will now be aligned on the grid (it can be activated after the event).

☛ *The grid can be active even if it is not shown.*

☛ *When you hold down the <Alt> key while manipulating objects, the grid is temporarily deactivated if previously activated, and vice-versa.*

Modifying grid lines and spacing

You can configure grid display by modifying:

- **Spacing** of grid lines.
- **Color** of grid lines.

HANDLING LINES

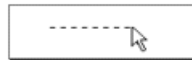
Operations concerning lines in **HOPEX** are described here.

Drawing Lines

Tracing a line

To trace a line:

1. In the tool bar on the left, click  and select **Line**.
2. Click the mouse where you want the line to begin and, holding the mouse button down, drag the mouse to define the length of your line.



3. Release the mouse button where you want the line to end.
The line is created as a straight line with a handle at each end.



Creating a joint

To create a joint in a line in order to segment the line, for example:

1. Select the line by clicking on it, taking care not to click on a handle.
2. Position the pointer on the line and press the Ctrl key until the pointer changes to form .



3. Holding the <Ctrl> key down, left-click and move the pointer to where you wish to segment the line.

A joint represented by a handle is added.



You can perform this operation as many times as you want. You can then drag the joints to modify the shape of the line.

Deleting a joint

To delete a joint (except at the two ends):

1. Point on the joint and hold down the <Ctrl> key (the pointer shape changes to +) and click to delete the joint in the line.

The joint is deleted.

You can also right-click on joints, which allows you to simultaneously delete all joints.



Moving Line Segments

To change the shape of a line:

1. Point on a joint.
It changes shape.
2. Holding the mouse button down, drag the joint to the new position.

Moving Lines

To move a line:

1. First select it.
2. Point to the line (and not to a handle) and holding the mouse button down, drag it to the desired position.

☞ If you perform the above steps by selecting a handle, you will change the shape of the line and not its position.

Connecting a Line to a Drawing Object

You can connect the end of a line to an object, so that if the object moves, the line moves with it.

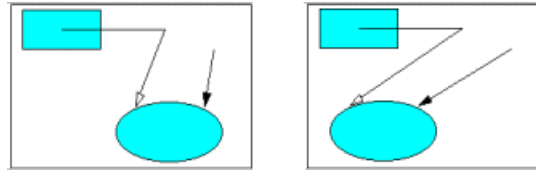
To attach a line to an element:

1. Select the handle at the end of the line.
2. Holding the mouse button down, drag the handle inside the drawing object.
3. Release the mouse button.
4. Right-click the handle and in the pop-up menu that appears, select **Connect to object**.

The pointer takes shape  and the handle is attached to the element: when the element is moved, the handle follows.

You can also double-click on the handle to connect or disconnect the line.

The linked extremity can then be moved outside the element: when the element moves, the end of the line moves, maintaining its position related to the element. In the example below, the two arrows are connected to the ellipse and follow its movements:



When an end is connected to a drawing object, the pointer shape changes to  when you point to the handle.

To disconnect a line from a drawing object:

1. Position the pointer over the connected end of the line.
2. In the pop-up menu, select **Disconnect**.

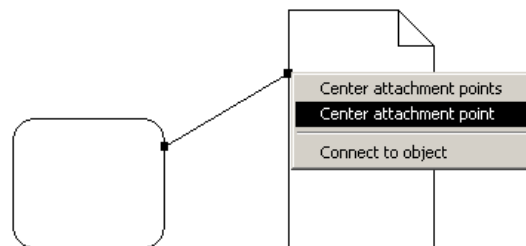
Centering Attachment Points

When you have attached a line to an object, or in the case of links in diagrams, you can center the attachment points.

 For more details on how to attach a line to an object, see ["Connecting a Line to a Drawing Object", page 104](#).

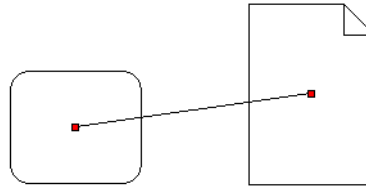
To center attachment points:

1. Right-click an attachment point and select **Center attachment point**.



 You can also center the attachment point by selecting and double-clicking it.

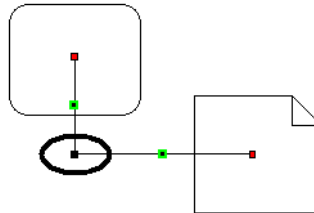
You can also center the two attachment points simultaneously by selecting **Center attachment points**.



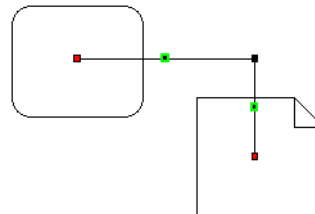
Reversing Position of Orthogonal Lines

To reverse the position of an orthogonal line relative to the objects to which it is attached:

- 1 Double-click the joint in the orthogonal line:



You should obtain the results below:



Lines Representing Links

Links in diagrams behave like lines: it is possible to modify their shape, appearance, etc. Links are obviously attached to the objects that they connect.

For certain links, text zones can be displayed (for example, for cardinalities). It is possible to modify the position of the text with respect to the line by selecting the text zone and dragging it along the line. Possible movements are necessarily limited

so that the text remains attached to the link. This function allows the text to be positioned above, below or on the line.

For more details, see ["Handling Links Between Objects", page 89](#).

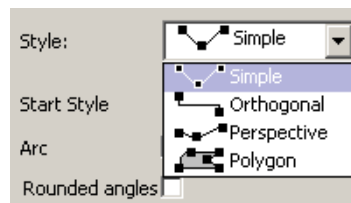
Modifying Lines

To modify the appearance of a line:

1. Right-click on the line.
2. Select **Colors and Borders**.

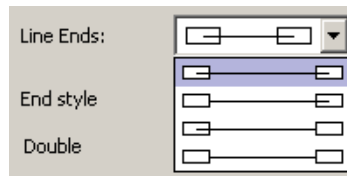
The **Colors and Borders** tab enables definition of:

- Line style (simple, orthogonal, perspective, polygon).

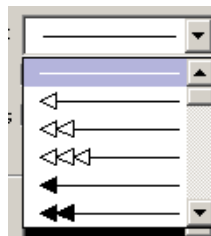


The last type, which gives a closed shape, allows you to draw an irregular polygon that can be filled with a color and a pattern as for other elements.

- Line ends (covered or not by connected elements).



- Style for the beginning (**Start style**) and the end (**End style**) of the line.



☛ If you do not want an arrow at the end of the line, select the simple straight line.

Color of the interior of arrow heads can be modified using the **Fill** frame (only if you have selected an arrow style with solid head).

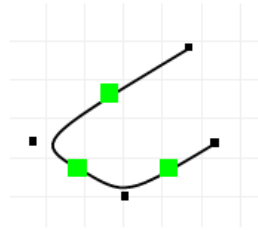
HOPEX enables drawing, for all line types, of:

- **Rounded angles.**
- **Arcs.**
- **Double** lines.

Examples of lines



Orthogonal line with rounded angles



Perspective line with rounded angles

Configuring Bridges in Diagrams

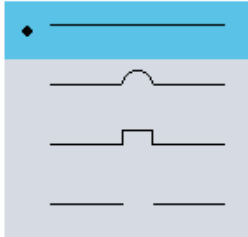
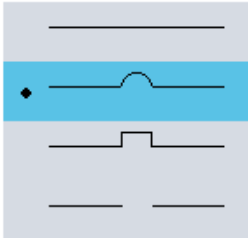
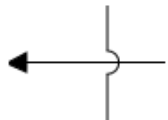
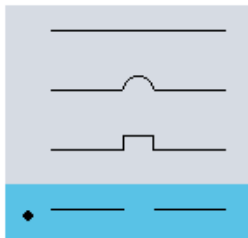
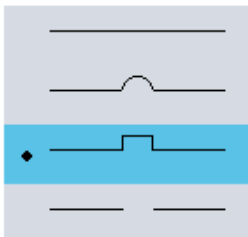
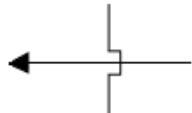
Bridges can help you improve the readability of diagrams when several lines cross each other. Those lines can be drawing lines, links, sequences, etc.

Parameterizing the default appearance of bridges

To modify the default appearance of bridges in diagrams:

1. Access user options.
 - ["Managing User Options \(Windows Front-End\)", page 60](#)
 - ["Managing User Options \(Web Front-End\)", page 44](#)
2. In user options, select **Diagrams/Edit Shapes**.
The option **Style of bridges** enables you to specify how bridges display by default in the application.

Appearance of bridges in diagrams

Style of bridge option value	Icon in the diagram toolbar	Appearance in the diagram
Disabled		
Semi-circle		
Empty space		
Rectangular		

Modifying the appearance of bridges in a diagram

You can modify the style of bridges applied by default in diagrams or modify the style of a specific bridge.

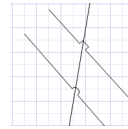
 *Lines created in a diagram are associated by default to the style of bridge configured in the user options (for new diagrams). For more details, see ["Parameterizing the default appearance of bridges", page 108](#).*

To modify the default appearance of bridges a diagram:

- 1 In a diagram toolbar, click the  icon and select a type of bridge. This style applies to new bridges created in the diagram.

To change the bridge of a specific line:

- 1 Select the line you are interested in and select a type of bridge. You may apply a different bridge style to each line of the diagram.



When opening diagrams created before the feature was made available, bridges are disabled. However you may:

- *Select a type of bridge after opening the diagram. Your selection is saved for new lines.*
- *Select an existing line and change its appearance.*

MODIFYING SHAPE COLORS AND BORDERS

 The following procedures are described for **HOPEX Windows Front-End**. These functions are available in **HOPEX Web Front-End** but with certain possible variants due to the interface.

To customize your shapes, you can use fill colors, modify **Style**, **Color** and **Weight** of a line or border, add texture, round off angles, etc.

To modify element colors and borders:

- 1 Right-click the workspace and select **Colors and Borders**.

Modifying Shape Fill

You can fill your shapes with plain color, shading or a pattern.

The **Fill** frame in the **Graphical options** dialog box allows you to select a fill color, shading and pattern for shapes.

Selecting a color

When objects cover other objects, color **No fill** allows you to view elements in the background.

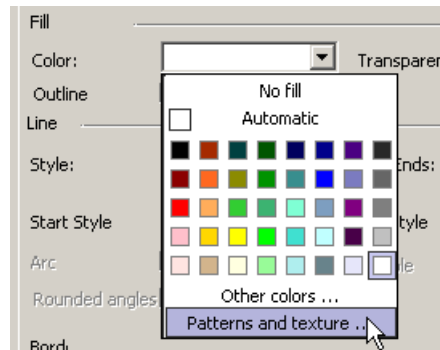
To select a color:

- 1 Click the desired color in the **Color** group box.

If a suitable color is not displayed, you can refine selection by selecting:

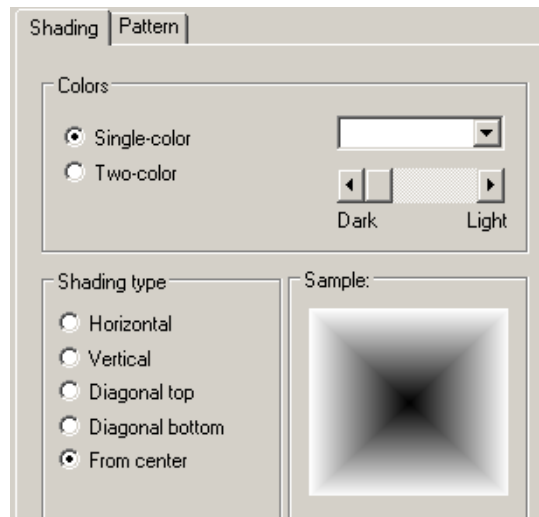
- **Other colors...**
HOPEX offers a range of 16 million colors (for borders, fonts, texts, etc.). In the color picker that opens, click the desired color or enter values in the Shade, Saturation, Brightness, Red, Green and Blue boxes. You can drag the slider to adjust the luminosity of the currently selected color.
- **Shading and Pattern** (see below)

Applying shading and pattern



Shading

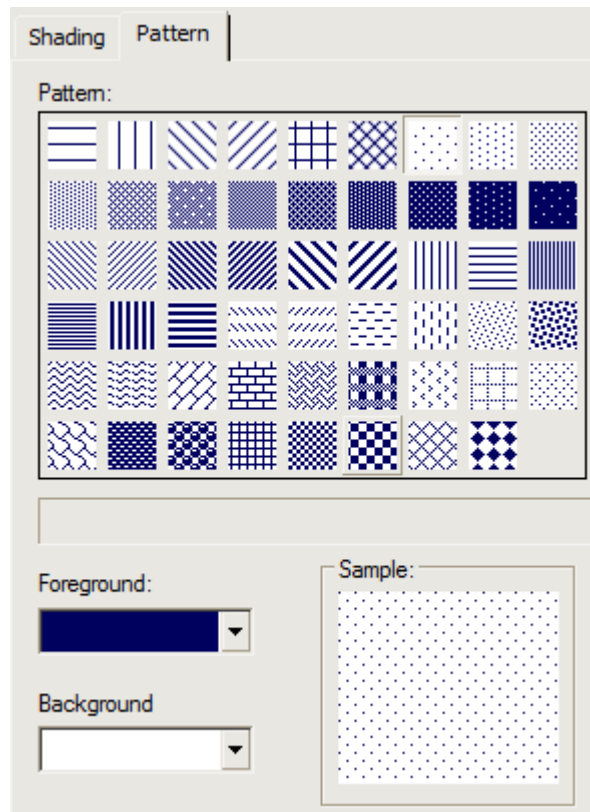
- Colors



- **Single-Color:** fills the selected object with single color shading that can be modified between extremes of black and white. Click the desired color in the Single-color drop-down box, then drag the Dark/Light button to adjust its brightness.
- **Two-Color:** fills the selected object with a color that gradually changes to another color. Click the desired colors in the Single-color and Two-color drop-down boxes.
- **Shading type**
The "Sample" box lets you see the selected shading type.
 - Horizontal
 - Vertical
 - Diagonal top
 - Diagonal bottom
 - From center

Pattern

- Click the desired fill pattern.



To modify pattern color:

- Click the new colors desired in the **Foreground** and **Background** drop-down boxes.

Managing transparency

HOPEX enables management of transparency of graphical elements.

- In the **Transparency** box, select or enter a value.
The transparency percentage indicates the degree of transparency (or conversely the opacity) of fill.

Adding texture

A **Texture** effect can be applied to closed (polygon) shapes, which adds depth to the diagram.

For more details on closed shapes, see ["Modifying Drawing Object Borders", page 114.](#)

Modifying Drawing Object Borders

To modify **Weight**, **Color** and **Style** of borders of drawing objects:

- 1 In the **Border** frame of the **Colors and Borders** tab, select the desired values in the drop-down boxes.

Color

To hide your lines and borders:

- 1 In the **Color** drop-down list, select value "No border".

Style

To modify style of elements:

- 1 Click the desired border style.

To obtain a thicker or thinner line:

- 1 Select a border style and modify the **Weight** parameter.

Weight

To modify weight of elements:

- 1 Select the desired border weight.

To obtain a thicker or thinner line:

- 1 Enter a new value in the **Weight** drop-down list.

ZOOMING AND MOVING AROUND IN DIAGRAMS

Zoom functions enabling easy movement in diagrams are available under both types of Front-End.

Zooming in Windows Front-End

You can scroll your diagram on the screen without using the scroll bars, by dragging the mouse with button held down in the direction you want. Note that you can also do this when selecting or moving drawing objects.

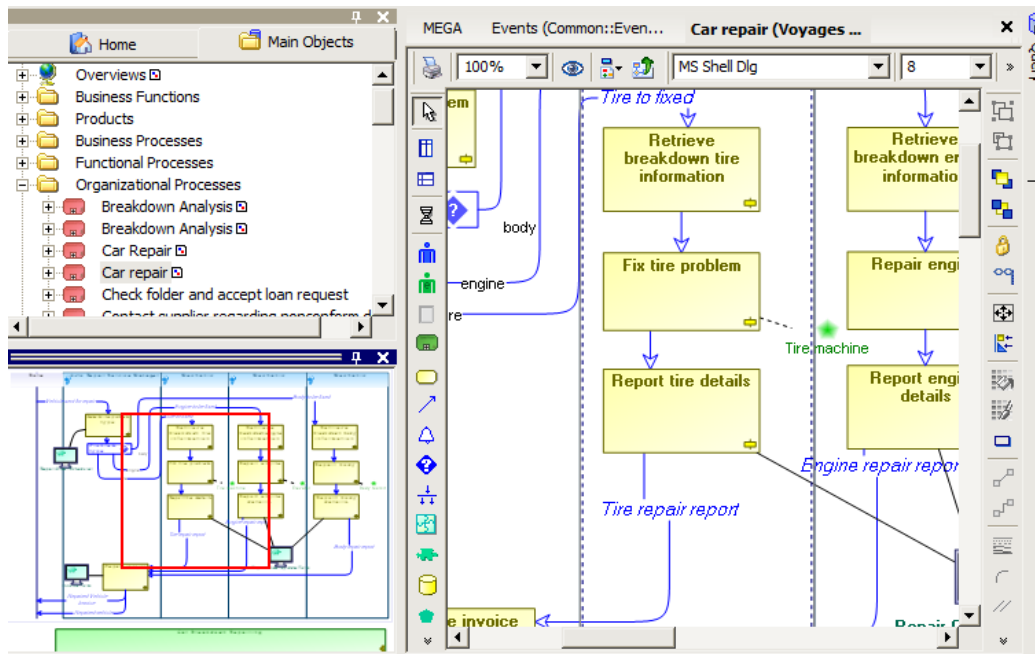
View > Scale allows you to modify view mode:

- **Actual Size** displays the elements at the size they will appear when printed, as a function of dimensions indicated for **Page Setup** in the **File** menu.
- Select **Current Page** to see the entire page on which you are currently working. The scale is adapted to show the entire page.
- Select **Pages Used** to see all pages containing at least one drawing object of the diagram.
- Select **All Pages** to see the entire diagram.
- Select **Previous Scale** to see the last scale used to display the diagram.

➤ **View > Page Boundaries** allows you to view, in the workspace and in the zoom window, the boundaries of pages containing the diagram.

To view the entire diagram, to move rapidly within it and to modify the display scale:

- 1 In the **View** menu, select **Pan and Zoom Window**.



To go to a particular location in the diagram:

- 1 Click the desired location in the zoom window.

The place where you clicked (if it is not too close to the edge of the diagram) will appear in the center of the main window.

Note that you cannot use this method if the entire diagram is displayed (**All Pages**).

You can also specify the area of the diagram in which you want to work by dragging the mouse to define a rectangle around it: only the selected part appears; the scale automatically adapts to fill the window.

Zooming in Web Front-End

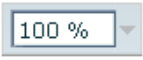
When you have zoomed in a diagram, it can be useful to be able to move the diagram quickly, without using the scroll bars.

Zooming

To zoom in or out in a diagram:

- 1 In the insert toolbar, click .
- 2 Revolve the mouse wheel in the appropriate direction.

 Simultaneously pressing the <Ctrl> key and revolving the mouse wheel enables zoom in the complete page (this is a possibility offered by Web navigators).

You can also use button  to refine the zoom function. You can select from the drop-down list:

- a percentage
- Width: displays the entire diagram in its width
- Height: displays the entire diagram in its height
- Last: enables return to the previous zoom
- Page: displays the entire diagram

Moving diagrams

To view a diagram:

1. In the insert toolbar, click .
2. Click in the page, in a blank area outside the diagram.
3. Then, keeping the mouse button pressed down, move the page as you wish.

 To cancel this movement mode, click button .

DISPLAYING DIAGRAM PREVIEW

HOPEX Web Front-End enables you to display a diagram preview from repository objects.

➤ See ["Viewing Diagrams from an Object", page 118](#).

You can also view a hierarchy of diagrams within a diagram.

➤ See ["Viewing Diagram Thumbnails", page 119](#).

Viewing Diagrams from an Object

You can view diagrams:

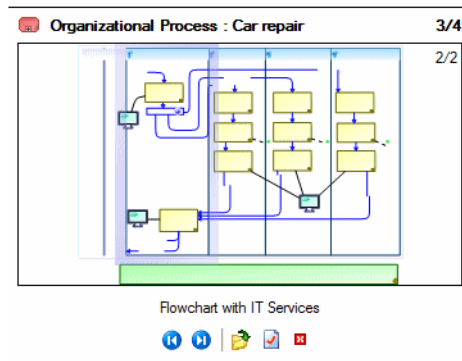
- which **describe** the current object.
- which **contain** the current object.

To preview a diagram describing the selected object:

- From a navigation pane (for example), right-click an object and click **Preview**.

To view diagrams containing a particular object:

- Right-click the object and select **Diagrams Containing Object**.
A window appears presenting diagram previews.



A specific toolbar appears at the top of the diagram.

Buttons allow you to display the list of diagrams containing or describing an object.
The mouse wheel also enables navigation between diagrams.

Using the Diagram Objects Toolbar

From the diagram toolbar you can carry out different actions on the diagram or on the object described by the diagram:

- Enlarge or reduce the image by zoom in and out.
 - Zoom in ().
 - Zoom out ().
 - Return to original image size (**See all** ).

 The mouse wheel also allows you to zoom in and out.
- Go to the object properties page ().
- Access diagrams containing the described object.

 The object blinks when it appears in another diagram.

 Unavailable options are grayed.

You can also move the image on the page (click the image and move the mouse while holding its button down).

The diagram name and type appear at the bottom of the page.

Displaying the pie menu in a diagram preview

Objects of diagrams are "active".

- Select an object in the preview diagram.
A pie menu appears on the object.



With this menu you can:

- access object Properties
 - generate a report on the object
 - access the diagram describing the object.
 - access diagrams containing the object.
-  Unavailable options are grayed.

Viewing Diagram Thumbnails

Displaying a diagram thumbnail

You can display the diagrams of described objects within a diagram. The objects are displayed in the form of thumbnails, which you can be enlarged.

To display a diagram describing an object within a diagram:

- 1 Right-click a described object (which means an object described by a diagram) and from the **Graphic element** sub-section, select **Display describing diagram**.

The corresponding diagram replaces the object.

You can enlarge the objects to make the thumbnails easier to read.

☛ To go back to the initial display, right-click the object and deselect the check box next the the **Display describing diagram** menu.

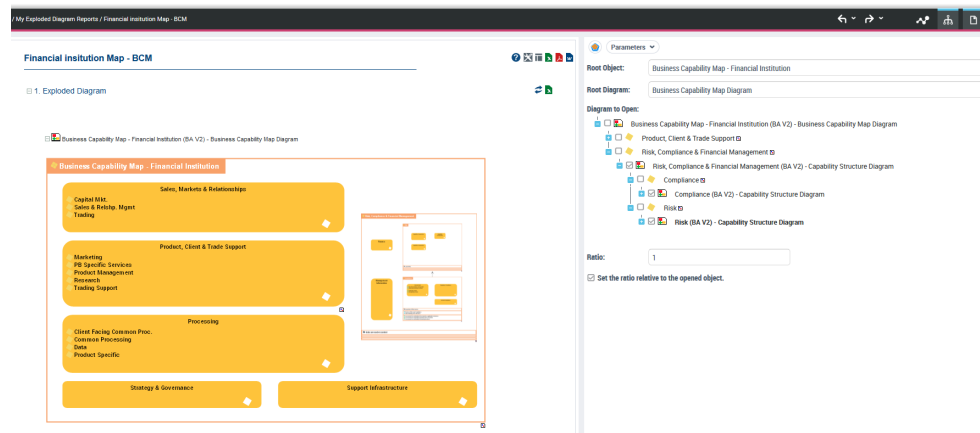
Launching the exploded diagram report

Report presentation

This report enables to build a summary view of a hierarchy of diagrams within a diagram.

It consists in opening the diagram of each object to include it in the diagram describing the root object.

The diagrams which describe the objects mentioned in the source diagram are displayed recursively, so that several diagramming may appear.



Accessing the report

To access the report:

- 1 (EA desktop) Right-click the root object and select **Documentation > Report discovery**. Unfold the folder "Platform tools" to launch the report.
- 2 (Solutions) Select the **Reports** navigation pane.

Report parameters

Input data for this report include:

- A root object diagram
- Diagrams to be included and to display

Parameters	Constraints
Root object:	One object is mandatory
Root diagram	Diagram associated with the root object
Diagrams to be included	Diagram(s) describing a tree object of diagram > object in diagram > description > object in diagram > ... type which is offered from the root diagram
Ratio	Defines the zoom factor applied to the diagram (by default equal to 1) - $0 < \text{ratio} < 1$: the diagram is smaller than the reference size - $\text{ratio} > 1$: the diagram is bigger than the reference size The reference size is defined in the option "The ratio is relative to the open object".
The ratio is relative to the open object	This check box enables to define whether the ratio applies to the size of: - the diagram to include (check box unchecked) - the object in the root diagram (check box checked) Examples: - Check box unchecked and ratio of 0.5: the diagram included is twice smaller than the source diagram. - Check box checked and ratio of 1.0: the sub-diagram is the same size as the object of the root diagram.
Insert border	Deactivated by default Enables to insert a border around the sub-diagram included. This can be useful if for example the sub-diagram does not already contain a border around the described object.
Recompute links	Deactivated by default Enables to reroute all links which go to or from an opened object to the appropriate target in the sub-diagram (e.g. an interaction to or from the object may trigger a service point or be triggered by a request point in the sub-diagram); if deactivated, the lines from the top diagram remain as they were in the original position.

EXPORTING DIAGRAMS TO POWERPOINT

HOPEX enables creation of a Powerpoint file containing a set of diagrams related to an object.

To start the export to PowerPoint tool:

1. Right-click an object and select **Documentation>Export Diagrams**. The export wizard appears.
2. In the **Summary Line Number**, indicate the maximum number of lines for a summary page.

You may indicate 10 for the number of lines. If the summary contains 33 lines, 4 pages will be created (10+10+10+3).
3. In the **Export PPT File**, specify the location (for **Windows Front-End**) and the name of the PowerPoint file to be generated.

You need to select the export mode:

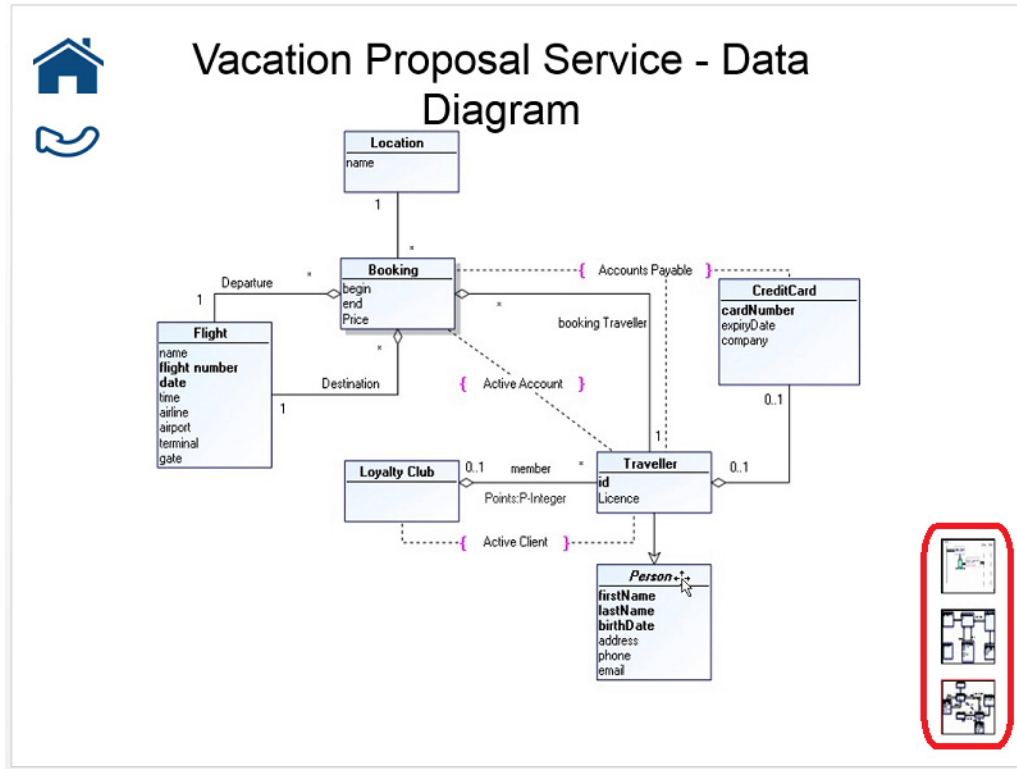
- **All Diagrams**: all diagrams in which the object appears are exported. In the next dialog box, indicate:
 - The **Deep level** needed to retrieve diagrams.

All diagrams linked directly to the object are retrieved. From these diagrams it is possible to retrieve the objects connected. Depth level is 2 by default. 0 corresponds to an infinite number of levels (except if the initial diagram is found in the tree at some point).
 - The **Diagram Natures** of interest.
 - **Select Diagrams**: you can select the diagrams you want to display in the **PowerPoint** file.
4. Click **Next**.

The PowerPoint diagram is generated. It contains a set of slides allowing navigation in diagrams, for instance:

- a summary page
- pages for each diagram

When an object is described by several diagrams of different types (of same level), an overview of diagrams is displayed on the bottom right hand side of the selected diagram page.



The  button allows display of the previous page in a series of slides (and not the diagram page that was last viewed).

DIAGRAM SETUP AND PRINTING

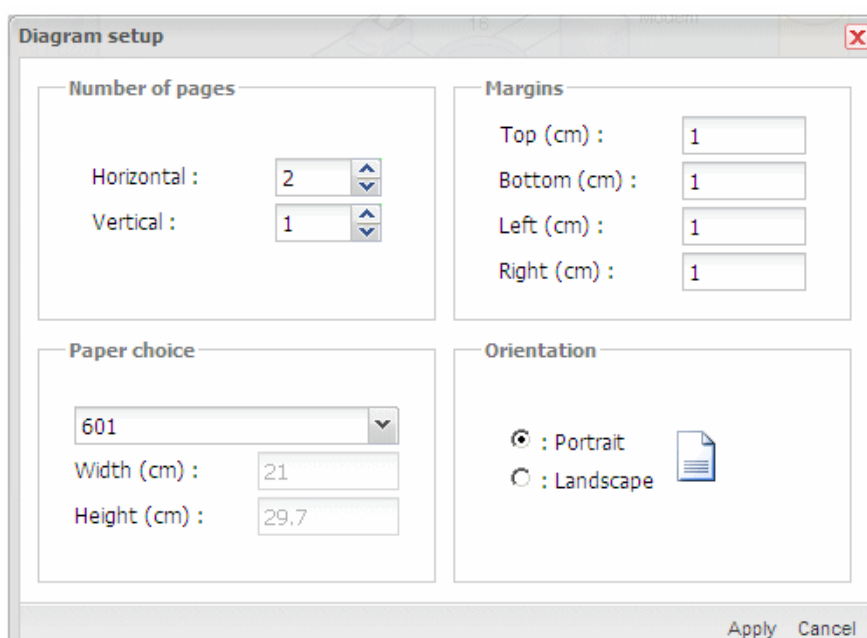
Defining Diagram Setup (Web Front-End)

To specify diagram setup:

- 1 Click .

The **Diagram Setup** window appears. It enables definition of:

- Paper size (A3, A4, A5 ... or indication of Width x Height in inches)
- Orientation (Portrait or Landscape)
- Number of pages (total size of diagram)
- Margins (in inches)



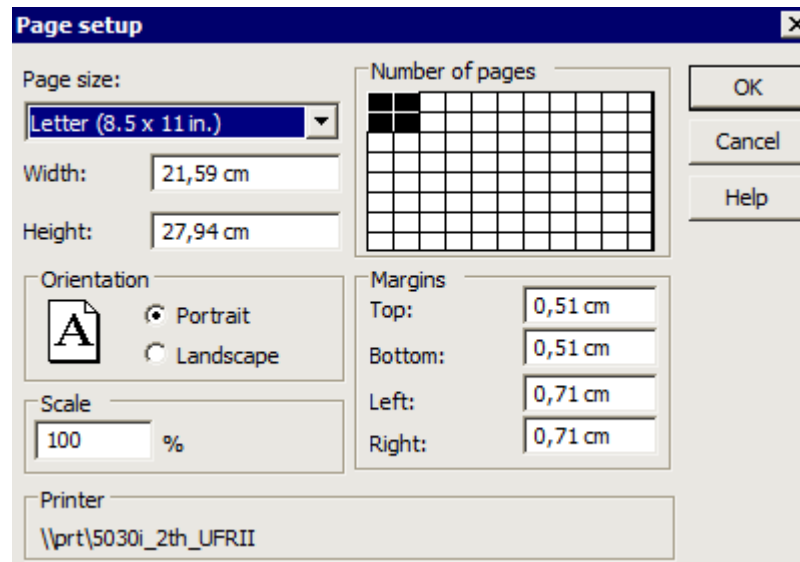
Defining Diagram Setup (Windows Front-End)

To specify diagram setup:

- 1 Select **File > Page Setup**.

The **Page Setup** dialog box enables specification of diagram characteristics, that is the **Paper Size, Orientation** (in **Portrait**, the larger dimension is vertical, in **Landscape**, the larger dimension is horizontal).

The **Number of Pages** group box allows you to indicate the total size of the diagram in number of pages.



To change the number of pages:

- 1 Click on the page corresponding to the bottom right corner.

You cannot reduce the size of a diagram if elements appear in deleted pages: all elements should be placed in pages that will be kept before reducing format (display of page boundaries simplifies this operation).

The **Margins** are superimposed on those defined by the printing device. This is done so that any information in these margins is not lost.

You can also indicate a print **Scaling** percentage.

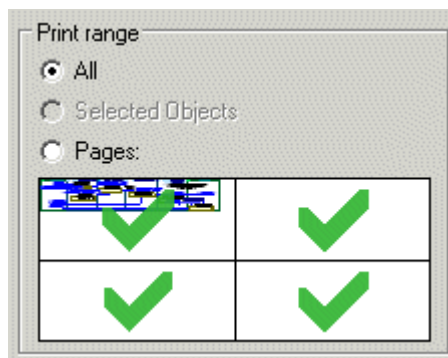
Printing Diagrams (Windows Front-End)

The **Print** dialog box allows you to edit all or part of the diagram and to store it in a file to be printed later or to be printed from another computer.

To open the print dialog box:

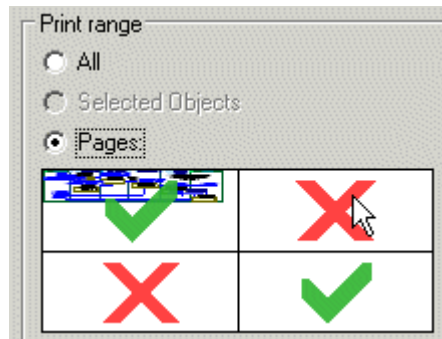
- 1 Select **File > Print**.

The **Print range** dialog box includes the number of pages you specified in the **Page Setup** dialog box. By default, all the pages are selected.



To deselect a page:

- 1. Click the page to be excluded from printing. The page is then marked with a red cross.



To print only certain diagram objects.

1. In the diagram, select the objects you wish to print.
2. In the **Print** dialog box, **Print Range** frame, select **Selected Objects**.
3. Click **OK**.
Only those objects selected in the diagram are printed.

To select a deselected page:

- 1. Click the page marked with a red cross. The red cross changes to a green tick.

To print multiple copies:

- 1. Indicate the **Number of Copies** required.

When several copies are printed, to sort these by page number:

- 1. Select **Collate**.

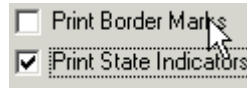
To write print commands in a file:

1. Select the **Print to File** option.
 - ☛ This allows physical printing of the diagram from another workstation.

A dialog box appears asking for the name and location of the file.

To print the status indicators present in the diagram:

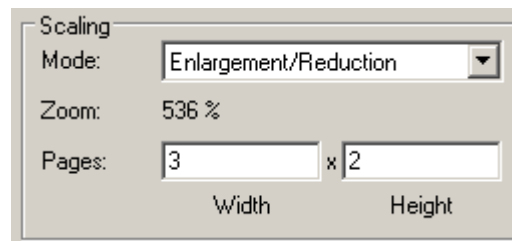
1. Check that the status indicators appear in the diagram.
2. In the **Print** dialog box, select the **Print State Indicators** check box.



☛ For more details on display of state indicators in a diagram, see ["Object status indicators", page 76](#).

To enlarge or reduce a diagram when printing:

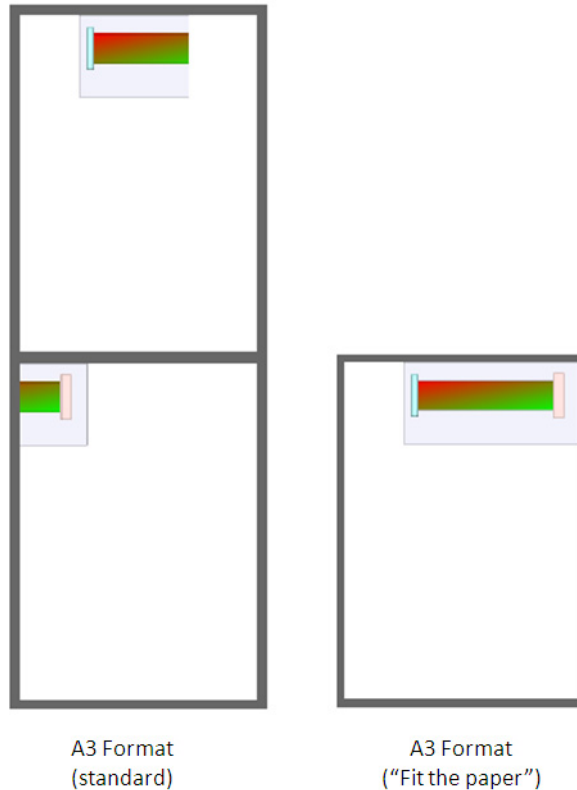
1. In the **Scaling** frame, select "Enlargement/Reduction" **Mode**.
2. Enter the number of pages (width and height) on which you wish to print the diagram.



☛ The **Zoom** value is modified as a result and previews the result of printing.

To adapt printing of the diagram to fit the format of your paper:

- 1. In the **Scaling** frame, select "Fit the Paper" **Mode**.
This mode allows you to make best use of the space provided by a large format page. In these conditions, the entire diagram can be adapted to a single page, which is not the case in this mode.



☛ With **Fit the Paper** mode, indications defined in **Page Setup** concerning paper size and number of pages are ignored (for more details on this page, see ["Defining Diagram Setup \(Windows Front-End\)"](#), page 124).

Printing Diagrams (Web Front-End)

Printing a diagram consists of generating a PDF format file, which you can then print.

To open the print dialog box:

1. Click **Print**.
2. In the **Scaling** frame, select **Mode** "Enlargement/Reduction" to enlarge or reduce a diagram when printing.

3. Enter the number of pages (width and height) on which you wish to print the diagram.
 The **Zoom** value is modified as a result and previews the result of printing.
4. Click **OK**.
The PDF export process begins.

MODIFYING PERFORMANCE CHARACTERISTICS (WEB FRONT-END)

By default, quality of **HOPEX** images is optimal. If you consider that diagram images take too long to load, you can decide to reduce quality of images.

To configure image quality:

- 1 In a diagram, click button  .
The **Improved Quality** option is selected by default.

You can modify parameters in two ways:

- Automatic mode: ["Automatic Mode", page 130](#)
- Raw pixelization: ["Pixelization", page 130](#)

Automatic Mode

Automatic mode measures the time taken to display the image, and depending on the various parameters to be specified, finds a more appropriate display mode.

To define automatic mode parameters:

- 1 In the **Quality and Performance Settings** window, select the **Advanced Parameters** tab.

You can specify:

- **Upper threshold** of image display in milliseconds
- **Lower threshold** of image display in milliseconds
- **Average** on number of queries (for example, last 5 images called)

If the average transfer time exceeds the specified thresholds, **HOPEX** chooses:

- improved quality, if the average is low (under lower threshold)
- improved performance, if the average is high (above upper threshold)

Pixelization

Pixelization consists of requesting a smaller image and displaying this in a larger size.

To adjust pixelization level:

- 1 In the **Advanced Parameters** tab, move the cursor as shown below:



FUNCTIONALITIES SPECIFIC TO WINDOWS FRONT-END

Using Backgrounds

You can place an image or define a color as a background to your diagram. By default, no background is selected.

To place an image as a background:

1. In the **View** menu, select **Background**.
2. In the **Background** dialog box, select the **Type** of background **Image**.
3. Click the Browse button  to display a dialog box where you can browse the directories and select the image file (Bitmap, Metafile or **HOPEX** shape).
4. In the **View** frame, select the type of background image:
 - **On screen**
 - **In printed document**
 - **In reports (MS Word) and Web sites**
5. In the **Position and Size** frame, define the position of the background by entering values or by positioning the background in the preview:
 - coordinates of top left corner (**X**, **-Y**)
 - dimensions (**Width** and **Height**) in the drawing
6. Click **OK**.

The background is included in the shapes loaded in the diagram.

Calling Shapes

To insert a shape into the diagram:

1. In the insert toolbar, click  then click **Shape**.
The **Load Drawing** dialog box opens.
2. Select the desired shape by clicking its drawing.
3. Click the **Open** button, or double-click the drawing.
The shape is inserted at the center of the display area.

The path of the file containing the shape is saved in the diagram that calls it. When the diagram is loaded, the shape is first queried using this path. If the shape is not found in the specified folder, it is queried in the standard shapes folder.

If a shape itself contains other shapes, all the shapes are loaded.

Remarks on using shapes

You can cut, copy, paste, duplicate, group, ungroup and move shapes in the same way as other drawing objects.

To modify dimensions of shapes, enlarge these in the workspace using the mouse. However, you cannot change their color.

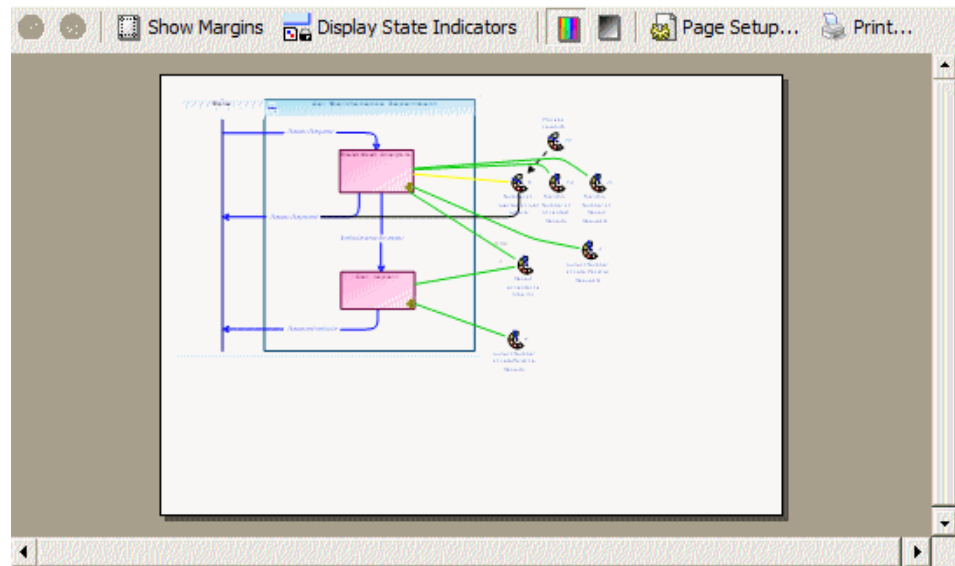
Print Preview

In a diagram, the menu **File > Print Preview** gives you a quick preview of your diagram as it will appear when printed.

If your diagram covers several pages, you can click **Previous** or **Next**.

You can also modify diagram Page Setup. For more details, see ["Defining Diagram Setup \(Windows Front-End\)", page 124](#).

To print the diagram, see ["Printing Diagrams \(Windows Front-End\)", page 125](#).



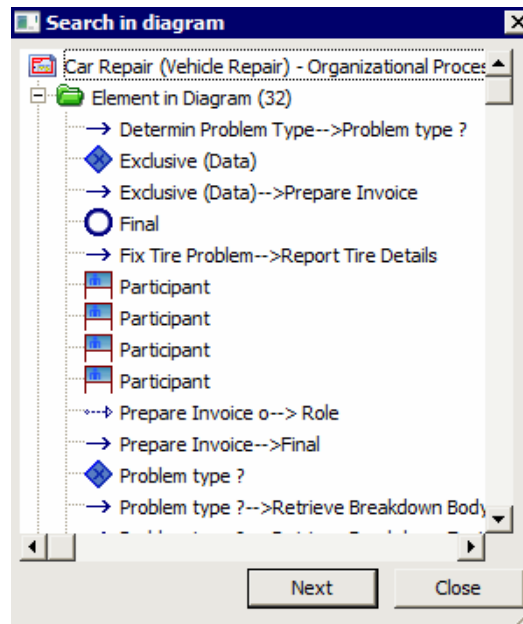
Finding Objects in a Diagram

You can easily find an object in a diagram (flowchart, organizational chart, etc.).

This functionality is useful when you cannot display the complete diagram on the screen.

To find an object in a diagram:

1. In the **HOPEX** menu bar, select **Edit > Search in diagram**.
The **Search in Diagram** window appears.



2. In the list of objects proposed, select the object that interests you and click **Next**.
The desired object is selected and appears in the center of the screen.

Using the Repository



HANDLING REPOSITORY OBJECTS



The repository is at the heart of the **HOPEX** software suite. It stores data, enables company knowledge management and ensures its consistency.

This chapter presents common operations that can be carried out on **HOPEX** repository objects, excluding diagrams.

☛ *For more details on handling objects in diagrams, see "Handling Diagrams", page 65.*

- ✓ "Defining Object Properties", page 138
- ✓ "Entering Object Comments", page 142
- ✓ "Managing objects", page 147
- ✓ "Naming Objects", page 155
- ✓ "Using HOPEX in a Multilingual Context", page 157
- ✓ "Consulting Repository State at an Earlier Date", page 160
- ✓ "Object Variations", page 161
- ✓ "Object Versions", page 172

DEFINING OBJECT PROPERTIES

Objects have several property types. In most cases, the properties available depend on the type of object.

In their properties, all objects include a **Comment** (or **Text**) tab.

Accessing object properties

To access the object properties:

1. Select an object, for example in a navigation tree, query results window or diagram.
2. Right-click the object and select **Properties**.
The properties window appears.

You can also choose to display the property window permanently for easy access.

(Web Front-End) To dock the properties window of objects:

- 】 Click the **Properties** icon in the main toolbar of the desktop.

(Windows Front-End) To display the properties window of objects:

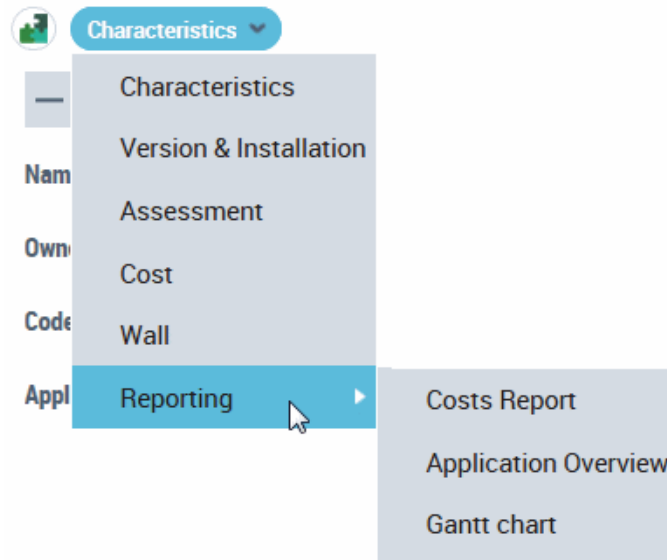
- 】 In the desktop menu, click **View > Edit Window > Properties**.

Using Object Property Pages (Web Front-End)

See ["Accessing object properties"](#), page 138.

To access all areas of property pages:

- 1 In the drop-down list at the top of the page, select the pages of interest to you.



In **HOPEX Web Front-End**, a properties page comprises sections.



To expand a section:

- 1 Click the icon  on the left of a section name.

➡ To collapse a section, click icon .

General object properties in the EA desktop

In the Enterprise Architecture desktop, the **General** tab of object property dialog box has several tabs/pages, each corresponding to a property type.

☛ The **HOPEX** object properties are solution-specific. For more information, see the user corresponding to the solution.

General > Administration

Groups information useful for repository administration, for example:

- Object type
- Object creation date
- Object modification date

General > Notes

Enables to create, connect or delete notes. Notes can be connected to all object types and can be placed in diagrams to draw attention to particular points.

For more details, see ["Adding Notes", page 77](#).

General > Keywords

Enables to associate keywords to repository objects.

You can use this feature to categorize objects for example.

You can for instance create the keywords "As-Is" and "To-Be" and connect processes to the corresponding keyword.

☛ Before creating a keyword, it is recommended that existing nomenclature be checked to ensure that it does not already contain a closely-related concept.

General > Impacts

Presents objects that use the current object. These objects are for example diagrams in which the object appears, or processes that refer to it.

General > History

Gives an overview of actions on each object in the repository. The type of update is specified for each update concerning the update: Create, Update, Connect, Disconnect, Delete).

☛ For more details, see ["Using the History", page 151](#).

General > Translation

In the context of a multilingual environment, enables entry of object characteristics and texts in different languages.

For more details, see ["Entering Data in Several Languages", page 157](#).

☛ Only appears if several languages have been specified for the site or environment.

General > Definitions

Enables to save terms used in your company or organization, add their definitions and organize them by subject area.

General > References

Enables you to consult external references (Excel worksheet, HTML pages, Word documents, etc.) associated with the object and create new external references.

For more details, see ["Using External References"](#), page 419.

General > Documents

Gives access to reports (MS Word) that describe the object and allows you to create new ones from a report template (MS Word); these documents can be integrated into the repository or placed in a folder that can be accessed by all users.

For more details, see ["Managing Reports \(MS Word\)"](#), page 310.

General > Rules Application

Presents the modeling rules and structure and organization regulations that apply to the consulted object. It also indicates if the rules in question are verified.

General > Variations

Displays objects that are at the origin of or result from a variation. This subtab is visible only when the selected object is varied, see ["Object Variations"](#), page 161.

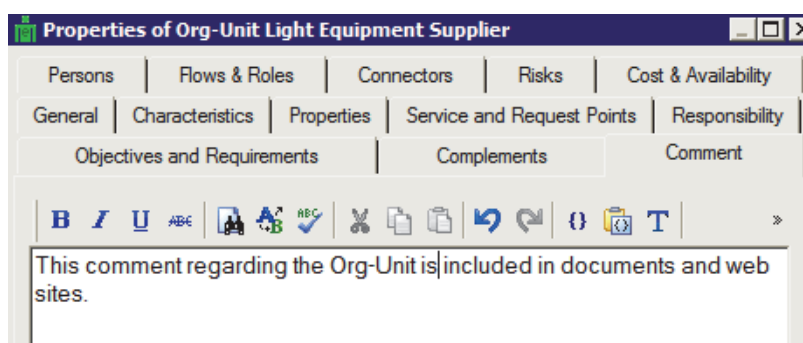
ENTERING OBJECT COMMENTS

See "Accessing object properties", page 138.

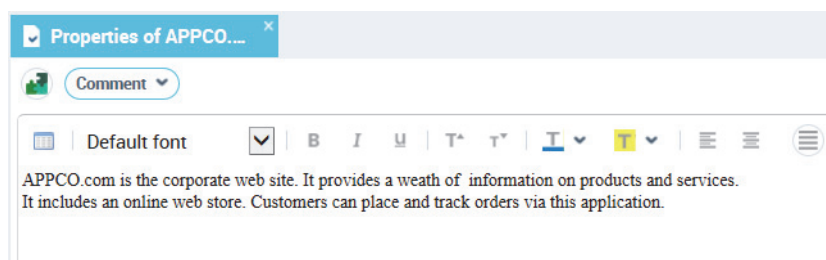
Using the Comment Tab/Page of an Object

To enter or modify a comment associated with an object:

1. Open the property page of the object of interest to you.
 - (Windows Front-End) select the **Comment** tab.



- (Web Front-End) in the drop-down list select **Comment**



The comment entered will automatically appear in the generated document. In this tab, icons give access to text editing functions (cut, copy, paste etc.).

To create a new paragraph while entering the comment:

- 1. Press <Enter>.

When several types of text are available for the same object, a drop-down list allows you to select the type of text entered.

☛ To comment a diagram and the object it describes in HOPEX Windows Front-End, select **Diagram > Properties** and **Diagram > Described Object > Properties**.

Using the comment window

You can also modify or enter object comments in the desktop comment window.

☺ *Displaying the comment window is useful when you want to successively enter the comments of several objects. When you click an object in a navigation window, in a diagram, or in a query result dialog box, the comment of the selected (active) object appears in this window. You can therefore easily modify the comment of the object then pass to that of another object.*

To display the comment window in **Windows Front-End**:

- 1 Select **View > Edit Windows > Comment**.
The comment window appears. It displays the comment of the active object.

To display the comment window in **Web Front-End**:

- 1 Click the **Properties** icon in the main toolbar of the desktop.

☛ *To view object comments in the Enterprise Architecture desktop, select **Comment** from the drop-down list.*

Text formatting

The comment dialog box toolbar allows you to access text edit functions (bold, italic, underline, strikethrough, align, bullets, indents, font color, etc.).



☛ *Bullets and indents cannot be customized. It is not possible to insert tables or page breaks or paste images. For a list of restrictions, see "Authorized formats", page 145.*

An RTF comment is not designed to store the integrality of Word documents. To do this, external references should be used. For more details, see ["Using External References", page 419](#).

The format applied will be used in generated reports (MS Word) and Web sites.

This comment uses many features available with the RTF format

Left

Center

Right

Bold

Underline

Italics

~~Strikethrough~~

- Firstly
 - Secondly

Example of comment formatting


Application-1

Characteristics

Comment

Comment

This comment uses many features available with the RTF format

Left

Center

Bold

Underline

Italics

- Firstly
 - Secondly
 - Thirdly

Reproduction in a Web site

Default font in generated reports (MS Word)

You can enter your comment text using the "Default font" or another font. In reports (MS Word) generated from this comment, the font used is that defined by default in the document model.

Authorized formats

Only those formats proposed in the comment dialog box toolbar are permitted:

- Bulleted lists
(Bulleted lists cannot however be customized)
- Font, size
(By default, text can be entered without associating a specific font)
- Character formats: bold, italic, strikethrough
(Text color is not saved)
- Paragraph formats: aligned, indented
(Indent value cannot be customized)

Prohibited formats

- Text color
- Tables
(There is no button enabling table creation. Tables pasted in the comment are not taken into account)
- Paragraph formats (page break, header, footer, margin, portrait/landscape orientation)
- Links
(In Web sites, links are not reproduced except if these are derived from MetaClasses, see ["Inserting object names in comments"](#), page 145.)

Inserting object names in comments

HOPEX Inserting object names in comments This enables:

- Automatic creation of links in generated Web sites.
- Automatic refresh of object names in comments. If you insert the object names as a field, you will not need to update them manually in the comment.

You can for example select an object in the explorer to place it in a comment.

You can also insert an object in the comment window using the following button:

- (Windows Front-End) **Insert Field** 
- (Web Front-End) **Insert Object in Text** 

In **Windows Front-End**, to view the identifier of objects inserted in comments:

- In the object comment windows, click **Hide/Show Fields** 

Org-unit `~rljhTPhmXKX3` [**Travel Agency**] participates in the following operations:

- `~IUQ3PmnCy4b1` [**Propose itinerary**]
- `~pIJDMTpCyic0` [**Process cruise reservation**]
- `~AVQ3A4oCyKt1` [**Process flight reservation**]

To delete a field in a comment:

1. Click  to be able to view the field.
2. Select the corresponding field code.
3. Delete the selected code.

MANAGING OBJECTS

Deleting Objects

To delete an object from the repository:

- 1 In the object pop-up menu, select **Delete**.
A message may indicate that you are not authorized to delete the object, stating the reason.

Via the pop-up menus of component objects of the object, you can delete those you have the right to delete.

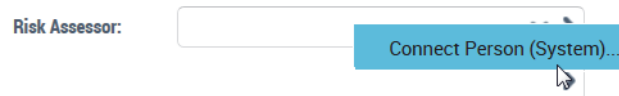
The following are examples of reasons for refusal of deletion:

- objects created outside the current private workspace
- modification in progress by another user

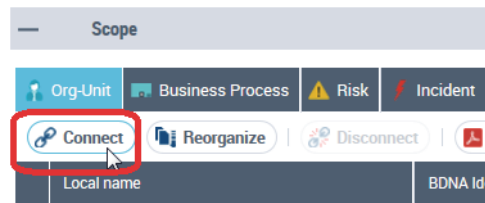
Connecting objects

There are several ways to connect objects, for instance through:

- The **Connect** command available in a field menu

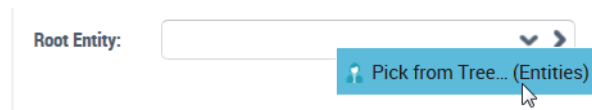


- The **Connect** button available in a list of a property page

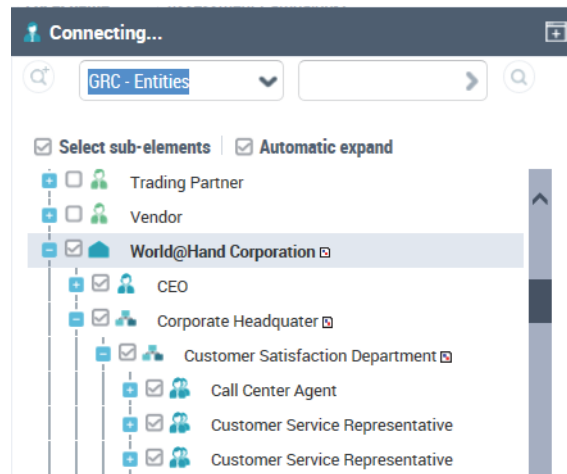


☛ *The Connect feature is based on the query tool. For more details, see ["Using the Search Tool to Connect an Object"](#), page 193.*

- A tree



Example: In HOPEX Internal Control, when you wish to launch a control execution campaign, the root entity is to be selected from a tree.



Two options enable you to select sub-elements and/or automatically expand the tree after clicking an object.

Managing Favorites

Favorites allows you to quickly access objects consulted regularly. They enable access to all actions possible on these objects. Favorites are useful when your repository is large and you want to save valuable time in navigation.

Adding an object to favorites

To add an object to your Favorites list:

- 1. Right-click the object you wish to add to your favorites and select **Add to Favorites**.
A message indicates that the object has been added to your favorites.

Accessing your favorites

To access your favorites (Windows Front-End):

- 1. In the main desktop toolbar, click :
The favorites navigation window appears (if closed) and expands.

To access your favorites (Web Front-End):

- 1. In the **Repository** navigation tab, click the **Favorites** icon.

Removing an object from favorites

To remove an object from your favorites list:

1. From the favorites navigation tree.

2. Expand the **Favorites** folder, right-click the object to be removed and select **Disconnect**.

Undoing and Redoing Actions on Objects

The undo mechanism in a drawing or in the navigator allows you to cancel the last action carried out. Having canceled an action you can subsequently change your mind and redo it.

This is true:

- for purely graphical operations,
- for those involving actions on the repository (creating or deleting objects for example).

Having created an object in a diagram, if you decide to undo this creation action, the object will be deleted from both the diagram and the repository. The same applies when you redo an action that you canceled.

Undoing and redoing one action

To cancel the last action carried out in a diagram or in the navigator:

- 】 In the desktop toolbar, click **Undo** .

To redo an action you canceled in a diagram or in the navigator:

- 】 In the desktop toolbar, click **Redo** .

Undoing and redoing several actions

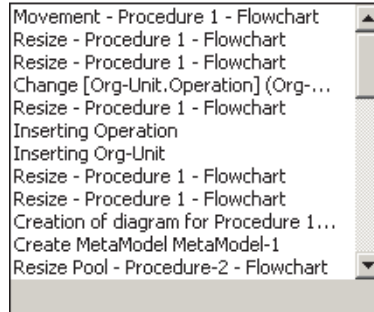
You can also undo or redo several actions which have been carried out in your workspace since the beginning of the session (even if data have been dispatched since then).

 *If another user has modified an object in a concurrent session, you cannot undo the action.*

To undo one or several actions:

1. In the desktop toolbar, click button **Undo** .

The window that appears shows the list of actions that you can cancel.



2. Move the cursor in the window to select the (successive) actions you want to undo, then click to undo these actions.

☞ You can only undo actions chronologically.

😊 To undo only the last action carried out, simply click **Undo**.

To redo one or several canceled actions:

1. Proceed in the same way as before, having clicked the drop-down list

arrow of the **Redo** button .

😊 To only redo the last action carried out, simply click **Redo**.

Using the History

The history is used to:

- obtain the list of objects recently modified
- display the latest modifications performed on each object.
- (in **HOPEX Web Front-End**) compare objects modified between two dates

Using the History in HOPEX Windows Front-End

The history contains all the objects you access or modify.

To open the history in **HOPEX Windows Front-End**:

1. Click  or select **View > History**.

☞ See also "[General > History](#)", page 140.

Objects are classified by object type (MetaClass).

Using the History in HOPEX Web Front-End

The history page for an object displays:

- who has made modifications on an object
- which values have been modified
- when the modifications took place

Prerequisites for history display

You must first activate the logfile to display the history page.

☛ For more details, see the *HOPEX Administration - Supervisor guide*, chapter "Managing Repositories".

Accessing history in HOPEX Web Front-End

To access the history page:

- 1 Open the properties page of an object and select **General > History**. A page displaying the chronology of modifications appear.

To access global history:

- 1 In the **Repository** navigation tab, click the **History** icon. History by date and object type appears.

The history comparison feature

In **HOPEX Web Front-End** the history is used to compare the attributes and the links of an object between two dates.

To run comparison:

- 1 In the history page, click **Compare**.

☛ To access the history page, see "[Accessing history in HOPEX Web Front-End](#)", page 152.

Comparing object attributes

The Attribute section enables to display the value of attributes at the specified dates in the Before / After column.

Object type	Value meaning
Before	Attribute value on the source date ("From")
After	Attribute value on the target date ("To")

☛ By default:

- the source date ("From") corresponds to the latest dispatch date
- the target date ("To") corresponds to the current date.

Comparing links

The "Links" section displays the list of links existing around an object.

The Before / After columns display the number of objects connected to the analyzed object on the given dates.

If you click a link, the Details zone displays the objects connected through the link on the source and target dates so as to view differences.

Duplicating objects

Duplicating objects

To duplicate an object in the navigator:

- 1 Right-click the object and select **Duplicate**.
The **Duplicate an Object** dialog box appears.

Only certain object types can be duplicated (class, generator, hypothesis, organizational and business process, operation, package, phase, city planning plan, DBMS version, _ModelTypeParam).

Naming duplicated objects

There are two possibilities for naming duplicated objects (duplicate).

The duplicate can have:

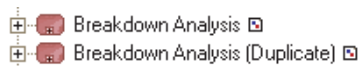
- A **Suffix** (default option).

Example: Breakdown Analysis (Duplicate)

- A **Prefix**.

Example: Duplicate of Breakdown Analysis

The option with suffix can be useful when, in the navigator, the duplicate is located below the duplicated object.



You can modify the **Prefix** or **Suffix** used to name component objects of the object.

The prefix and suffix are not used for objects that are in a namespace.

Selecting duplication strategy

For most objects that can be duplicated, you do not have a choice of duplication strategy.

For business processes, you have the choice between:

- "Duplicate Activities and Sub-Processes"
- "Duplicate Organizational Processes"
- "Reuse Activities and Organizational Processes"

Duplicating in another library

For objects already stored in a library, you can store duplicates in another library.



For objects not stored in a library, you cannot store duplicates in another library.

To store duplicates in another library:

1. Select check box **Create duplicates in another library**.
2. Select the required library.
3. Click **OK**.

Objects are duplicated into the selected library.



If you do not select this check box, the duplicate will appear by default in the same library as the duplicated object.

Duplicated object names in a multilingual environment

When you duplicate an object, it must be in the repository language so that translations in the various languages will be correctly transferred to the duplicates.



To determine the language of your repository, consult repository properties.

Editing Objects (Windows Front-End)

HOPEX Windows Front-End offers an editor, that is a data entry tool, for certain object types. This editor enables simple display and modification of the objects concerned, offering in the same interface the advantages of both navigator and properties dialog box.

You can run the editor on the following object types:

- Method
- Project
- Project type
- MetaClass (ie. object type, accessible via the **Utilities** tab)

To run the explorer in **HOPEX Windows Front-End**:

1. Right-click the object and select **Edit**.
The editor opens on the selected object.



To view the editor with its two panes (tree and properties), click the

Details button in the toolbar .



*If the editor shows only the tree, click the **Details** button in the toolbar .*

2. To validate modifications carried out in the properties dialog box of an object (right pane of editor), press the <Enter> key.

NAMING OBJECTS

Certain types of objects in **HOPEX** have a local name, specific to a given context. This mechanism allows another object to use the same name, but in a different context.

It is possible for example to use:

- different conditions with the same name in different organizational processes.
- different "Enter Order" operations with the same name in different organizational processes. You can for example have operations:
 - "Enter Order" in the "Normal Order Delivery" organizational process
 - "Enter Order" in the "Urgent Order Delivery" organizational processThe operations have the same local name though being different. They can have different comments or send different messages.

☛ Examples of object types with local names are: Application, Diagram, Operation, Service, Message, Collaboration, Package, Class.

Local Name and "Long" Name

When an object has a local name, two names are presented:

- the local name,
- the "long" name which includes the local name, preceded by the name of the object owner (the owner being the context in which the object is defined).

☛ The long name is available in the enterprise architecture desktop.

In the properties dialog box:

- the **Characteristics** tab presents the **Local Name** of the object.
Example: The **Local Name** of the operation below is "Enter Order".
- The **General** tab, **Administration** subtab presents the long name of the object. The first part of this long name refers to the object owner.

Example: The long name of the following operation is: "Urgent Order Delivery::Enter Order". The first part of this long name refers to the owner of the operation, the "Urgent Order Delivery" organizational process.

To change the object owner:

- 】 In the **Properties** dialog box of the object, **Characteristics** tab, use the **Owner** field drop-down menus.

Querying Object Types with Local Name

When you query an object type with a local name, the result dialog box presents the object **Short Name** opposite its "long" name. For example, when several operations have the same short name, you can select the operation corresponding to the context.

Short Name	Name	C ▲
☐ Analyze Purchase Request	Voyages and Vacations::Purchasing::Standard Purch...	0
☒ Analyze Purchase Request	Voyages and Vacations::Purchasing::Urgent Purchas...	2
☐ Approve Request	HBC Group::Purchase::Process Purchase Request::A...	3
☐ Approve Request	Voyages and Vacations::Purchasing::Process Purcha...	0
☐ Approve Request	Voyages and Vacations::Purchasing::Process Purcha...	0
☐ Enter Purchase Request	Voyages and Vacations::Purchasing::Process Purcha...	0
☐ Enter Purchase Request	Voyages and Vacations::Purchasing::Process Purcha...	0
☐ Enter Request	HBC Group::Purchase::Process Purchase Request::E...	3
☐ Finalize Request	HBC Group::Purchase::Process Purchase Request::F...	3

28 Object(s) - 1 Selected - (0 Hidden)

USING HOPEX IN A MULTILINGUAL CONTEXT

Knowledge sharing is possible across the company and in different languages through multilingual support: repository content is managed and published in as many languages as required.

HOPEX allows you to enter data in several languages.

You can easily switch from one language to another to enter or consult data or to generate documents.

Specifying the Data Language

HOPEX allows you to enter data in several languages. You can easily switch from one language to another to enter or consult data or to generate documents.

To specify the work language in **HOPEX Windows Front-End**:

- 1 In the desktop, select **Tools > Language**, then specify your work language.
You do not therefore need to end a session in order to display data in another language.

 To configure the list of work languages, see "Managing Options" in the **HOPEX Power Supervisor** guide.

To specify the data language in **HOPEX Web Front-End**:

- 1 From the **Main Menu**, click the button corresponding to the language of your interface ("French" for example) and select the language of your choice in the drop-down menu.

Entering Data in Several Languages

To enter your data in several languages:

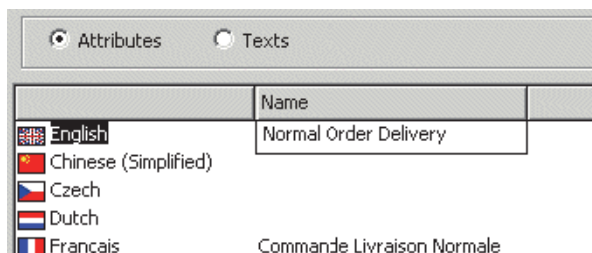
- 1 (Enterprise Architecture desktop) Select the **General** tab of the object properties dialog box, then the **Translation** subtab.

	Name
 English	Export Order
 Deutsch	Exportbestellung
 Français	Commande Export
 Italiano	Ordine esportazione
 日本語	輸送注文

Object characteristics in the target language

To enter the characteristics of an object (for example, its name) in another language:

1. In the **Translation** subtab, select **Attributes**.



You can enter the **Name** of the object in one or several languages.

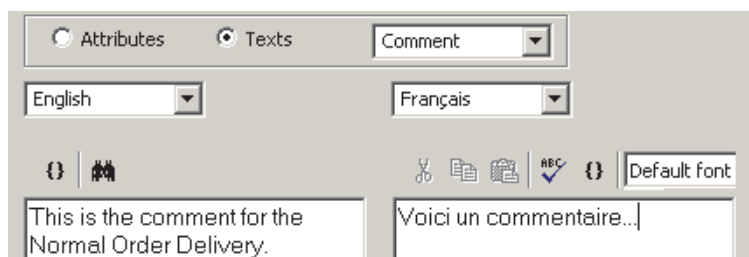
Object comments in the target language

Before entering a comment in another language, check that it is selected in:

- (HOPEX Windows Front-End) **Tools > Options > Languages**
- (HOPEX Web Front-End) **Main Menu > Settings > Options > Languages**

(HOPEX Web Front-End) To enter the comment of an object (or other text type) in another language:

1. In the **Translation** subtab, select **Texts**.



2. In the drop-down list, select the type of text that you want to enter in another language (**Comment**, **Scope of application**, etc.)
If a text has already been entered in English, it will appear in the frame on the left.
3. Select the target language, that is the language into which you wish to translate your original text.
4. Enter your text in the target language in the frame on the right.
5. When completed, click **Apply** and/or **OK**.

In this frame you can use cut/paste.

HOPEX offers a tool that can be used to find the remaining objects for translation in a repository.

For more detailed information, see "Querying objects to be translated" in "Managing objects" in the **HOPEX Power Supervisor** guide.

Multilingualism and duplicated object names

When you duplicate an object, it must be in the repository language so that translations in the various languages will be correctly transferred to the duplicates.

☛ To determine the language of your repository, consult repository properties.

☛ For more details on duplication, see ["Duplicating objects", page 153](#).

Viewing Untranslated Objects

To view untranslated objects:

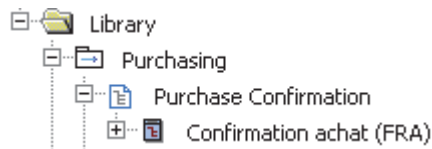
1. Open the **HOPEX** options dialog box.

☛ To access the options dialog box, see:

- ["Managing User Options \(Windows Front-End\)", page 60](#)
- ["Managing User Options \(Web Front-End\)", page 44](#)

2. Click the **Languages** icon.
3. Select the **Indication of objects not translated** check box.

The name displayed for untranslated objects is their name in the language in which they were created. When you select this option, the name is suffixed by the code of the corresponding language (for example, US for English). This option is disabled by default.



In the example above, an application has been created in French and has to be translated into the current language (English in this example).

CONSULTING REPOSITORY STATE AT AN EARLIER DATE

The **Time Machine** function allows you to consult repository state at an earlier date.

☛ *Solutions have this function as standard. For other products, **HOPEX Productivity Pack** is required.*

Prerequisites to the use of the Time Machine

To consult repository state at an earlier date, a repository snapshot must have been previously created.

☛ *The repository snapshot creation function is available with **HOPEX Collaboration Manager**.*

*For more details, see **HOPEX Collaboration Manager - Repository Snapshots**.*

Consulting Repository View at an Earlier Date

To consult the view of the repository at an earlier date:

1. In the menu bar, click the calendar and select a date.

☛ *The date must be earlier than today's date.*

2. Click the icon on the right of the calendar.

You have a **read-only** view of the repository on the selected date.

If there is no repository snapshot for the selected date, the previous one is taken into account.

For more details, see **HOPEX Collaboration Manager**, "Using Repository Snapshots for the Time Machine".

☛ *To return to the current view, see ["Returning to the Current View of the Repository"](#), page 160.*

Returning to the Current View of the Repository

To return to the current view of the repository:

1. In the menu bar, click the calendar.

2. Under the calendar, click **Today**.

The current view of the repository is displayed in writing mode or reading mode.

OBJECT VARIATIONS

The system of variations enables the creation of an alternative view of an object or model. This alternative view differs in certain ways from the reference model and enables us to follow updates made to the model over time.

You can for example model an application and its deployed instance while both refer to the same object.

Activating Variations

To be able to create variations:

1. Open the **HOPEX** options dialog box.
 - ☛ To, access the options dialog box, see:
 - ["Managing User Options \(Windows Front-End\)", page 60](#)
 - ["Managing User Options \(Web Front-End\)", page 44](#)
2. Click **Business Process and Architecture Modeling**.
3. In the right pane of the window, select the **Activate Variations** checkbox.
4. Click **OK**.

When this option has been activated, you can:

- create variations
- view in the interface the options that enable modification of default behavior of variations in **HOPEX**.
 - ☛ The descriptors and the query tool propose for example checkboxes to take account of inheritance. For more information on these functions, see the guide and ["Querying Using the Query Assistant", page 202](#).
- access the **Variations** subtab in the **General** tab of the objects properties dialog box.

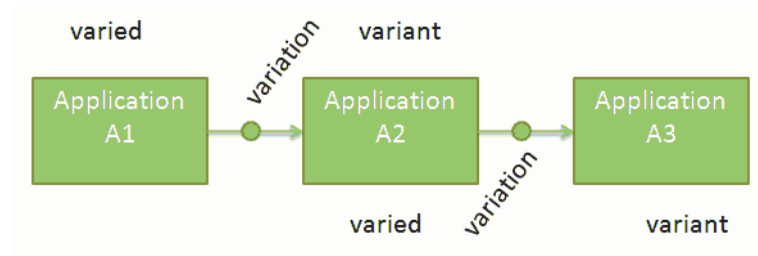
Variations

A variation is a MetaClass that connects concepts to their variants. The link between the existing object and the new object allows the new object to inherit elements of the object from which it is derived.

The user can then indicate the differences to be added to the new object, by modifying or replacing obsolete elements. This mechanism favors maintenance of modeled objects, since inherited elements are not duplicated and modifications to the first version of objects are automatically transferred to the variant objects.

From a theoretical viewpoint, we distinguish three component types in a variation model.

- The varied model: this is the initial model. In the case of application version monitoring, the varied model is the initial application (version 1.0).
- The variant model: this is the new model similar to the first. For applications, it is the new application version (version 2.0).
- The variation: the variation is a modeling artifact that connects the varied model to the variant model. This object is of no interest in itself from an application viewpoint, but it is the reference point for declaring differences between varied and variant.



The variation system can be applied to different object types: it involves variable objects.

This tool for modeling by variation was introduced to satisfy the following requirements:

- Reduced duplication: between a variant object and a varied object, there is no duplication. A certain number of elements attached to the initial object are considered as connected to the new version of the object, and we therefore talk of relationship **inheritance**. Non-duplication of links simplifies maintenance of the different versions.
 - ☛ *Not all elements attached to the initial object are inherited, but all inheritance relationships are defined at the level of the **HOPEX** metamodel which can be easily modified.*
- Integration in ergonomics: elements from a varied object can be viewed graphically in diagrams, but they are also visible in properties pages.
- Included in reports: all elements linked to a varied object can appear in the different reports.

Objects Varied

From a theoretical viewpoint, objects that can be varied are concepts (MetaClasses) inheriting from the "Variable Object" abstract MetaClass.

When a concept is inherited from "Variable Object":

- Its instances can be varied.
- Properties pages are automatically added to the object.
- Finally, the relationship inheritance system is available for this concept.

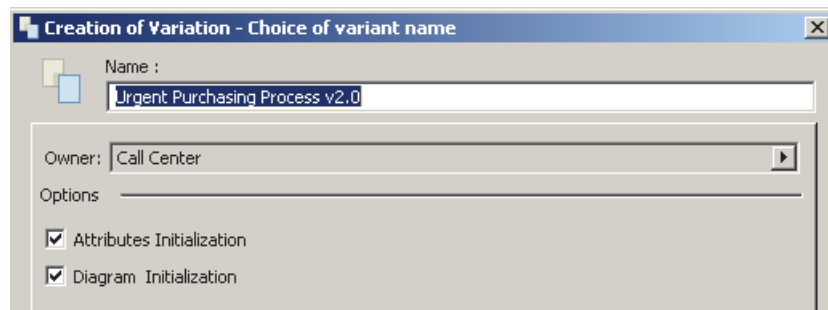
☛ *To make an object variable, see technical article "How to make an object variable".*

Creating a Variation of an Object

Variation creation functions are common to all variable objects.

To create a variation of an object:

1. Right-click the object and select **Variation > New Variant**.
A variation creation wizard appears.
By default:
 - the variant takes the name of the varied object, with extension v2.0.
 - Attributes and diagrams are copied.



☛ For diagrams, the described object is not copied (it is a variation of the described object).

☛ You can choose to not copy attributes and diagrams. To do this, clear the check boxes **Attributes Initialization** and/or **Diagrams Initialization**.

2. Click **Finish**.
The variant object appears in the navigator, under the varied object. By expanding the tree, you can see the inherited elements.

Representing Variations in a Model

If required, you can represent variations in a model diagram, for example in an application tree

To represent a variation in a model diagram:

1. In the diagram insert toolbar, click **Variation** from the reel.
2. Click the object to be varied and drag the pointer to the newly created object before releasing the mouse button.
A brown colored link appears.

☛ The variation is represented by a link, but it is in fact a HOPEX object.

Variation Modeling Rules

Consistency rules available in the **HOPEX** repository help you to check that your system of variations is correctly modeled.

To access modeling rules, you must have access to:

- "Advanced" metamodel
 - (Windows Front-End) through **Tools > Options > Repository**).
 - (Web Front-End) through **Main Menu > Settings > Options > Repository**
- the **HOPEX Power Studio** product.
Rules appear in the **MetaStudio** navigation window, under the "Repository Consistency" folder.

These rules are:

- A substituting object must be correctly contextualized: this means that a substitution must connect objects of the same type and must also be connected to the variation in which it intervenes.
☛ For more details on substitution, see "Replacing one element by another: substitution", page 165.
- An object cannot be the result of several variations.
- An object cannot be its own variant.
- A variation relates to two objects of the same MetaClass.

To apply this regulation and thus check the consistency of objects you create with the rules to be respected:

1. Open the **HOPEX** options dialog box.
☛ To, access the options dialog box, see:
 - *"Managing User Options (Windows Front-End)", page 60*
 - *"Managing User Options (Web Front-End)", page 44*
2. Select **Modeling and Methods Regulations**.
3. In the **Active modeling regulation** field, click .
4. In the dialog box that appears, select "Variation Modeling Regulation" and click **OK**.

You can consult results linked to this regulation at any time. They appear in the properties dialog boxes of the objects concerned.

You can also display them in diagrams and navigators with status indicators showing objects that are not validated with respect to the regulation.

☛ For more details on modeling rules, see "Consistency Rules", page 234.

Variation Inheritance

By default, the variant object inherits elements of the varied object (original object).

Commands available on inherited elements allow you to :

- exclude elements from the variant
- replace these by others.

Consider application A including functionalities F1 and F2.
By default, the variant Application A v2.0 inherits these functionalities.

Excluding an element from the variant

To exclude functionality F2 from the variant object in the above example:

1. Right-click the inherited functionality.
2. Click **Exclude**.

The functionality disappears from the properties of Application A v2.0.

 You have the possibility to restore it. For more details, see ["Restoring elements", page 167](#).

Replacing one element by another: substitution

A substitution indicates that a certain object is used instead of another in a given context. In the case of a variation, you can substitute one of the elements of the varied object by an object of your choice.

 Unlike a variation, a substitution does not involve inheritance but a functional conformity.

Substitution example

In the case of application versions, substitutions enable expression of the following: in considering an application evolution, a service 2 is replaced by a new service 3.

- The new service 3 must be linked to the variant application
- service 2 is linked to one of the parent applications (it is possible to have several application generations linked in cascade)

Differences between variation and substitution

Variations express a similarity relationship between two models; an application v2.0 is very similar to v1.0. The variation enables concentration on their differences. These are expressed through another object. A variant is linked to only one varied object (to simplify inheritance issues).

A **substitution** however can be linked to several source elements and to several target elements. This allows indication that a certain set of services is replaced by another set of new services.

If a replacement object is similar to the replaced object (a new version of a service), this can be indicated by adding a variation between them.

 The ability to inherit a relationship is a functionality declared at metamodel level, which can be adapted to suit requirements. The same applies concerning ability to substitute a concept.

Replacing an object

Certain elements of a variant can be replaced by others.

For example, in a new application you can replace an inherited application service by any other service.

Other elements such as functions cannot be substituted. In this case, the replacement command is grayed.

To replace an object by another in a variant:

1. In the **HOPEX** navigator, expand the variant object to see its inherited objects.
2. Select the element you wish to replace.
3. Open its pop-up menu and select **Replace**.



4. In the dialog box that opens, select the substitution element and click **OK**.

Viewing inherited elements

To view inherited elements:

1. Open the properties dialog box of the variant application.
2. Select the **Architecture** tab.
3. In the **Application Architecture** area, click **Inherited Object** .

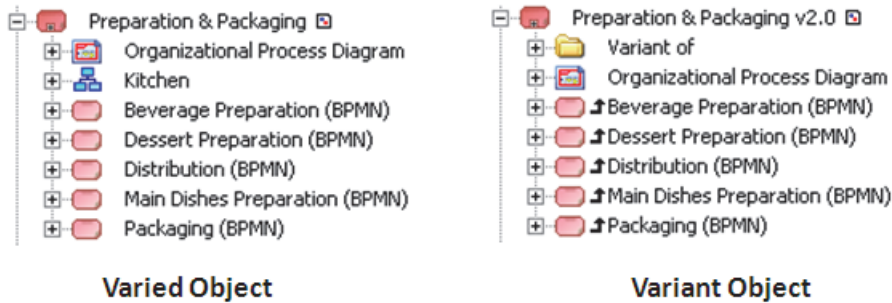
To view elements excluded or replaced by a substitution:

1. Follow the previous steps.
2. Click **Excluded** .

 The point above illustrates inheritance around the application concept.

In a diagram, inherited elements are accompanied by an arrow  :

- In the navigation tree.
- in diagrams



Restoring elements

To restore a substituted or excluded element:

1. In the properties page, click **Excluded**  to display excluded elements.
2. Open the pop-up menu of the element in question and select **Restore**.



In the target object properties dialog box, the **General** > **Variations** tab presents a report that lists all links obtained directly or by varied applications, with indication of the source as well as reasons for replacement or removal via substitutions.

Viewing variations and substitutions graphically

In model diagrams, such as the application internal architecture diagram, elements shown in the diagram are elements belonging to the described object.

 When you click the icon associated with an object, an explanatory message appears.

Inherited objects are associated with an inheritance arrow .



Elements that have been replaced are indicated by a red cross .

 Diagram objects that are not linked to the described object, not

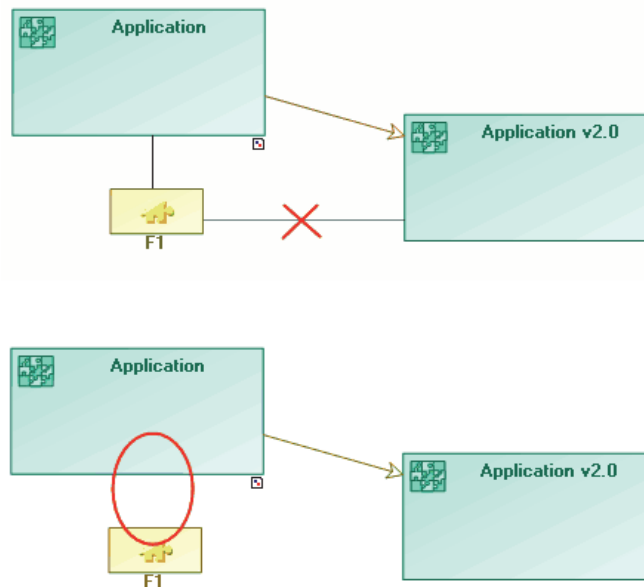
inherited or not replaced are identified by a warning panel  to indicate that their presence in the diagram assumes a link with the described object.

Removal of an inheritance link in a hierarchical diagram

In a hierarchical diagram, such as the application tree, inheritance is characterized by links between described objects.

When you delete an inheritance link between an element of a varied object and the variant object, you delete all possible inheritances and therefore the link between the element and the varied object.

Example: In the example below, Application v2.0 is the variant of Application. Functionality F1 is owned by Application and is inherited by Application v2.0. If you delete the inheritance link between F1 and Application v2.0, you also delete the ownership link between F1 and Application.



Inheritance limits

There is a restriction on the length of sequences of variations. Elements inherited from a varied object cannot be reflected infinitely on all objects derived from the original object. At the end of a certain sub-level of variations (66), inheritance is lost. The limit is indicated by a message.

In the case of a large number of variations, consolidation of variants history is recommended. See "[Consolidating variants history](#)", page 169 below.

Consolidating variants history

Thanks to variations, it is possible to keep track of the different versions of an application. After a certain time however, it can be difficult, even pointless, to manage obsolete versions. You can delete from the repository those versions earlier than a certain version, by consolidating the history of variants.

The consolidation command enables transfer of inherited elements of an object to the new object and destruction of ancestors. The purpose is to reduce volume of the repository and remove obsolete information.

To consolidate an application:

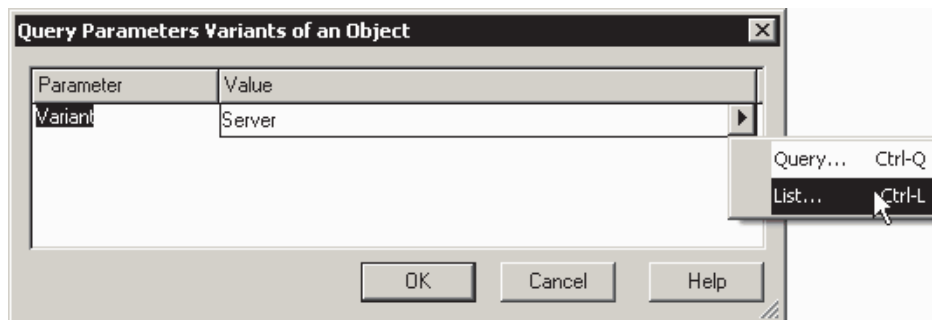
- 1. Right-click the variant application and select **Consolidate**.

Finding Object Variants

A query can find all objects derived from another. This is the "Object Variant" query.

To find object variants:

1. In the **HOPEX** query bar, select object type "Query" and enter "Object Variants".
The "Object Variants" query appears in the results dialog box.
2. Right-click the query and select **Execute**.
*☛ This function is available with **Windows Front-End** only.*
3. In the dialog box that appears, enter the name of the varied object, for example "Server". Clicking in the **Value** frame, an arrow appears allowing you to find the name of the object.



4. When the object has been selected, click **OK**.

Short Name	Name
	4BD65C9D4BE10919
	4BD65D9D4BE10AED
2008 Server	Call Center::2008 Server
AIX Server	Call Center::AIX Server
Application Server	MEGA::Architecture Frameworks::Servers and ...
Business Application Server	Call Center::Call Center Equipment::Artifact C...

The list of objects derived from "Server" appears. The tool displays not only direct variants but also sub-variations.

Variation Reports

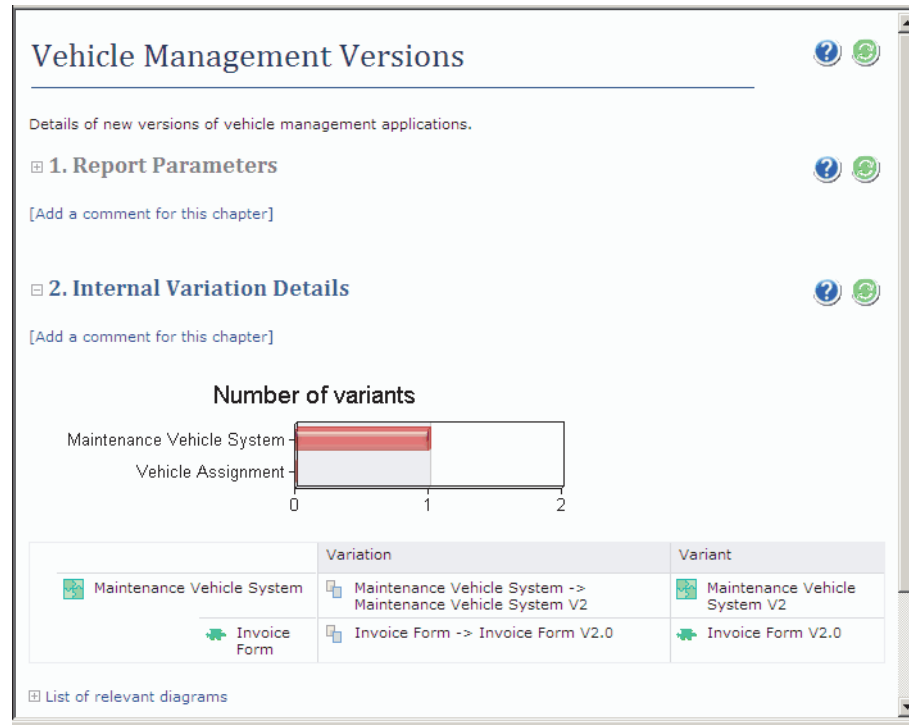
In **HOPEX** there are three report types linked to variations:

- **Variant Object Analysis:** this report details all relationships linking the variant to objects either directly or by inheritance. In this report, varied sources are indicated with reasons for replacements, and deletions are also accessible.
- **Varied Object Analysis:** this report type relates to varied objects. It gives a view of:
 - **Details of internal variations:** when a varied object comprises elements, these elements can also be varied in the context of the primary variation. The objective of this report is to show variations of analyzed elements and the detail of component variations.
 - **Details of variation descendant lineage:** variants themselves are variable objects and can therefore be varied in turn. This report details the complete lineage of a varied object.
- **Variation Analysis:** variations are used to establish relationships between a varied object and its variants. A variation can be broken down into sub-variations that define how elements of the varied object are themselves varied. This report details the structure of certain variations.

In **Windows Front-End**, these reports supply the **General > Variations** tab in the properties dialog box of each variable object. Depending on its situation (variant

and/or varied), the object displays information on parents, elements inherited, substituted or replaced and on the descending line.

☛ Example reports are available in the "Tutorial" repository of the "Demonstration" environment.



Example of "Varied Object Analysis" report

☛ Display of reports assumes that metamodel access is in "Advanced" mode.

OBJECT VERSIONS

The variation concept has been extended to object version management, retaining the inheritance principle.

The operating principle of versions is similar to that for variations. However, to comply with operational reality, a versioned object is frozen by a lock mechanism. The object can only be modified by creating a new object version.

☛ For more details on variations, see ["Object Variations", page 161](#).

Accessing Object Version Management

To access object version management:

1. Open the **HOPEX** options dialog box.
 - ☛ To, access the options dialog box, see:
 - ["Managing User Options \(Windows Front-End\)", page 60](#)
 - ["Managing User Options \(Web Front-End\)", page 44](#)
2. Click **Business Process and Architecture Modeling**.
3. In the right pane of the window, select the **Activate Variations** check box.

Creating Object Versions

To create a variation of an object:

1. In the **HOPEX** navigation window, right-click the object and select **New > Version**.

☛ Only applications can be versioned.

A version creation wizard appears.

By default:

- the version takes the name of the initial object, with a version extension.
- Attributes and diagrams are copied.

☛ For diagrams, the described object is not copied (it is a variation of the described object).

2. Click **Finish**.

The object representing the new version appears in the navigator, under the initial object. A lock appears alongside the initial object.

Operation of versions is based on that of variations, to which is added locking of the initial object.

☛ For more details on variations, see ["Object Variations", page 161](#).

☛ Locking of the object to be versioned should not be confused with that covered in **MEGA Administration-Supervisor** in the context of writing accesses.

Managing Locks on Parent Objects

After creation of a version, the parent object is locked.

To modify the locked object, you must create a new version.

 For more details, see ["Creating Object Versions", page 172](#).

You can however remove this restriction if you are authorized to unlock protected objects.

Unlocking objects

To unlock the parent object that has been versioned:

- 1. Right-click the object and select **Manage > Unlock Object**.

 This command appears if you are authorized to unlock protected objects.

To be able to unlock objects:

1. Open the **HOPEX** options dialog box.

 To, access the options dialog box, see:

- ["Managing User Options \(Windows Front-End\)", page 60](#)
- ["Managing User Options \(Web Front-End\)", page 44](#)

2. Click **Repository**.
3. In the right pane, for **Authorize Unlocking of Protected Objects**, select "Authorize".

Locking objects

It is recommended that you do not leave an object unlocked when a version of this object has been created.

To lock an unlocked object:

- 1. Right-click the object and select **Manage > Lock Object**.

 Object locking and unlocking commands only appear in the case of objects that can be versioned.

LIBRARIES



This chapter presents the library concept proposed by **HOPEX**.

Libraries are used to split **HOPEX** repository content into several parts.

Libraries can be seen as logical repositories. Libraries are not simply a means of classifying objects of a repository, they are real partitions of the repository.

Objects owned by different libraries can have the same name but they are different objects. An object can belong to only one library.

- ✓ ["About Libraries", page 176](#)
- ✓ ["Defining a Work Context", page 178](#)
- ✓ ["Using Libraries", page 180](#)

ABOUT LIBRARIES

An object can be found:

- explicitly in a library, because it is connected, or
- implicitly, because its owner (or the owner of the owner), etc.) is itself in a library.

In the second case, two objects can have the same name if they have different owners. Being in a library does not however prevent an object from being used in the model of an object in another library.

For example, say a company takes over another company working in the same business. A description of the processes of both companies is required to align them. People in the two companies should be able to work independently and give identical names to processes or org-units in both companies, but they will also need to share common objects.

A way of dealing with this problem could be to work in two different HOPEX repositories. It would however be difficult to define common processes working in two different repositories.

In the same repository you can create one library for each company and a third for shared objects. There will be no name conflict since the people in each company work in their own library. In their models they can reference objects created by persons in the other company. And they can share common objects in the third library.



Use of libraries can be combined with visibility and protection management.

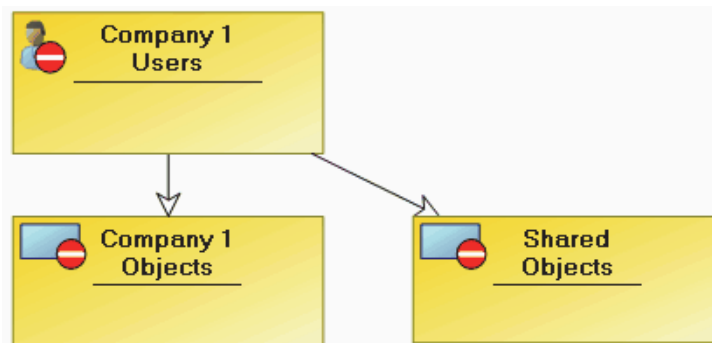
In the above example, certain persons of each company may need to have visibility on objects of their company and on shared objects, but should be able to modify only the objects of their own company.

To do this, for each library you must define:

- a writing access area
- a reading access area
- a user reading access area

The writing and reading access areas contain objects of the corresponding libraries.

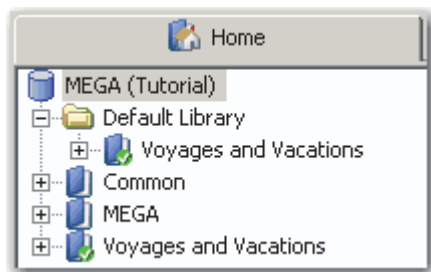
User reading access areas will be connected to reading access areas so as to give users in each company visibility on objects of their own company and shared objects.



If the reading and writing access areas are correctly configured, all objects created by a user will be automatically placed in the correct library and the correct access areas.

DEFINING A WORK CONTEXT

The **Home** navigation window, which is displayed by default, contains all libraries.



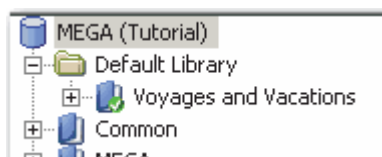
☛ The **MEGA** library, automatically created for each new repository, contains the list of objects necessary for operation of installed **HOPEX** products.

The context in which you work is defined by a library, which is the default library. A default library can be defined for each user.

Defining a Default Library

To define your default library:

1. In the **Home** navigation window, select the library on which you wish to work.
2. Right click on the library and select **Set As Default**.
This library appears with a green tick, and is automatically placed in the **Default Library** folder.



The default library is used to store an object if there is no current library at the time of its creation.

☛ in the **Home** navigation window, right-click the **Default Library** folder, select **Connect > Library** and specify the library you wish to define by default. It appears in the folder.

Creating a Library

 **Creation and management of accesses to the different libraries must be done under the supervision of the HOPEX repository administrator. The number of libraries should be limited to avoid creating too many duplicates of the same object.**

To create a library:

1. In the **Home** navigation window, right-click the repository name and select **New > Library**.
The library creation dialog box opens.
2. Enter the name of the library.
3. Click **OK**.
The library appears in the **Home** navigation window.

Defining Library Object Presentation

Objects in a library can be grouped in two ways:

- by type: objects are arranged in folders corresponding to their type.
 *This form of presentation is active by default. A folder is created only if there is at least one object of the type.*
- or by name: objects are presented in alphabetical order.

To modify presentation of objects:

1. In the **Home** navigation window, right-click the repository name and select **Regroup > By Name**.
2. Expand a library to view its list of objects, now presented in alphabetical order.

USING LIBRARIES

HOPEX offers facilities for access to objects contained in a library or referenced by it.

Using Library Objects

When you are working on a business process diagram for example, you may reuse a process already existing in the current library.

 *The current library is the library containing the current object; this library is not necessarily the default library.*

From a business process diagram, to obtain the list of business processes owned by the current library:

1. In the edit window, click the **Business Process**  button and click in the described business process diagram.
The **Add Business Process** dialog box opens.
2. In the **Name** box, click the drop-down menu arrow and select **Propose**.
The **Business Process** dialog box appears and lists the business processes in the current library.

 *If the library contains sub-libraries, or if it accesses other libraries, objects contained in these libraries are also proposed.*

 *If you are searching for a process outside the current library, you can use the **List** command. This command displays all business processes in the repository, irrespective of their owner library.*

Creating an Object from a Library

To create an object from a library in **HOPEX Windows Front-End**:

1. In the **Home** navigation window, right-click the desired library and select **New**, then the desired object type.
2. In the creation dialog box that appears, enter the object name.
3. Click **OK**.

The object is automatically connected to the library.

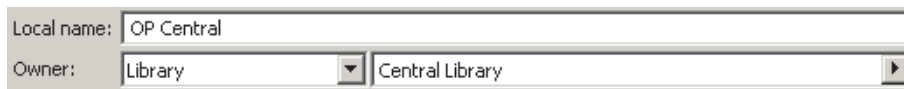
 *Main object types are proposed from the **New** command in a library pop-up menu.*

Defining the Object Owner

The owner of an object is automatically specified at creation of the object. If there is no current library, the object owner will be the default library.

To change the library owning an object, such as an organizational process for example:

1. Right-click the object and select **Properties**.
2. In the **Characteristics** tab of the properties dialog box, in the **Owner** box, click the drop-down menu arrow and select **Library**.



3. In the **Owner** box on the right, click the drop-down menu arrow and select **Library Neighborhood**.
The **Selection of objects of Library type** window lists the libraries owned and accessed by the current library.
4. In the **Selection of objects of Library type** window, select the chosen library and click **OK**.
The name of the library appears in the object properties dialog box.
5. Click **Close** to close the object properties dialog box.
In the navigation tree, the object appears under the library.

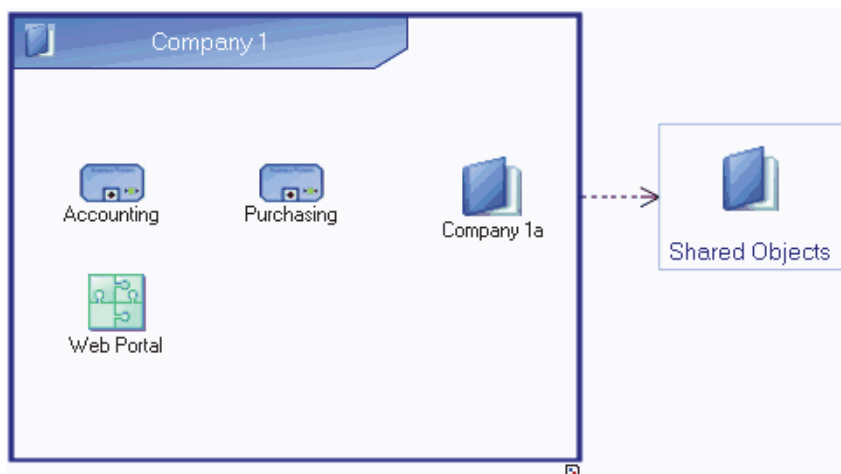
 You can also list all repository libraries by selecting **List** at the right of the field.

Library Diagram

The library diagram enables representation of the list of objects contained in a library, and the creation of links to other libraries.

 Object types presented in a library diagram are limited to "main types". These "main types" are accessible in the diagram objects insert toolbar.

You can use this diagram to quickly access the main objects on which you are working.



In the example above, "Company 1" contains "Accounts" and "Purchasing" business processes and the "Web Portal" application.

A library can:

- Own another library.

In the example above, "Company 1" has a subsidiary "Company 1a", for which a library has been created.

- Access another library.

In the example above, "Company 1" accesses the "Shared Objects" library.

Defining library references from its diagram

To reference a library by another library:

1. In the **Home** navigation window, open the diagram of the library that interests you.
2. In the navigation window, select the library you wish to reference.
3. Drag the library into the edit window and place it outside the frame of the described library.
4. Click the reel in the objects toolbar  and create a link from the frame of the described library to the referenced library

 The link appears as a dotted line in the diagram. This indicates that the library is accessed by the described library.

Libraries accessed by a library appear in the **Characteristics** tab of its properties dialog box.

Isolated Objects

Isolated objects are objects that are not connected to a library.

You can create objects without connecting them to a library, and do this at a later stage. A search tool allows you to find the isolated objects.

To find isolated objects

1. In the **Home** navigation window, right-click the repository name and select **Find isolated objects**.
2. A dialog box displays the list of isolated objects:

Exporting Library Content

To export a library:

1. Right-click the library and select **Manage > Export**.
2. In the **Export in format** box, select the export format in the drop-down list.
3. (Optional) Click **Browse**  to modify the file save location. Change the file name if necessary.

4. Click **Export** to start backup.
A series of messages keeps you informed of backup progress. The **Execution Report** window appears.
5. In the **Execution Report** dialog box, click:
 - **Open result file** to open the backup file.
 - **OK** to close the dialog box.

Export of a library includes all objects owned by the library and, hierarchically, all objects owned by each of its objects.

QUERYING OBJECTS



INTRODUCTION TO THE SEARCH IN HOPEX

Searching in HOPEX (Web Front-End)

HOPEX (Web Front-End) offers two types of tools to perform searches in the repository:

- a search bar for a quick search, which enables full-text search
 - ☛ *This feature is available if the repository has been indexed. For more details, see "[Quick Search \(Web Front-End\)](#)", page 187.*
- an advanced search tool, for an advanced search through a wizard or the possibility to enter a query using a repository query language.
 - ☛ *See "[The Advanced Search \(Web Front-End\)](#)", page 188.*
 - ☛

Searching in HOPEX (Windows Front-End)

HOPEX (Windows Front-End) offers two types of tools to perform searches in the repository:

- a search bar for a quick search by object type.
 - ☛ *See "[The Quick Search \(Windows Front-End\)](#)", page 197.*
- an advanced search tool, for an advanced search through a wizard or the possibility to enter a query using a repository query language.
 - ☛ *See "[The Advanced Search \(Windows Front-End\)](#)", page 201.*
 - ☛

SEARCHING IN HOPEX (WEB FRONT-END)

In **HOPEX Web Front-End** you can perform quick or advanced searches on repository objects.

Quick Search (Web Front-End)

HOPEX Solutions and products enable you to perform quick searches on all repository objects, if the repository has been indexed. This feature is available as standard.

☛ If the repository is not indexed, the advanced query tool is available instead. See ["The Quick Search \(Windows Front-End\)", page 197](#).

Indexing the repository

Repository indexing can be performed:

- previously by your administrator
- automatically.

☛ For more details, see **HOPEX Power Supervisor**, chapter *"Managing Repositories > Using Repositories > Enabling and Disabling Repository Indexing"*.

Performing a quick search

Prerequisite: the repository is indexed.

☛ See ["Indexing the repository", page 187](#).

To perform a quick search:

1. In your **HOPEX** desktop, in the search tool, enter the term you want to search for.

You can add several terms to your search.

☛ See ["Quick search syntax", page 187](#).

😊 To search for a term that includes the "-" character, use the "*" character.

For example to search for pre-meeting term, enter: *Meeting, pre*, or both of them.

2. Click .

Results appear in the right pane of the window.

Quick search syntax

By default, searches relate to objects with names or comments containing one of the terms entered.

For example, if you are searching for two terms, the result displays the objects in which one or the other of the terms has been found (equivalent to the "OR" operator).



You can use the following operators to refine your search.

Operator	Use	Example
"	Quotes allow search for a complete phrase	"delivery date"
*	Replaces one or several letters	"delivery *date* order"
?	Replaces a single letter	order?
+	Placed before a word, indicates that the word must be present	+date +delivery



Characters behind the "-" character are not taken into account.

Quick search results

Each full-text search result contains:

- the location where the entered text was found:
 - the short name
 - the comment
- ranking, which takes account of:
 - the number of times text was found
 - the weighting attributed to the attribute concerned.

The Advanced Search (Web Front-End)

Advanced queries are searches carried out by means of queries, either:

- with the help of a wizard
 - ☛ See *"Performing an advanced query with the wizard"*, page 189.
- via a registered query
 - ☛ See *"Performing an advanced search on a registered query"*, page 190.
- by manual entry of query parameters
 - ☛ See *"Performing an advanced search in ERQL mode"*, page 191 and *"Query Syntax"*, page 269.
 - ☛ To execute searches in the form of queries, you must know the names of the object types handled, and be familiar with query syntax, see HOPEX Power Studio.

Accessing advanced query in HOPEX Web Front-End

You can access the advanced query tool through:

- the **Main Menu > Advanced Query**
- the property page of an object, in order to connect objects

☛ For more details on how to connect an object, see ["Using the Search Tool to Connect an Object"](#), page 193.

Performing an advanced query with the wizard

With **Wizard mode**, you can execute more detailed queries. Details can relate to:

- object attributes and/or
- Object properties

To perform an advanced search with the search wizard:

1. Open the advanced query tool.

☛ See ["Accessing advanced query in HOPEX Web Front-End"](#), page 189.

The advanced search tool appears.

2. In the **Select Object Type** drop-down menu, select the object type to which your query relates.
3. Click the **Wizard mode** pane.
4. (Optional) In the **Attributes** tab, specify the operator and value defining the attribute to which the search relates:
 - Click in the **Operator** field of the attribute to which the search relates and select the required operator.

☛ Attributes in the drop-down list come directly from **HOPEX** and exist in English only.

☛ With the "Like" operator, the result contains the specified value, while with the "=" operator, the result is exactly the specified value.

- Click in the **Value** field of the attribute and enter the string to search for.

☛ Each specified **Operator** or **Value** is highlighted by a small red triangle at top left of its cell.

5. (Optional) Configure another attribute, repeat step 4.

6. To include link conditions in your query, select the **Links** tab and specify the link characteristics to which the search relates.
 - In the **Links** tab, specify as in step 4 the **Operator** and **Value** fields of the link to which the query relates.
 - (Optional) Configure another link, repeat step 6.

Org-Unit

Wizard mode

Attributes Links

Name	Operator	Value
End life date		
Freeze past Time Period		
Headcount		
Hourly Rate		
Internal/External	=	Internal Org-Unit
Life Cycle Definition		
Local name		

Registered Queries

ERQL mode

7. Click **Find** to run the query.
The list of results appears in the **Results** tab.
8. Select the object you want to consult.
Properties of the object appear in the read/edit area.

Performing an advanced search on a registered query

You can perform a query based on registered queries linked to an object, and run the query.

To perform an advanced query from a registered query:

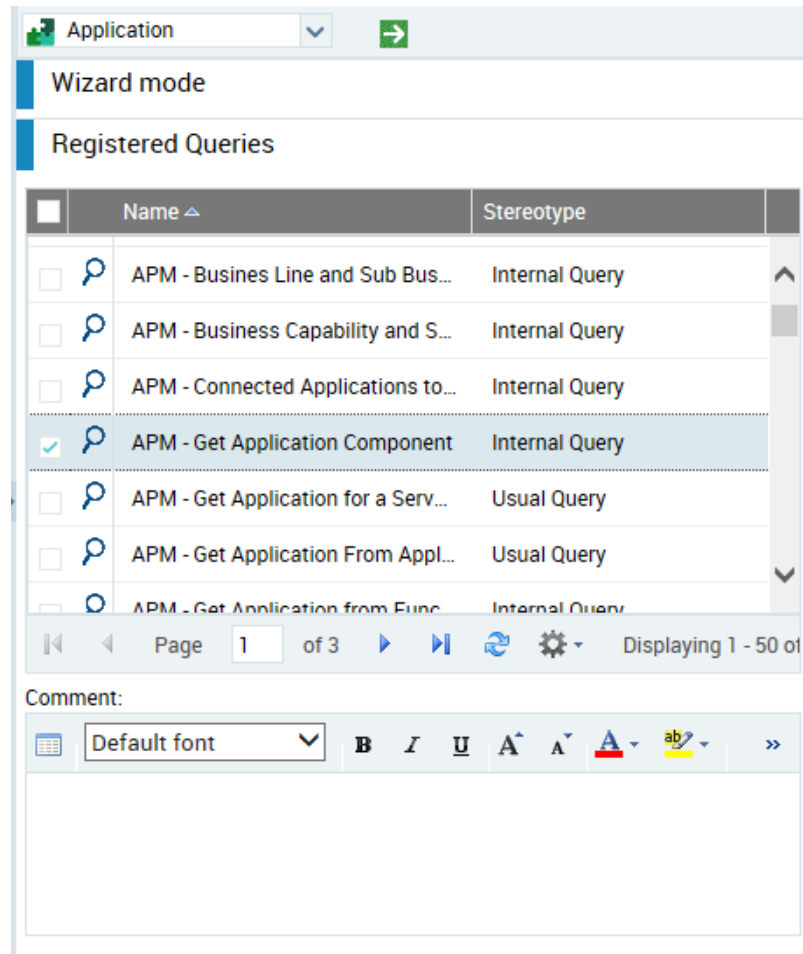
1. Open the advanced query tool.

See ["Accessing advanced query in HOPEX Web Front-End", page 189](#).

The advanced search tool appears.

2. In the **Select Object Type** drop-down menu, select the object type to which your query relates.
3. Click the **Registered Queries** pane.
The list of registered queries relating to the selected object appears.

4. Select the query you are interested in.
In the **Comment** tab, the comment associated with the query is displayed (if a comment exists).



5. Click **Find**  to run the query.

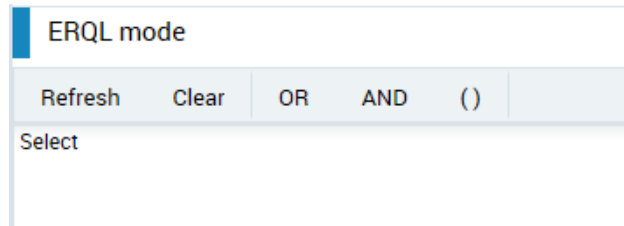
Performing an advanced search in ERQL mode

To perform an advanced search in ERQL mode:

1. Open the advanced query tool.
 - See ["Accessing advanced query in HOPEX Web Front-End", page 189](#).

The advanced search tool appears.
2. In the query tool, click the **Query** tab.

- Click the **ERQL mode** pane.



- Enter a query.

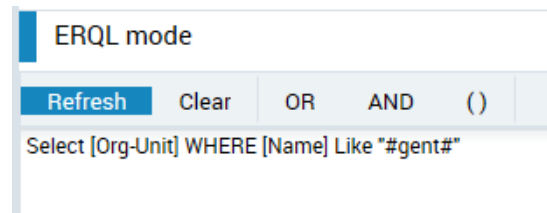
☛ See HOPEX Power Studio - Query Syntax.

Example: "Select Org-Unit Where Name like "#agent#" finds org-units whose name contains agent.

- Click **Find** ➔ to launch the query.
The list of results appears in the **Results** tab.
- Select the object you want to consult.
Properties of the object appear in the read/edit area.

To simplify data entry, you can build a query from properties selected in the wizard:

- In the **Select Object Type** drop-down menu, select the object type to which your query relates.
- Select the query parameters in the **Wizard mode**.
- When you have selected your parameters, select the **ERQL mode** pane.
- In the command bar of the **ERQL mode** pane, click **Refresh**.
The syntax of the query appears.



- Complete the syntax.

☛ You can call help during query code build by pressing <Ctrl> + <Space>. An "Intelissense" window appears, in which you can select object types to help you build code.

- Click **Find** ➔ to run the query.
The list of results appears in the **Results** tab.
- Select the object you want to consult.
Properties of the object appear in the read/edit area.

Using the Search Tool to Connect an Object

The search tool can be used:

- to list all of the objects of a given type.
- to find an object whose name begins / ends with a string or contains a given string

Querying objects of a given type

To obtain all objects of a given type:

1. Connect to HOPEX.
 See *"Starting HOPEX (Web Front-End)", page 22.*
2. Click **Main Menu** then **Advanced Query**.
3. In the **Select Object Type** drop-down menu, select the object type to which your query relates.
4. Click **Find**.
The result window lists all the objects of the repository found through searching.

Querying objects containing a particular string

You can query objects containing, beginning or ending with a particular string.

To obtain all objects that contain a given string:

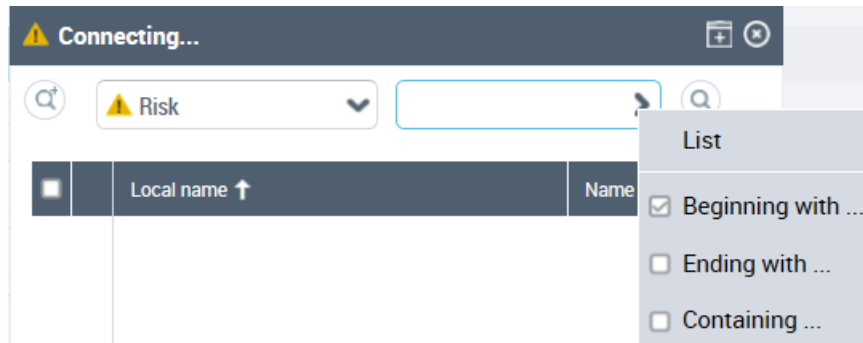
1. In an object property page, expand a section or select a page in which you can connect objects.
2. Click the **Connect** button.
3. (Optional) In the first field, select an object type for the query through the drop-down menu.

 At times, HOPEX may offer different selection modes for the search. See *"Choosing the object selection mode", page 195.*

By default the query relates to the Name, **Beginning with** the string you enter.

4. Enter a string in the field provided.

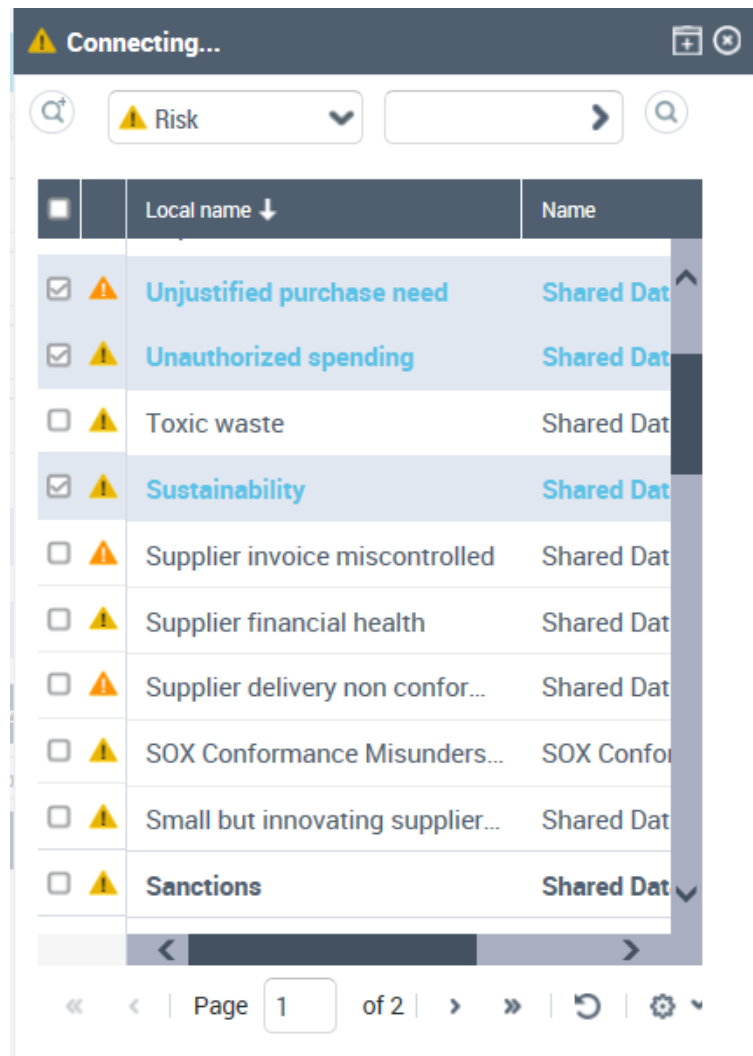
5. In the drop-down menu of the second field, select a query criteria if needed.
 - **List**: to list all objects of a given type
 - **Containing**: to list objects containing a particular string
 - **Ending with**: to list objects ending with a particular string



☞ *The last option selected becomes the default option.*

6. Click **Find**  to run the query.

7. Select the object(s) of interest to you.



Whenever the result contains many objects, you can use the vertical scrollbar and/or the page arrow.

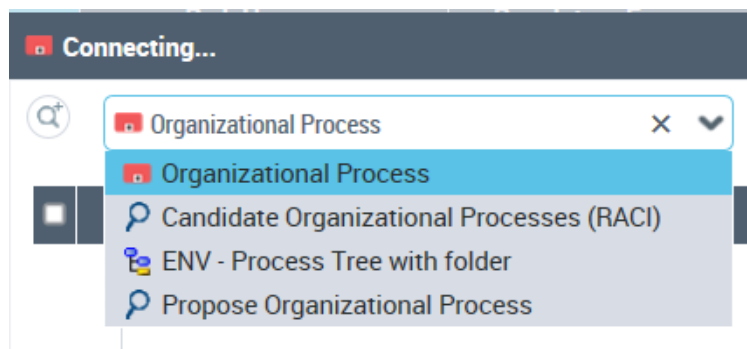
8. Click **Connect** to display the object(s) in the property page.

Choosing the object selection mode

At times the search tool may offer you several modes to select objects.

Example: you want to define the scope of an org-unit and connect organizational processes. You may choose to select

processes from a list, a tree, a candidate process query, etc.



THE QUICK SEARCH (WINDOWS FRONT-END)

Search Toolbar

With **HOPEX** (Windows Front-End), you can perform quick searches by object type.

With the search toolbar at the top of the workspace, you can perform the more common searches.



To run more complex searches, click  or see ["The Advanced Search \(Windows Front-End\)", page 201](#) to access the advanced search.

Queried objects

Searching on a single object type

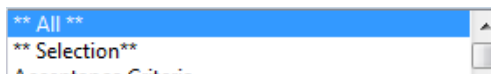
To perform a search on a single object type:

1. Access the search toolbar.
2. In the first field, select an object type from the drop-down list.
Example: "Org-Unit" to search for all the org-units in the repository
3. Click **Find**  or press [Enter].
Objects are listed in the result window.

Searching on all object types

To perform a search on all object types:

1. Access the search toolbar.
2. In the first field, select "*** All ***" (the first value in the drop-down list).

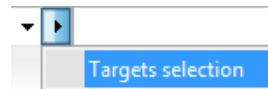


3. In the second field, define the search type.
 See ["Query Type", page 199](#).
4. Click **Find**  or press [Enter].
Objects are listed in the result window.

Searching on several object types

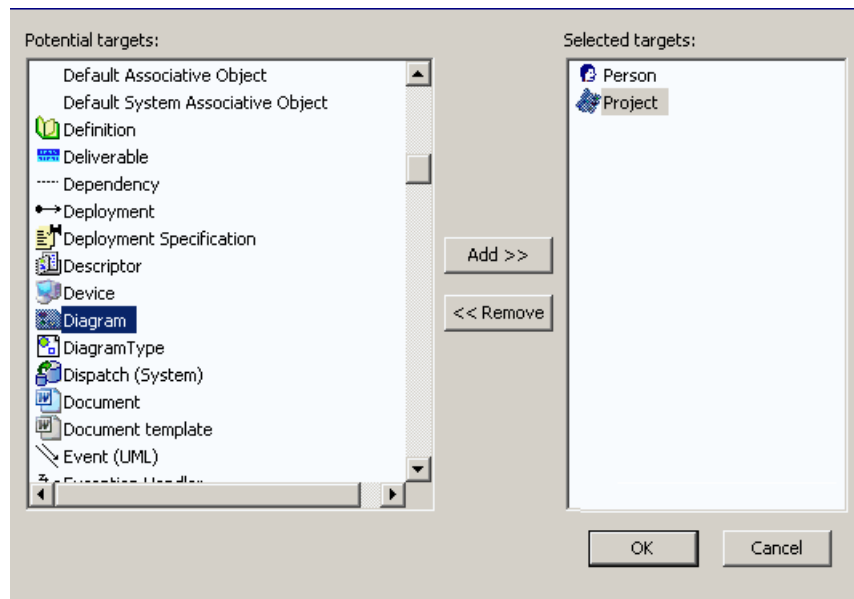
To perform a search on a limited number of object types:

1. Access the search toolbar.
2. In the first field, click the right arrow and select **Targets Selection**.

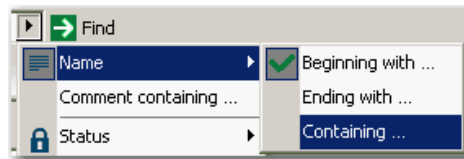


3. In the **Select Query Targets** dialog box, select the object types on which you want to run a search, then click **Add**.

☛ To select several object types at once, use the [Ctrl] key.



4. Click **OK**.
The object type selection field automatically displays "Selection".
5. In the second field:
 - enter the character string to be searched,
 - click the arrow to define whether the search is run on the name and/or comment



6. Click **Find**  or press [Enter].
Objects are listed in the result window. The result is heterogeneous (multitarget).

Query Type

☛ See also *"The Quick Search (Windows Front-End)", page 197.*

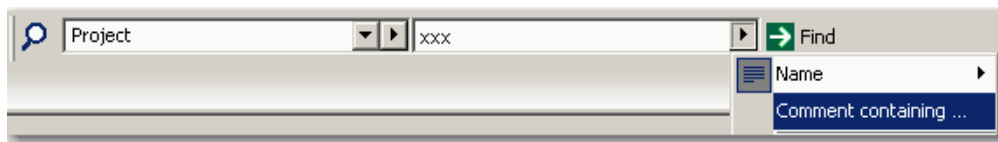
You can perform searches as a function of characteristics common to all object types.

Searching in the object comments

To search for a character string in object comment:

1. Access the search toolbar.
2. In the first field, select the object type.

Example: Project



3. In the second field:
 - enter the character string to be searched for.
 - click the arrow and select **Comment Containing**.
4. Click **Find** . Objects are listed in the result window.

Searching in the object names

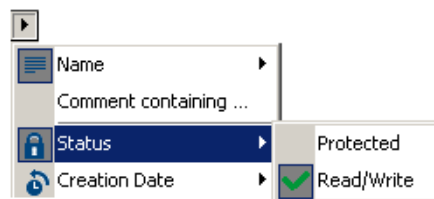
You can search for objects of which the short name:

- begins with,
- ends with,
- or contains a character string.

Searching as a function of object status

You can perform a search using object status as search criteria: "read/write" (modifiable) or "protected" (read-only).

This criterion can be combined with another. For example, you can search for modifiable projects whose names begin with a given string chain. In this case, both criteria are indicated graphically, which allows you to immediately see on which criteria the search is based.



Searching by date

You can perform a search by **Creation Date** or **Modification Date**. This date can be:

- **Before**
- **On**
- **After**

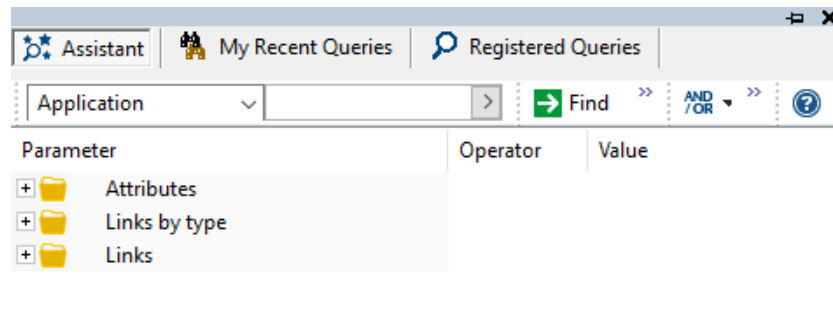
Searching by absolute identifier

When you are in expert metamodel mode (**Tools > Options, Repository** group, **Metamodel Access > Expert**), you can perform a search using an absolute identifier.

☞ *This command is available in expert metamodel mode only.*

THE ADVANCED SEARCH (WINDOWS FRONT-END)

Presentation of the Advanced Search Tool



The advanced search tool (Query Tool) is available:

- from the workspace, using the  of the search toolbar.
- from other **HOPEX** tools such as diagrams, the explorer, etc.

Different modes, each corresponding to a tab, are available depending on how the search is run (from the workspace or from another tool).

Use the advanced search tool to enter queries, which define:

- the objects and links browsed.
- the conditions on links and objects making up the repository browsing path.

The subject of the search is called "target".

A query can be written:

- using a wizard: see ["Querying Using the Query Assistant", page 202.](#)
- directly using the repository query language (ERQL)

 *ERQL (Entity Relationship Query Language) enables you to define queries using entity/relationship formalism.*

*Syntax of this language is described in **HOPEX Power Studio - Query Syntax.***

Querying from the workspace

In your **HOPEX** (Windows Front-End) workspace, you can search objects via:

- the search toolbar to run a quick search
 See ["The Quick Search \(Windows Front-End\)", page 197.](#)
- the advanced search tool (click ) which offers a number of search modes:
 - Assistant
 See ["Querying Using the Query Assistant", page 202.](#)
 - Recent queries
 See ["Using Recent Queries", page 210.](#)
 - Registered queries
 See ["Editing Queries", page 211.](#)

Searching from another HOPEX tool

The search tool can be called from numerous HOPEX windows or tools (explorer, diagram, etc.).

For example it can be called from a diagram if you want to add an object.

When run from another **HOPEX** tool, the search toolbar includes the following tabs in addition to the three standard modes:

- Candidates (see ["Handling Candidate Objects", page 220](#))
- Result (see ["Query Result", page 214](#))

 For more details on the different query modes, see ["Querying Using the Query Assistant", page 202.](#)

Querying Using the Query Assistant

The **Assistant** tab enables creation of multi-parameter searches without needing to know ERQL language.

A search bar similar to that presented in ["The Quick Search \(Windows Front-End\)", page 197](#) section, enables selection of the object type you want to search for.

 *The search bar in the advanced search tool does not enable searches from a selection of object types as it is the case for the workspace search bar.*

You can perform a simple search using this bar, or perform a search using the parameters that appear in the tree.

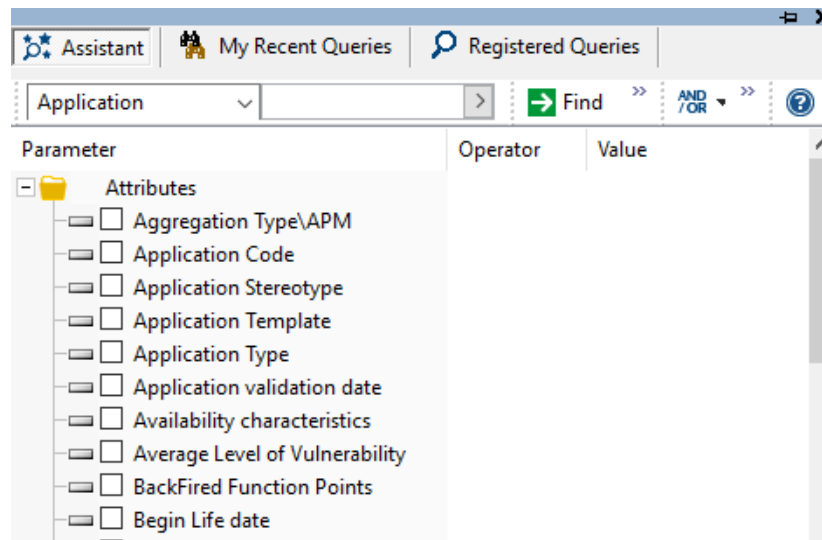
To query using the assistant:

1. Access the advanced search tool.

 See ["Presentation of the Advanced Search Tool", page 201.](#)

The advanced search tool appears and displays the **Assistant** tab.

2. In the search bar, in the first field, select the type of object to query.
Example: Application.



3. In the parameter field, select the parameter concerned by the search.
 - ☛ See ["Using the query assistant tree", page 203.](#)
 - ☛ See ["Entering the query parameters", page 206.](#)
4. In the Operator field, define the operator to be applied.
 - ☛ See ["Query operators", page 207.](#)
5. (If necessary) In the Value field, define the parameter value.
 - ☛ See ["Query parameter values", page 208.](#)
6. (If needed) Display the query code.
 - ☛ See ["Displaying the query code", page 209.](#)
7. Click **Find** .

The result list is displayed.

 - ☛ See ["Query Result", page 214.](#)
 - ☛ To save the query, see [""Saving a query from the assistant", page 210.](#)

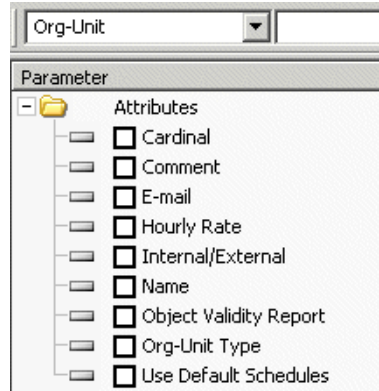
Using the query assistant tree

For each target object type, the query assistant proposes:

- its **Attributes**
- the **Links** to the types of objects that can be connected.

Target object type characteristics

You can use characteristics (attributes) of the target object type as parameters (for example, name and comment, which are characteristics valid for all object types).



Links

You can also use link characteristics as parameters.

Object types that can be connected to the target object type appear under the "Source" heading.

➡ To sort the links by object type, click this **Source** column.

Each link groups the characteristics of the link and associated objects.

Parameter	Operator	Value	Source
Links			
☐ Achieved Objective			Objective
☐ Activity			Activity
☐ Aggregation-Of			Org-Unit
☐ Application			Application
☐ Assigned Objective			Objective
☐ Business Function			Business Function
☐ Business Process			Business Process
☐ Collected-Message			Message
☐ Component			Org-Unit

☛ The "Links by Type" folder presents links sorted by the object type concerned.

"Involvement", "Follow-up Policy", "RACI", "Performer status" are properties of the link between Org-Unit and Organizational Process in the example below.

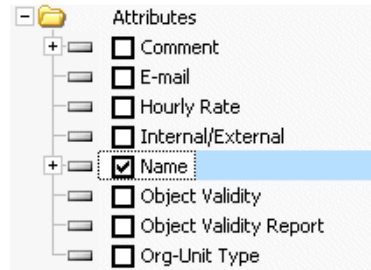
Parameter	Operator	Value	Source
Org-Unit			
☐ Designer Org-Unit			Org-Unit
☒ Org-Unit			Org-Unit
Org-Unit			
☐ Link Comment			
☒ RACI			
☐ RACI BPMN Management			
Organizational Process			
Participant			
Person			
Project			
Report Parameter Value			
Requirement			
Resource			
Risk			

Accountable
Consulted
Informed
Responsible

Entering the query parameters

The **Parameters** column contains the names of query parameters (characteristics, links, associated objects). Check boxes enable indication of the parameters which define the query.

- 1 Select (or clear) the parameters you want to take into account to build your query.

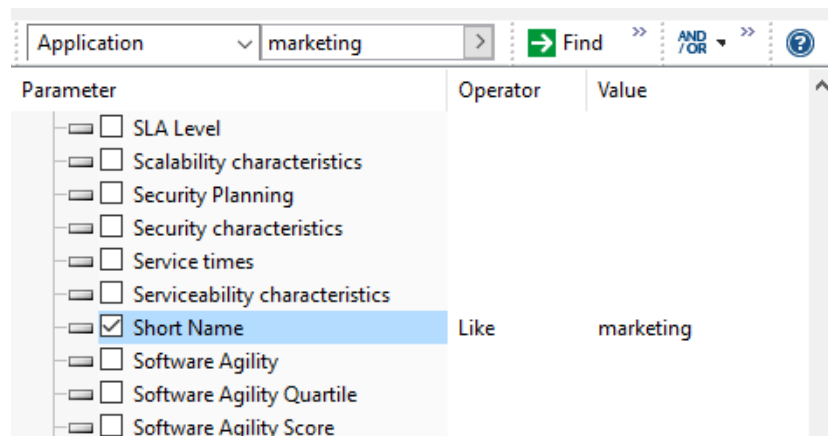


Selected links or properties then appear highlighted to facilitate query build and readability.

➡ To reset all the parameters, click  (**Remove All Query Criteria**).

When you enter a name in the second field of the assistant query bar, the **Name** parameter is initialized using this value.

➡ Check that you have selected one of the options offered by the arrow in the second field (e.g.: **Name starting with**, **Name containing**).

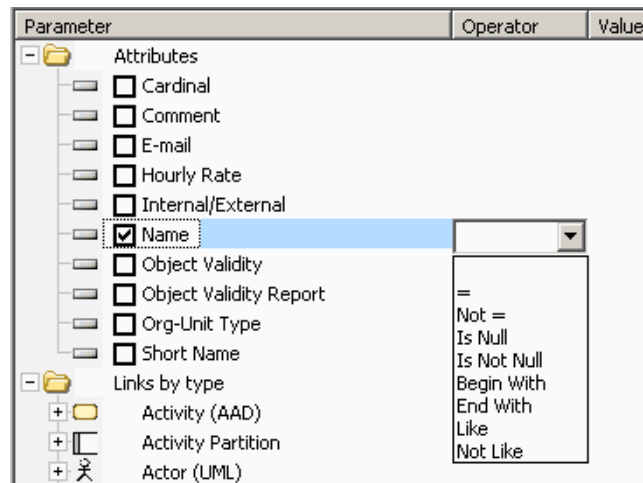


By default, the tree includes the main search parameters only. To extend the list of proposed parameters to:

- the administration properties, see ["Displaying administration properties", page 213](#).
- (If you work in a multilingual environment) translations, see ["Displaying translation properties", page 213](#).

Query operators

Operators are defined as a function of the selected parameter.



And, Or, and Not Operators

In the assistant toolbar of the advanced search tool, the  button enables use of the "And", "Or", and "Not" operators.

These operators concern all parameters selected in the assistant.

The parameters concerned by these operators are highlighted in a color that varies according to the operator (blue for "And", green for "Or", orange for "Not").

- **And**

The **And** operator means **ALL conditions must be fulfilled**.

```
Select [Project] Where [Progress percentage] ="100%"
And [Project manager names] ="Brown"
And [Project diagram] Is Not Null
```

- **Or**

The **Or** operator means **AT LEAST ONE condition must be fulfilled**.

```
Select [Org-Unit] Where [Message-Sent]
Or [Message-Received]
Or [Message-Collected]
```

- **Not**

The **Not** operator means **NO condition must be fulfilled**.

```
Select [Org-Unit] Where Not [Message-Sent]
And Not [Message-Received]
And Not [Message-Collected]
```

Inherited objects

 For more details on inherited objects, see ["Object Variations", page 161](#).

In case of use of object variations (["Activating Variations", page 161](#)), by default, the **Inherited Objects** option is selected. The code generated by the query assistant includes a keyword citing the inheritance.

Examples of query codes taking account of inheritance

```
Select [IT Service] Inherited Where [Defining-Application]
= 'Myapplication V2.0'
```

This query obtains all services defined for the "Myapplication V2.0" application , including those inherited.

```
Select application inherited Where [Functionality] = &func
```

This query obtains all applications that carry the "My func" functionality either directly or via inheritance.

Deactivating inheritance in the query assistant

To deactivate inheritance in the query assistant:

- 1. In the query assistant, click .
- 2. Clear **Inherited Objects**.

 The **Inherited Objects** option of the assistant dialog box impacts only the code generated by this assistant.

Query parameter values



The **Value** field enables to enter or search for the parameter value.

Parameter	Operator	Value	Source
☐ Locatability characteristics ☐ Manageability characteristics ☐ Maximum Tolerable Downtim... ☐ NIST FIPS 199 Risk Impact Level ☒ Name ☐ Next Review Date ☐ Number of Files ☐ Number of Vulnerabilities	=		Query... Ctrl-Q List... Ctrl-L

Depending on the parameter type, some tools help you enter its value.

For example:

- to enter a date, a calendar is proposed.

Parameter	Operator	Value																																										
☐ Data Freshness ☐ Date of C&A Completion ☐ Date of Contingency Plan Test ☐ Date of Planned C&A ☐ Date of Security Control Testin... ☒ Date of last release ☐ Date of next release ☐ Deployment Date ☐ Details\Cast ☐ End life date ☐ Expenses ☐ Extensibility characteristics ☐ Freeze past Time Period ☐ Functional Support\APM ☐ Global Expense	=	4/20/2018 april 2018 <table border="1"> <tr><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td><td>1</td></tr> <tr><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td></tr> <tr><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr> <tr><td>30</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> </table> Today: 20/04/2018	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6
26	27	28	29	30	31	1																																						
2	3	4	5	6	7	8																																						
9	10	11	12	13	14	15																																						
16	17	18	19	20	21	22																																						
23	24	25	26	27	28	29																																						
30	1	2	3	4	5	6																																						

- to enter a frequency, a list of values is proposed.

☒ Process Frequency ☐ Purpose ☐ QA Organizational Process ☐ References ☐ Scope of application ☐ Short Name ☐ Task Type ☐ Transaction	=	Annually Daily Monthly On Request Quarterly Twice a Month Weekly

Displaying the query code

The query code is built as you progressively select the boxes and complete the fields.

Values entered in the fields are kept when you clear the box (so as to note the parameter corresponding to the query code - you can then quickly reintegrate it by rechecking the box).

By default, the query code is not visible in **Assistant** mode.

To display the code of the selected query:

- In the assistant toolbar of the advanced search tool, click **Show**  > **Query Code**.
The query code is displayed at the bottom of the **Assistant** tab.
You cannot modify this code.
If needed, you can copy (Ctrl+C) the query code to use it elsewhere or to save it to create a new query.

"Saving a query from the assistant", page 210. **Saving a query from the assistant**

When **Display > Query Code** is selected, the query code appears at the bottom of the assistant.

```
Select [Organizational Process] Where [Process Frequency] = "A"
```

You can save it by creating a query.

To create a query from the code obtained in the assistant:

1. Display or create a query.
 See *"Querying Using the Query Assistant", page 202.*
2. In the assistant menu bar, click **Save as** .
 The dialog box for creating a query opens.
3. In the **Name** field, enter a name for your query.
4. In the **Stereotype** field, select the query type.
5. Click **Next** to reread the code of your query.
6. Click **Finish**.
 Your query is available in the **Registered Queries** tab.

Using Recent Queries

In the advanced search tool, **My Recent Queries** tab provides fast access to the latest queries you have executed.

Accessing you recent queries

To access the last queries you have launched:

1. Open the advanced query tool.
 See *"Presentation of the Advanced Search Tool", page 201.*
2. Select the **My Recent Queries** tab.
3. By default the object type on which your last query dealt with is selected; if needed, in the drop-down list, select another object type.
4. Select a query in the list.
 The query code is displayed at the bottom of the list.

Defining recent queries

My Recent Queries mode uses the "Temporary Query" object type (or MetaClass) to temporarily memorize your queries.

They contain the final code that produced the objects listed in the result tab. These objects are specific to each user.

A recent query is not intended to be kept indefinitely. If you want to keep it, you must save it.

➡ See [""Saving a query from the assistant", page 210](#).
[Saving a query from the assistant", page 210](#).

Configuring the number of recent queries

For each user, a defined number of recent queries is memorized.

When this number is reached, the oldest recent queries are deleted, except if they are among your favorites.

To configure the number of memorized recent queries:

- 1. In **HOPEX** menu bar, select **Tools > Options**.
- 2. Select the **Queries** folder.
- 3. In the right part of the dialog box, in the **Number of Recent Queries Kept** field, modify the value.

➡ The default value is 50.

Examples of recent queries

A recent query is a query that has been resolved and is directly executable. If the query includes parameters, the recent query contains the values of these parameters.

Query	Parameter values	Temporary query code memorization
Select [Project] Where [Short name] ="&[Short name]	HBC for &[Short name]	SELECT [Project] WHERE [Short name] ="HBC"
Select [Project] Where [Start date] = "&Project.Start date" And [Project manager names] = "&Project.Project manager names"	"15/02/2004" for "&Project.Start date" and "Brown" for &Project.Project manager names"	Select [Project] Where [Start date] = ""15/02/2004"" And [Project manager names] = ""Brown""
Select [Organizational Process] Where [Name] Like "Com#"		Select [Organizational Process] Where [Name] Like "Com#"

Editing Queries

Registered Queries mode facilitates access to queries by target object type and update. You can also create your own queries from this mode.

Query types

Queries can be of two types:

- **Internal:** includes "technical" queries used in standard supplies (descriptors, report templates (MS Word), matrices, etc.), "Name" and "*".
- **Usual:** includes queries programmed by users (proposed by default) as well as the queries "*" and "Name".

Using a Repository Query

To access repository queries:

1. Open the advanced query tool.
 See *"Presentation of the Advanced Search Tool", page 201.*
2. In the **Registered Queries** tab, select an object type in the drop-down list.

To filter queries according to their type:

1. In the assistant toolbar of the advanced search tool, click **Show**  **>**
Query type.
The **Display Queries** window opens.
2. Select the query types you want to be displayed.
Example: "Internal query".
3. Click **OK**.
The list of registered queries is updated depending on the type selected.

Creating a query

To create a query:

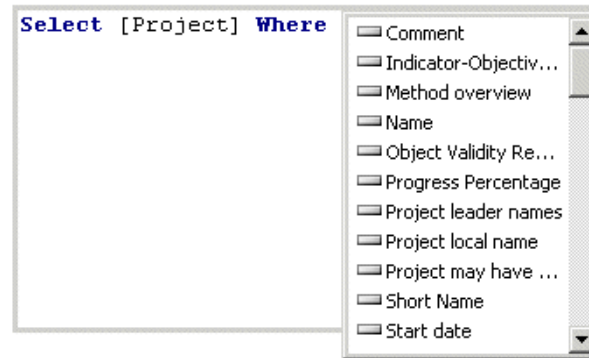
1. Open the advanced query tool.
 See *"Presentation of the Advanced Search Tool", page 201.*
2. Click the **Registered Queries** tab.
3. In the drop-down list, select the object type for which you want to create a query.
4. Click **Create New query**.
Your query is initialized as follows:
"Select xx where", where "xx" is the name of the target object.
5. Enter your query code.
HOPEX offers help when you are in doubt on the possibilities offered by the ERQL syntax.
 For more details, see *"Using help when entering queries", page 213.*

 You can analyze your query code before execution by clicking .

Using help when entering queries

To use help during query code build:

1. Press <Ctrl> + <Space>.
A drop-down list proposes the possibilities for completion of your code.



As in **Assistant** mode, properties proposed in this drop-down list are the most common. To add other properties, modify the display parameters, see:

- ["Displaying administration properties", page 213](#)
 - ["Displaying translation properties", page 213.](#)
2. Select an object type to complete your query.

Displaying administration properties

To display the administration properties:

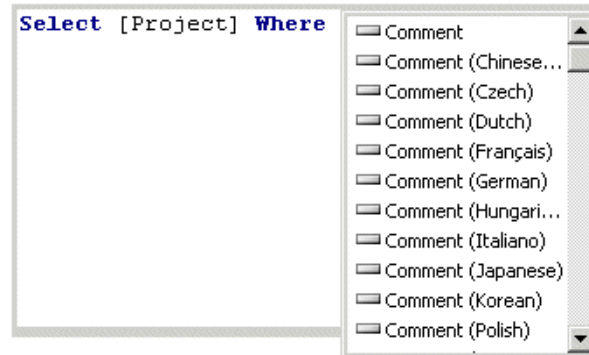
1. Open the advanced query tool.
➤ See ["Presentation of the Advanced Search Tool", page 201.](#)
2. Click the **Registered Queries** tab.
3. In the assistant toolbar of the advanced search tool, click **Show**  **>**
See administration properties.
 The drop-down list is updated and now includes the administration properties.

Displaying translation properties

To display language-dependent properties:

1. Open the advanced query tool.
➤ See ["Presentation of the Advanced Search Tool", page 201.](#)
2. Click the **Registered Queries** tab.

3. In the assistant toolbar of the advanced search tool, click **Show**  **>**
See translation properties.
 The drop-down list is updated and now includes translations of each characteristic in the different languages.



Pasting object names in queries

An object name can be inserted in a query in the form of a field.

In this way, when you enter a query of type:

```
Select [Org-Unit] Where name = xxx
```

you can copy the object name and paste it in the query.

So when you modify the object name you have copied, the query will be automatically updated.

To copy an object name, right-click the object (in a diagram or in the navigator) and in its pop-up menu, select **Copy**.

Query Result

After having executed a query by clicking **Find**, the **Result** tab appears.

To select all objects in the result tab:

- Simultaneously press keys <Ctrl> and <A>.

Two display modes are proposed:

- **Reinitialize** mode
- **Cumulative** mode

Constituting the result

Reinitializing results

By default, result tab content is reinitialized at execution of each query. In other words, the result tab is emptied and filled at execution of each query.

☛ **Reinitialize** is the only mode possible when a query is executed from the query bar.

Cumulating results

You can cumulate the results of several queries in the same tab.

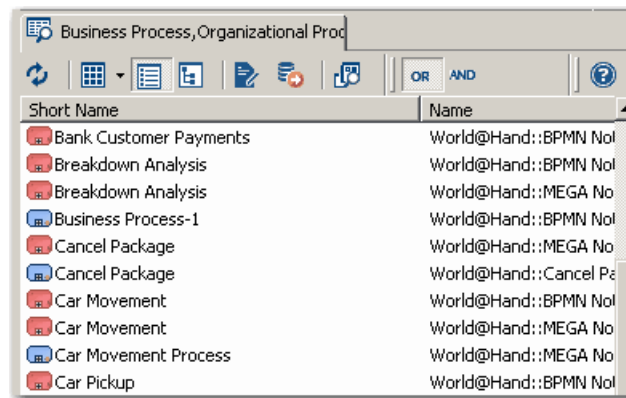
☛ The workspace toolbar does not allow cumulation of results. Content is systematically reinitialized.

To obtain **Cumulative** mode:

- 1 In the assistant toolbar of the advanced search tool, click  **Cumulative**.

☛ To obtain a cumulative result, do not close the result dialog box after running queries.

In **Cumulative** mode, the result tab can list objects of heterogeneous types (for example, processes and org-units).



Displaying objects common to several result sets

When the cumulative mode is selected, to display objects common to several sets of results, click .

☛ This button appears only when Cumulative mode is selected.

Displaying results of the advanced search tool

Creating a new tab in the result tab

You can create a new tab so as to avoid mixing results.

To create a new tab in the result tab:

1. Perform a search.

➡ See *"Querying Using the Query Assistant", page 202.*

2. In the search results window, click **Keep result in new window** . Your result appears in a separate tab, allowing it to be kept in case of re-execution of a query.

Customizing result tab columns

By default, the result tab presents the following columns for each object:

- short name
- long name

You can customize these columns. Each column corresponds to an object property.

To customize columns of the result tab:

1. Perform a search.

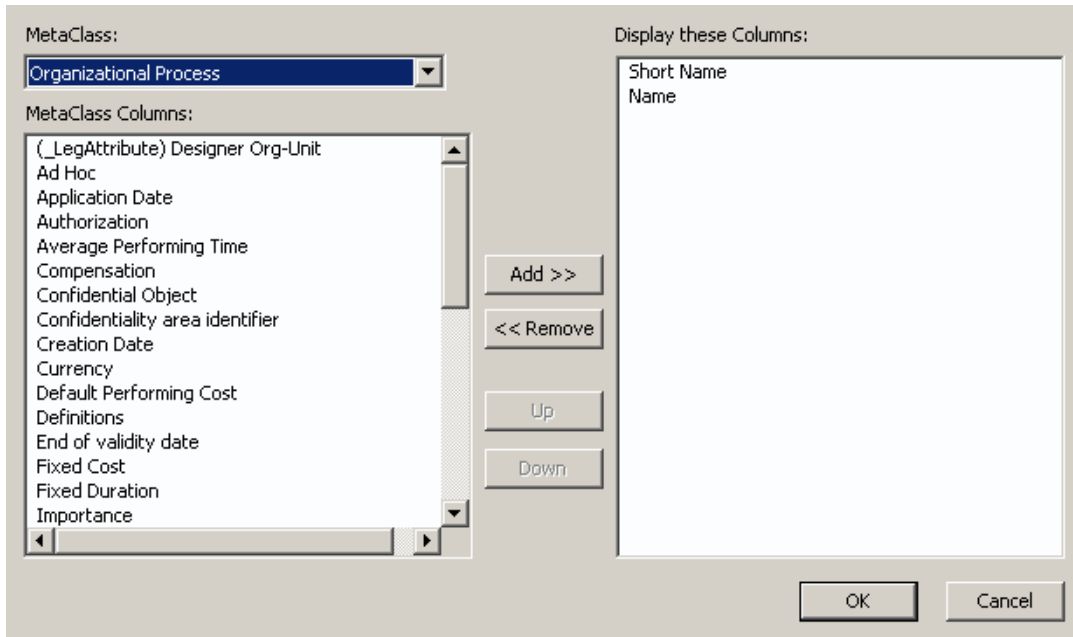
➡ See *"Querying Using the Query Assistant", page 202.*

2. In the search results window, click **Show**  **> Customize columns.**

☛ The **Use Generic Objects** option presents query result objects as abstract MetaClass instances.

For more details on abstract MetaClasses, see "Abstract Metamodel" in **HOPEX Power Studio - MEGA Studio**.

The **Column Display Customization** dialog box allows you to add or remove columns for a given MetaClass.



Each new column represents a MetaClass characteristic.

☛ If you wish to classify result dialog box results by object type, add the MetaClass column.

☛ For object types in a namespace, the short name is also indicated by default.

Memorizing columns

To store in memory the columns to be displayed when executing future queries:

1. Access the user options (**Tools > Options**).
2. In the Options tree, select **Query**.
3. In the right pane, select the **Result: Keep displayed columns** option.

☛ To display user options from the workspace, select **Tools > Options**.

The next time you perform a query, the result window proposes the same columns as those previously defined.

Reinitializing columns

The list of columns displayed depends on the object types of the query.

To reinitialize the columns:

1. Accédez aux options de l'utilisateur (**Outils > Options**).
2. In the Options tree, select **Query**.
3. In the right pane select **Result: Reinitialization of result list columns** option.

After each query execution, columns corresponding to characteristics not connected to queried targets are removed.

Displaying results as a list

By default, results appear in the form of a list .

When **Display result objects list** is on, duplicates are eliminated (i.e. duplicates of objects that appear in several recent queries).

For example, if the "Urgent Order" organizational process appears in several recent queries (ie. it appears several times in the query tree), it will appear only once in the list.

The **Display results as list** is equivalent to  in the result window.

Displaying queries that produced the result

You can display results as a tree, which enables viewing of recent queries that produced result object collections.

To display query results as a tree:

1. Click **Display tree of recent queries and result objects**.
2. Double-click the recent queries to show the result objects.
You obtain a tree enabling identification of the different queries executed with their result sets.

Displaying objects common to several result sets

The  button is used to restrict the view to only those objects common to all recent queries.

 and  buttons only appear when Cumulative mode is selected.

Refreshing result window content

You can rerun execution of queries that produced the list of objects in the result window.

To refresh results:

1. In the query result dialog box, click **Refresh** .

Modifying objects in the result window

You can use the query result window to update the characteristics of objects it contains.

Modifying an object

To modify an object from the result window:

- 1. In the result window, right-click the object and select **Modify**. You can then modify the selected characteristic, for example the object name.

 Sales Consolidation	Headquarters Consolidation::Sales Consolidation
 Sales Management	Sales Management
 Savings Accounts	Online Bank::Savings Accounts

Modifying a selection of objects

You can also modify the characteristics of a selection of objects (for example, assign the same characteristic value to a selection of objects).

To display columns corresponding to the different object characteristics, see ["Customizing result tab columns", page 216](#).

To modify a selection of objects from the result window:

- 1. Select the objects you want to modify.
- 2. Click the object characteristic you wish to modify and in the pop-up menu of the selection, select **Modify**.
- 3. Then modify the characteristic value.

 Credit Cards	Online Bank::Credit Cards
 CRM Management	CRM Management
 Electronic Trade Application	Electronic Trade Application
 Equipment Purchasing	Boat Management::Equipment Purchasing
 Find Suppliers	Purchasing Management System::Purchasing M...
 Flight Reservation (Amadeus)	Flight Reservation (Amadeus)
 Front Office	Travel Agent System::Front Office

- 4. Press "Enter" to validate.
The data is updated for all objects in the selection.

 Credit Cards	Online Bank::Credit Cards	
 CRM Management	CRM Management	In House Application
 Electronic Trade Application	Electronic Trade Application	In House Application
 Equipment Purchasing	Boat Management::Equipment Purchasing	In House Application
 Find Suppliers	Purchasing Management System::Purchasing M...	In House Application
 Flight Reservation (Amadeus)	Flight Reservation (Amadeus)	In House Application
 Front Office	Travel Agent System::Front Office	

Generating Analysis Reports

To generate a report from objects selected:

1. In the query results, select the objects.

 To select several objects, use the [Ctrl] key.

2. Click **Generate report from selected objects** .

The report is displayed. The table columns are the same as those of the list at the time of report generation.

 See ["Customizing result tab columns", page 216](#).

This tab allows you to quickly display the list of MetaClasses present in the result dialog box, and the corresponding number of objects.

3. (if needed) Click **Send To**  to send by e-mail the report you have generated.

 To modify the css style sheet of the query report, see ["Style sheet location", page 221](#).

Handling Candidate Objects

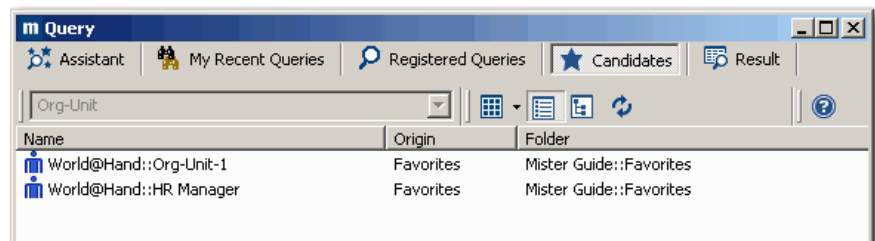
The **Candidates** tab appears in HOPEX Windows Front-End when the advanced query tool is run from another tool such as the explorer, a diagram, etc.

It presents, by object type:

- objects from History
- objects from Favorites
- objects in the **HOPEX** clipboard.

These are objects recently or currently used. This mode therefore enables fast access to objects handled. It is useful when you call the query tool from a function that does not allow use of the navigator.

 This tab does not appear if you run the query tool from the desktop (you therefore have access to the navigator, enabling you to easily handle repository objects and in particular your favorites and history).



Commands of  enable alternative display of these objects.

Configuring Query Tool Options

Accessing the query tool configuration options

To configure the query tool:

1. (**HOPEX Windows Front-End**) In the menu bar, select **Tools > Options**.

The user options window opens.

☛ To parameterize the query tool in **HOPEX Web Front-End**, from the **Main Menu** click **Settings > Options**.

2. In the Options tree, select **Queries** folder.
Configure the query tool in the right pane.
3. Select (or clear) the required options.

☛ See ["Query tool configuration options", page 221](#).

Query tool configuration options

You can modify, for example, the configuration of the following options:

Displaying the query tool and its tabs

You can define whether or not to display:

- the query tool: **Display Query Wizard** option
- tabs constituting the query tool:
 - queries: **Display Registered queries page** option
 - recent queries: **Display Recent Queries** option
 - candidate objects: **Candidate objects display** option

☛ For more details on the different query modes and query tool tabs, see ["Querying Using the Query Assistant", page 202](#).

Query target synchronization

The **Query target synchronization** option enables activation or deactivation of query target synchronization between workspace query bar and query tool.

- **Always**
This value enables permanent synchronization of workspace query bar and query tool: if a target is selected in one of these devices, it will also be automatically selected in the other.
- **Sometimes (if the tool is not hidden)**
The workspace query bar and the query tool are synchronized except if the query tool is hidden (**Auto Hide command**).
- **Never**
This value deactivates all synchronization between workspace query bar and query tool.

Style sheet location

Report: Style sheet location option defines the style sheet location.

EXPLORING THE REPOSITORY



When you modify an object (process, operation, etc.), it is of interest to know the impact of this action on the other objects in the repository.

It can be of interest to display the contents of the repository at a given moment in time and to study the links between different objects, or check consistency between objects.

- ✓ "The Explorer", [page 224](#), which enables you to easily browse the entire repository.
- ✓ "Matrices", [page 230](#), which provide you with a better view of the links between objects.
- ✓ "Tools for Checking Objects", [page 234](#), which enable you to view the consistency of modeled objects.

THE EXPLORER

The explorer allows you to view repository objects and links and to carry out impact analyses. Its use is similar to that of the Windows explorer: objects are represented in the form of a menu tree, which allows you to navigate easily and to have an overview of all the diagrams, objects and links specified in the repository.

☛ *The explorer is available in both Web Front-End and Windows Front-End. The presentation and functions offered are not however identical. Differences are indicated.*

Running the Explorer

Launching Explorer in Windows Front-End

To run the explorer in **HOPEX Windows Front-End**:

- 1. From the desktop, select **Tools > Explore** or click button  in the toolbar.
The explorer window opens. Note that the window is empty because you did not select an object before running the explorer.

To select the object to explore in the explore dialog box:

1. In the explorer menu bar, select **Explore > Object**, or in the explorer

toolbar click button .

The **Selection of an object** dialog box opens.

2. In the left pane of the window, click the object type to explore. For example, select "Org-Unit".
The list of "Org-Unit" objects appears in the right pane.

To consult the objects that surround an object, for example an "Org-Unit":

- 1. In the right pane of the **Selection of an Object** window, double-click an org-unit.

The explorer window opens and describes the selected object.

The list on the right shows the object types and links that characterize the object.

☛ *To explore an object, you can also right-click the object that you wish to explore and select **Explore**.*

Launching Explorer in Web Front-End

To run the explorer in Web Front-End:

- 1. Right-click the object you wish to explore and select **Explore**.

Exploring the Repository

Viewing the number of objects

The number between brackets indicates the number of objects of that type in the repository.

To show/hide this number in **Windows Front-End**:

- 1 In the explorer, select **View > Options > View Number of Objects**.

 *If your repository is very large, you may find it preferable to disable this option: This will speed up display of objects in the explorer.*

Viewing repository objects

The **Description** button  in the toolbar (green folder) allows you to view the description of the object you have selected. When you run the explorer from an object, the links that describe this object are displayed.

 *In HOPEX Web Front-End, the green folders are displayed by default. The button is not available.*

 *The description of an object includes the more basic objects that define it. For example, the operations of an organizational process are part of the description of the organizational process.*

To view the objects connected to the object you are exploring:

- 1 In the left pane of the explorer window, click an object type or link type that is preceded by a green folder.
Objects connected to the selected object are displayed on the right.

Impact analyses

The **Impact analysis** button  in the toolbar (yellow folder) allows you to determine if the object you are exploring has an impact on other objects.

 *In HOPEX Web Front-End, the yellow folders are displayed by default. The button is not available.*

 *Objects included in the impact analysis are the objects that will impact the object being analyzed if they are modified. For example, an organizational process is modified if one of the operations it contains is modified or deleted.*

To determine the objects impacted by the object you are exploring:

- 1 Double-click an object type preceded by a yellow folder:

Example: By double-clicking "Diagram", you will see the diagrams in which an object appears.

Viewing unused links

The **Empty Collections** button  in the toolbar (folder with watermark) allows you to display the unused links around an object. It can apply to description folders (green folders) and impact analyses (yellow folders).

 This function is available with **HOPEX Windows Front-End** only.

To view unused links:

1. Click the **Description** button  and/or the **Impact Analysis** button .
2. Click the **Empty Collections** button .
The unused links appear. They are presented as watermarks (green and/or yellow).

 You can create objects for these unused links or connect them to already existing objects. For more details, see ["Creating objects", page 227](#), and ["Connecting, disconnecting and deleting objects", page 227](#).

Opening a diagram from the explorer

To open a diagram from the explorer:

- 1. Right-click the diagram and select **Open**.
The corresponding diagram opens in the Edit window.

Exploring other objects

To quickly open a second explorer on an object:

- 1. Right-click the object you wish to explore and select **Explore**.
A second explorer window opens.

Explorer Display Modes

To improve explorer readability, use the buttons in the toolbar to select the format you find most suitable for viewing objects in the explorer.

 Selection of display mode is available in **HOPEX Windows Front-End** only.

In the toolbar, if you click button:

- **Details** , in the right pane you will see the object characteristics that can be specified.
- **List** , you no longer see the details of object characteristics.
- **Tree Only** , only the tree on the left is displayed.

Modifying the Repository with the Explorer

Creating objects

You can create new objects from the explorer in two ways:

- Either directly from the **New** button in the explorer window.
The object created then appears in the left pane of the explorer.
- Or from the explored object.

To create an object from another object:

1. Right-click the object type you wish to create and select **New**.
The object creation dialog box appears.
2. Name the object and click **OK**.
The object is created.

Copying and pasting objects

To copy an object or a group of objects:

1. Select the object(s) to be copied.
2. Right-click and select **Copy**.

To paste the object or group of objects you have just copied:

1. Right-click in the tree on the left where you wish to place the objects and select **Paste**.

 **When you paste objects in the explorer, the explorer automatically creates links between the objects you paste and the next object up in the hierarchy. This explains why you cannot paste certain objects in certain positions.**

 *In HOPEX Windows Front-End, object names can be copied in the explorer and pasted elsewhere, for example in a word processor or a diagram. You can also drag and drop objects from the explorer into a diagram.*

Connecting, disconnecting and deleting objects

To connect objects using the explorer:

1. Click an object type in the left pane of the window.
2. Right-click in the right pane of the window and select **Connect**.
The **Query** dialog box opens.
3. In the **Query** dialog box, specify the selection to be applied and click **Find**.
4. In the results window, select the objects to be connected.
5. Click **OK**.
The objects to be connected appear in the explorer window and are connected to the object.

You can also:

- disconnect two objects.
- delete repository objects

A deletion confirmation message appears. Use the delete command with caution.

☞ *It is possible that your authorization, defined by the administrator, limits deletion to those objects that you yourself have recently created.*

Modifying object properties

You can also modify the properties of an object:

- Right-click the object and select **Properties**.
You can modify characteristics of the object.

The details entered appear in the right pane of the window.

☺ *You can also indicate characteristics by entering them directly in the main explorer window.*

Comparing Objects Using the Explorer (Windows Front-End)

The **HOPEX** explorer allows you to compare objects.

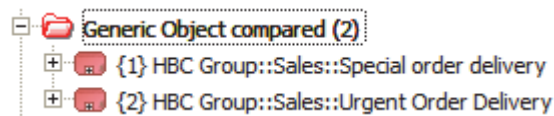
You can, for example, compare two organizational processes: "Normal Order Delivery" and "Urgent Order Delivery".

To run a comparison on objects:

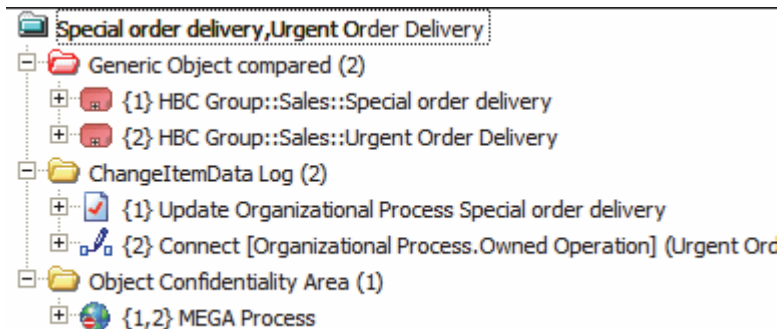
1. Select the objects to be compared holding the <Ctrl> key down, then right-click.
2. In the pop-up menu that appears, select **Compare and Align**.

An explorer window opens. It presents the comparison of the two selected objects.

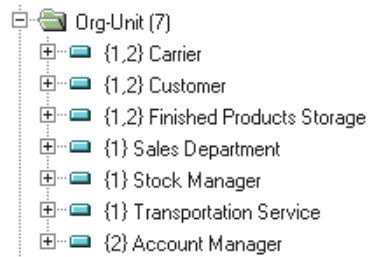
The red folder  contains the objects compared.



The number between brackets preceding the object name identifies the object. This number is used in other folders of the explorer to identify the objects compared.



In the example below, you can see that certain org-units are used in both organizational processes (Carrier, Customer, Finished Products Storage).



MATRICES

Matrices allow you to view the links between objects in the repository. The interest is to see how the two object types interact and to analyze impacts of a modification between two concepts.

The **Documentation** navigation window allows display of available matrices.

☺ *Matrices generated by **HOPEX** can be exported to Excel.*

Accessing Matrices

To access matrices from **HOPEX Windows Front-End**:

- 】 Select **View > Navigation Windows > Documentation**.

To access matrices from **HOPEX Web Front-End**:

- 】 Click the navigation menu, then **Repository > Documentation**.
-

Creating a Matrix

We shall take the example of a matrix between object types "Operation" and "Org-Unit". This matrix will define which operations are concerned when we modify an org-unit, and conversely, which org-units are affected by modification of an operation.

To create a matrix:

1. See ["Accessing Matrices", page 230](#).
2. Right-click the **Matrices** folder and select **New > Matrix**.
In the **Create Matrix** dialog box, specify the matrix content (for example, org-units executing operations).
3. Enter the name of the matrix, for example "Org-Units/Operations".
 *The matrix template list box contains predefined templates you can use to create matrices: for example, you can create a matrix based on the "Org-Units x Operations" template.*
4. Select "None" for the **Matrix template**.
5. Click **OK**.
A new matrix appears.
6. Double-click the new matrix (or right-click and select **Open**).
The matrix window opens; it is empty. To specify matrix content, see ["Specifying Matrix Content", page 231](#).

Specifying Matrix Content

To specify the content (called rows and columns) of a matrix:

1. See ["Accessing Matrices", page 230](#).
2. In the matrix window, select:
 - (Windows Front-End) **Row > Add**.
 - (Web Front-End) **Add Row**.The **Query** dialog box opens for selection of a target object.
3. Select the target and click **Find**.
4. Select all the objects displayed and click **OK**.
The rows of the matrix are entered.
5. Repeat the procedure for columns (**Columns > Add** or **Add Column**).
The titles of rows and columns are defined in the matrix.

To define content of cells, see ["Defining Cell Content \(Windows Front-End\)", page 231](#).

Defining Cell Content (Windows Front-End)

Defining cells consists of indicating which type of link between the two objects you wish to see in the matrix. You can display this link:

- by selecting one of the links proposed in the list.
- by creating a query that will find links between the two object types.

Selecting a link

To complete the cells of the matrix via an existing link:

1. See ["Accessing Matrices", page 230](#).
2. In the matrix window, select **Cell > Define**.
The **Definitions of Cells** dialog box opens.

 If you have created an "Organizational Processes/Messages" matrix, you would be able to choose between two links: Message-Received and Message-Sent.

3. Select a link and click **OK**.
Cells of the matrix are filled.

(Org-Unit / Operation)	I-Fin	Accept request	Account manager/client interview	Activate Purchase Requisition Follow-Up	Analyze other reason call	Analyze Purchase Request	Analyze Purchase Request	Approval	Approve contract	Approve Investment	Approve Purchase Requisition	Approve Request	Approve Request	Assign Warehouse	Availability advice	Await receipt	Begin
Account Manager		X															
Accounting Assistant																	
Accounting Department																	
Addressee																	
Administration ,Finances Management																	
Advisor																	
Agency Manager																	
Airline Company																	
Approver																	
Associated Airlines																	
Auto Repair Service Manager																	
Beverages Staff																	
Buyer			X														
Car Maintenance Department																	
Car Rental Department																	
Car Rental Director																	
Carrier																	

😊 *Matrices allow you to display one of the characteristics of the selected link. By default, the **Contents** displayed in a cell is an X indicating that a link exists between the objects in row and column.*

Creating a query

In a query, the source corresponds to the row and the target to the column.

Take the example of the Org-Unit/Operations matrix, with org-units in rows and operations in columns.

To display operations of which org-units are those defined in the lines of the matrix, you will use the following query:

```
Select [Operation] Where [Participant].[Intervening Party
Assignment].[Assigned Agent]=&row
```

Modifying Matrices

Modifying presentation (Windows Front-End)

If column headers are not legible, you can modify their presentation.

To display headers vertically:

1. See "[Accessing Matrices](#)", page 230.
2. In the **Display** menu, select **Vertical**.

Modifying cell contents

Removing a row or column

To remove a row or column from the matrix:

- In the matrix menu bar, select:
 - (Windows Front-End) **Row > Remove** or **Column > Remove**.
 - (Web Front-End) **Remove**, after selecting a row or column.

Connecting and disconnecting objects

You can modify a cell by connecting or disconnecting its related objects.

To modify cell contents:

- Right-click the cell to open its pop-up menu.



TOOLS FOR CHECKING OBJECTS

Building a consistent repository requires compliance with modeling rules. These can be rules defined by **HOPEX**, by a standards organization, or by administrators of your enterprise.

HOPEX provides you with tools that enable you to:

- Select rules to be met
- Check that your modeling objects meet these rules

Consistency Rules

Definition of concepts

Consistency Rules

A rule applies to a **HOPEX** repository object and defines a check on this object.

There are several levels of rule:

- **Suggestion**: rule it is advisable to observe, but not a requirement. Non-respect of the rule is indicated in the rules application report but does not produce a warning.
- **Recommendation**: important rule. Non-respect of the rule produces a warning.
- **Requirement**: mandatory rule. Non-respect of this rule produces an error and is a source of blocking.

➡ For more details on rules, see **HOPEX Power Studio -Publisher**, chapter "Creating Consistency Checks".

Regulations

A regulation enables classification of rules according to a specific context or domain. It can contain not only a set of rules but also sub-regulations.

You can define an active regulation, permanently visible on objects concerned.

For example, if you activate the "Process Modeling Regulation" regulation, there is an automatic check on the business processes, organizational processes, activities, org-units, operations and conditions that you create and handle.

You can also apply another regulation temporarily on an object.

Active regulation permanent check

An active regulation is a reference regulation, defined as such so that you can permanently check the conformity of objects that you create with rules to be respected.

Defining an active regulation (Windows Front-End)

You must carry out this operation in **HOPEX Windows Front-End**.

To define an active regulation:

1. From the **HOPEX** menu bar, select **Tools > Options**.
2. Select **Modeling and Methods Regulations**.
3. In the **Active modeling regulation** field, click .
4. In the dialog box that appears, select the regulation to be applied and click **OK**.

You can consult results linked to this regulation at any time. They appear in the properties dialog boxes of the objects concerned. You can also display them in diagrams and navigators with status indicators showing objects that are not validated with respect to the regulation.

Results of checks on objects

When an active regulation exists, results appear in the properties dialog boxes of objects to which the regulation is applied.

To consult results:

1. Open the object properties.
2. Select the **General** tab, **Rules Application** subtab.
You obtain the name of the regulation, followed by a table containing the names of rules in the regulation, their result for the checked object and the diagnostic.
Check results appear in the form of an icon.
Each icon relates to a regulation rule:



Rule is respected.



Rule is "Suggestion" type and is not respected.



Rule is "Recommendation" type and is not respected.



Rule is "Error" type and is not respected.

If the "Error on execution" message appears, it means the rule was not correctly implemented. In this case, consult your administrator.

Results in diagrams and the navigator

You can also display results in the diagram that contains the object. In this case, a status indicator appears alongside the checked object if an error or omission is to be reported.

In the same way you can display check results in the navigator.

 **Since the diagram displays no result by default, the lack of indicator means that no error has been detected, on condition that you had activated the rule and selected the result display option.**

To display rule results in the diagram:

1. In the **HOPEX** menu bar:
 - (Windows Front-End) Select **Tools > Options**.
 - (Web Front-End) Click **Main Menu > Settings > Options**.
2. Select the **Modeling and Methods Regulations** folder.
3. Select the option "Apply active regulation in diagrams".

To view results specific to a diagram object:

1. Click the icon that appears under the checked object.



A dialog box opens, detailing rules applied to the object.

Regulation specific check

When you run a check on an object, a dialog box asks you to select which regulation you wish to apply. This is a temporary check, independent of any which may be active on the object from another source. The specific check relates not only to the selected object but also to objects connected to it.

Occasional checks on objects

To apply a specific regulation to an object:

1. Right-click the object concerned and select **Check > Regulation with propagation**.

 *The effect of this command is to check the object and its connected objects. So in the case of an organizational process, you obtain results not only on the process itself but also on objects contained in this process, such as org-units, operations and messages.*

The list of regulations appears: This list comprises regulations that can be applied to the object concerned.

 *The regulations administrator can apply a regulation to the object other than one of those defined by default.*

If an active regulation is defined and applies to the object in question, it appears in the list and is selected by default.

2. Select the regulation you wish to apply and click **OK**.
A report in the form of an HTML page appears.

Occasional checks in a diagram

To specifically check objects in a diagram:

1. In Windows Front-End, open a diagram.
2. Select **Diagram Check > Regulation with Propagation**.
3. Select the regulation that you want to apply to the diagram.
4. Click **OK**.

A report appears. It contains results of the check on diagram objects.

Check results

Check results appear in an HTML report. This report indicates the regulation applied and lists the objects concerned.

The icon that appears before an object corresponds to the result not of a rule but of all rules applied to the object.

Process Modeling Regulation		
Result	Rule	Diagnostic
	<i>Recommendation</i> A procedure must be connected to a structure org-unit	<i>This rule is verified</i>
	<i>Suggestion</i> A procedure must have an accountable structure org-unit	An accountable org-unit is a structure type org-unit connected to the procedure, of which RACI property is set to accountable.  Procedure / Accountable OrgUnit

The result icon that will appear depends on the level of rules that have not been respected:



All rules respected.



At least one "Suggestion" type rule is not respected. No "Recommendation" or "Error" type rule to be reported.



At least one "Recommendation" type rule is not respected. No "Error" type rule to be reported.



At least one "Error" type rule is not respected.

The link **Rules Application Detail** allows you to consult detail of these rules.

Check Descriptors

A check descriptor applies to part of **HOPEX** repository content and edits results in the form of an HTML report.

The HTML report details characteristics not only of the object checked, but also of the objects it contains. A report on a descriptor relating to an organizational process will therefore display results for the process (such as comment, manager org-unit, etc.) followed by results linked to operations of this process.

You can extend the check to all objects directly or indirectly linked to the main object.

To run the check descriptor:

- 1 Right-click an object and select **Check > Check Descriptor**.

 For objects of diagram type, the feature is also available in Windows Front-End by selecting **Diagram > Described Object Check > Check Descriptor**.

Having selected a check type if necessary, an HTML page appears.

Checks carried out are listed and objects with no comment or isolated are indicated. You can modify the object types concerned via the explorer by clicking the hypertext links.

COMMUNICATING IN HOPEX



HOPEX simplifies team working and makes available different means of communication in your **HOPEX** desktop. You can:

- ✓ work on objects with certain users without other users seeing your work (available with option **HOPEX Collaboration Manager** and in an RDBMS format repository).
 - See *"Working in a Collaborative Workspace", page 240.*
- ✓ create and participate in threads of posts on objects.
 - See *"Managing Threads of Posts", page 259.*
- ✓ create alerts on objects to follow their ongoing modifications.
 - See *"Managing Your Alerts on Object Modification", page 261.*
- ✓ participate in chats, independently of the **HOPEX** desktop (**Web Front-End**) in which you are working.
 - See *"Chat Service (Web Front-End)", page 265.*

WORKING IN A COLLABORATIVE WORKSPACE

☛ *This functionality is only available with option **HOPEX Collaboration Manager** and in an RDBMS format repository.*

The following points are covered here:

- ["Overview", page 240](#)
- ["Creating Collaborative Workspaces", page 243](#)
- ["Inviting Persons to Your Collaborative Workspace", page 247](#)
- ["Deleting Participants from Your Collaborative Workspace", page 248](#)
- ["Modifying Collaborative Workspace Participant Access Level", page 248](#)
- ["Modifying Your Collaborative Workspace Characteristics", page 249](#)
- ["Adding/Deleting Objects in Your Collaborative Workspace", page 250](#)
- ["Working in a Collaborative Workspace", page 251](#)

Overview

HOPEX enables you to share your work with certain users. They see modifications as these progress. The other users of the repository do not see updates until this work is dispatched in the repository.

From your **HOPEX** desktop, you can share your work with certain users. To do this, you must:

- create a collaborative workspace
 - ☛ See ["Creating Collaborative Workspaces", page 243](#).
- invite participants
 - ☛ See ["Inviting Persons to Your Collaborative Workspace", page 247](#).
- define objects on which you want to work
 - ☛ See ["Adding/Deleting Objects in Your Collaborative Workspace", page 250](#).

Collaborative workspace participant access level

The access level of a participant to a collaborative workspace defines actions he/she can and cannot perform within this workspace.

☛ *Participants of **Blocked** level do not receive an update notification e-mail if the **Send notification by e-mail** option is selected (see ["Sending automatic notifications to participants", page 249](#)).*

☛ *To modify the access level of a participant, see ["Modifying Collaborative Workspace Participant Access Level", page 248](#).*

Access levels of a collaborative workspace participant are:

- **Blocked**
The blocked user cannot connect to the collaborative workspace.
- **Viewer**
The viewer has read-only access to the collaborative workspace and its properties. He/she cannot update the collaborative workspace. He/she can offer an opinion on the workspace when it is in review.
 - ☛ See *"Connecting to a collaborative workspace", page 252.*
 - ☛ See *"Giving your opinion on work in review", page 254.*
 - ☛ See *"Accessing collaborative workspace properties", page 249.*
- **Contributor** (default)
By default, a participant has contributor status. He/she can carry out updates, indicate when his/her work is completed and resumed, and offer an opinion on the workspace when it is in review.
 - ☛ See *"Connecting to a collaborative workspace", page 252.*
 - ☛ See *"Communicating your work progress in the collaborative workspace", page 253.*
 - ☛ See *"Giving your opinion on work in review", page 254.*
- **Manager**
In addition to the actions available to the contributor, the manager can also manage participants and objects, organize reviews, and modify the collaborative workspace owner.
 - ☛ See *"Inviting Persons to Your Collaborative Workspace", page 247.*
 - ☛ See *"Deleting Participants from Your Collaborative Workspace", page 248.*
 - ☛ See *"Modifying Collaborative Workspace Participant Access Level", page 248.*
 - ☛ See *"Adding/Deleting Objects in Your Collaborative Workspace", page 250.*
 - ☛ See *"Modifying the collaborative workspace owner", page 250.*
- **Owner**
The owner is the user who creates the collaborative workspace. Only one of the participants has this access level.
Only the owner of the workspace can perform all available actions in his/her collaborative workspace.
In addition to the actions available to the manager, the owner can close, dispatch and discard his/her collaborative workspace.
 - ☛ See *"Closing a collaborative workspace", page 255.*
 - ☛ See *"Dispatching or discarding collaborative workspace updates", page 256.*

Collaborative workspace states

A collaborative workspace can be in the following states:

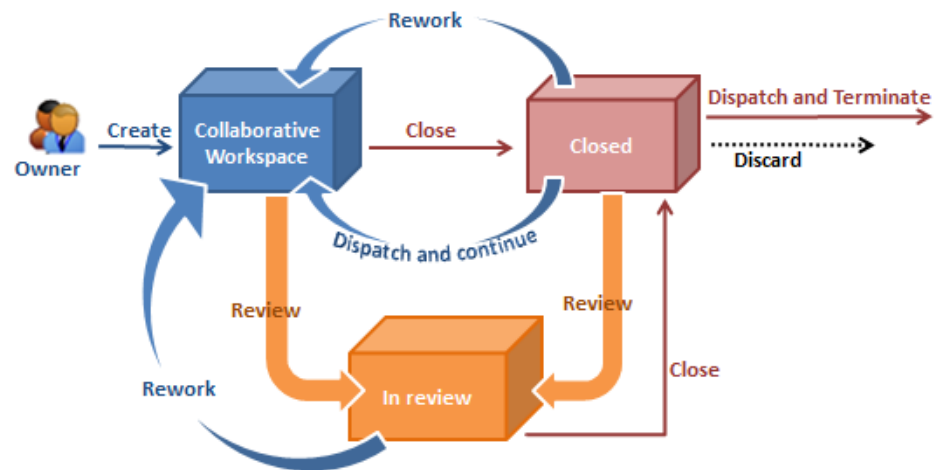
- **Shared**
Once the collaborative workspace has been created, it is in Shared state. All authorized participants can connect to it. Authorized participants can update this collaborative workspace.
- **Closed**
When the collaborative workspace has been closed by its **Owner**, it can no longer be accessed by the other participants. The owner is the only participant who can modify collaborative workspace objects.
- **In Review**
All authorized participants can connect to the collaborative workspace. Participants who have not completed their work can complete it. Participants can offer their opinion on the collaborative workspace.

➡ See *"Collaborative workspace participant access level"*, page 240.

Owner actions and collaborative workspace states

The owner of the collaborative workspace is the only participant who can perform all available actions in his/her collaborative workspace.

➡ See *"Working in a Collaborative Workspace"*, page 251.



Work status of a participant

A collaborative workspace participant may or may not be connected to the collaborative workspace.

Work status of a participant can be:

- **Idle**
The participant remains in this status for as long as he/she does not connect for the first time to the collaborative workspace.
 Status for participants of access level **Owner, Manager, Contributor, or Viewer.**
 - **Reading in progress**
The participant has connected at least once to the collaborative workspace.
 Status for participant of access level **Viewer.**
 - **Work in progress**
The participant has connected at least once to the collaborative workspace.
The participant remains in this status until he/she specifies that his/her work is completed.
 Status for participants of access level **Owner, Manager, or Contributor.**
 - **Review in progress**
The participant has connected at least once to the collaborative workspace.
The participant remains in this status until he/she specifies that his/her work is completed.
 Status for participants of access level **Owner, Manager, or Contributor.**
- When the collaborative workspace is in status:
- **Shared**, the participant passes from status **Work in Progress** to **Review in Progress** or the reverse when he/she indicates **Work Completed** or **Work Resumed**.
 - **In Review**, once the participant has indicated **Work Completed** he/she cannot resume work.
 See ["Communicating your work progress in the collaborative workspace"](#), page 253.

Creating Collaborative Workspaces

You can create a collaborative workspace:

- when you have created or modified one or several objects in your private workspace and you want to share your work with other users before dispatching it in the repository (when it will be available to all users).
- from opening your private workspace, to directly share your work with other users.

Once you have created a collaborative workspace:

- you can create another collaborative workspace (to work on other repository objects).
☛ This action is performed from a private workspace.
- you cannot modify, in your collaborative workspace, repository objects that are not reserved in Check Out in your collaborative workspace.
☛ See "Adding/Deleting Objects in Your Collaborative Workspace", page 250.
- you can be invited to other collaborative workspaces as a participant.
☛ See "Inviting Persons to Your Collaborative Workspace", page 247.
- you can create a private workspace (if you do not already have one).

To create a collaborative workspace:

1. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **File > Workspace > New**.
 - **Web Front-End**: click **Main menu > Collaborative Workspace > New Workspace**.

The collaborative workspace creation dialog box appears
2. In the **Name** field, enter the name of the collaborative workspace.
☛ You can modify its name later, see "Modifying the collaborative workspace name", page 250.
3. (Optional) Select **Send notification by e-mail** to warn each collaborative workspace participant (including yourself) of certain modifications in this collaborative workspace (change of collaborative workspace state, addition/deletion of participants).
☛ At creation of your collaborative workspace, participants receive a connection invitation by e-mail. This invitation specifies the name of the collaborative workspace, the repository and environment in which it has been created, and the access level of the participant to this collaborative workspace.
4. (Optional) In the **Comment** frame, you can enter information on creation of this collaborative workspace.

For example, enter information on objects you want to share with users.

*☛ To later define users with whom you want to share your private workspace and the objects in question, click **Finish**.*
5. Click **Next** to define users with whom you want to share your private workspace.

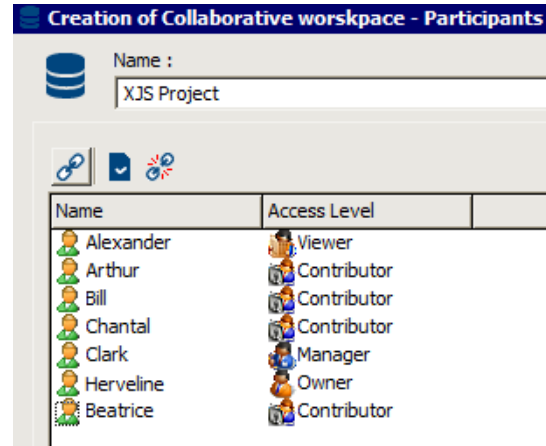
The add participants dialog box appears, presenting you as **Owner** of the collaborative workspace.
6. Click **Connect** .

The add persons dialog box appears.
7. Select the person (use [CTRL] key to select several persons) with whom you want to share your work, then click **Connect**.

The person or persons are added to the list of collaborative workspace participants as **Contributor**.
*☛ To return to the previous step, click **Previous**.*

8. (Optional) To change access level of a participant, in the **Access Level** field of the person, select another access level.

☛ To define access level of a participant later, see ["Modifying Collaborative Workspace Participant Access Level"](#), page 248.



9. Click **Next**.
If you have already created objects in your private workspace, these appear in the list of objects of your collaborative workspace.

☛ If you do not want to share one or several of the listed objects, select the object (use the [CTRL] key to select several), then click **Cancel Check Out** ❌.

10. (Optional) To reserve repository objects for your collaborative workspace, click **Check Out Objects** .

 To reserve objects later, see *"Adding/Deleting Objects in Your Collaborative Workspace"*, page 250.

The add generic objects dialog box of the workspace appears.

- (Optional) Clear **Propagation** if you do not want to add objects that depend on the selected object as a function of the chosen perimeter.
- By default, export perimeter is as defined in the properties of the Export tool. To modify default perimeter, in the **Perimeter** field, select the propagation perimeter.
- In the **Objects to Reserve in Check Out** frame, click the **Add Objects to List** button .
- Perform object search and select the objects in the result dialog box.
- Click **OK**.

The objects appear in the list of objects in Check Out in your collaborative workspace.

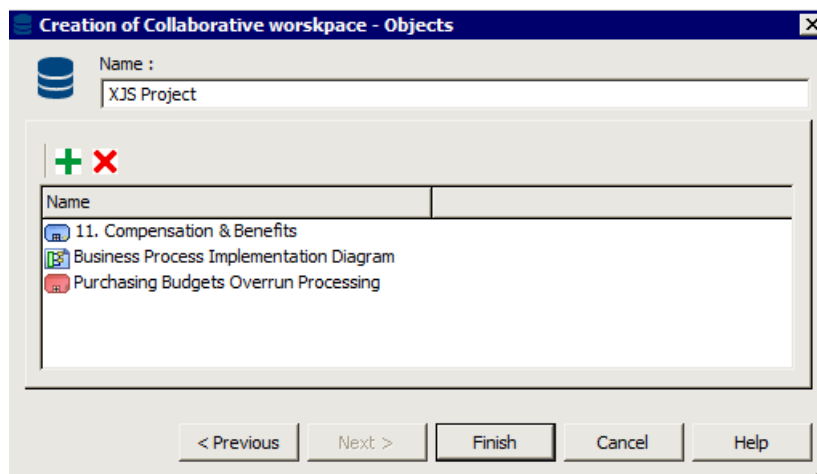
 An object can be in Check Out in only one collaborative workspace at a time.

 In case of an error, select the object (use the [CTRL] key to select several), then click **Remove Objects from Propagation List** .

- Click **Next**.

The list of objects and their dependent objects appears.

- In case of an error, select the object (use the [CTRL] key to select several) that you do not want to reserve, then click **Remove Objects from Propagation List** .
- Click **OK/Finish**.



11. Click **OK/Finish**.

The selected objects are reserved in Check Out for your collaborative workspace. They are locked for users who are not participants in your collaborative workspace.

If you selected option **Send notification by e-mail**:

- an invitation message is sent immediately to all participants (including yourself) of your collaborative workspace, with their status in this collaborative workspace.
- you receive a notification message on sharing your collaborative workspace.

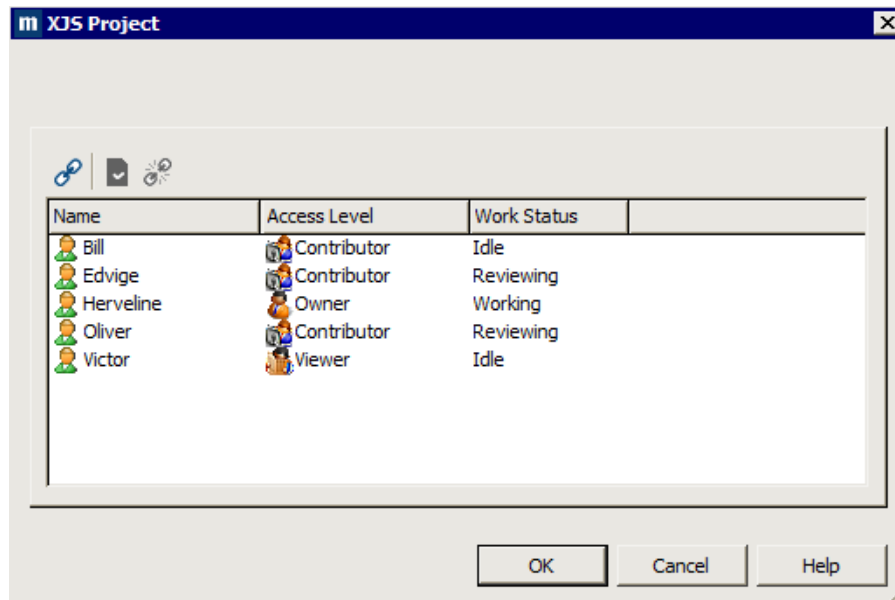
Inviting Persons to Your Collaborative Workspace

Once your collaborative workspace has been created, you can invite other persons to participate in your work.

To invite persons to your collaborative workspace:

1. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **File > Workspace > Manage Participants**.
 - **Web Front-End**: click **Main menu > Collaborative Workspace > Management Participants**.

The collaborative workspace participants dialog box appears.



2. Click **Connect** .
3. In the add persons dialog box, select the person you wish to invite to share your workspace.

☛ Use the [Ctrl] key to select several persons at the same time.

4. Click **Add**.

The person is added to the list of participants in the collaborative workspace as **Contributor**.

☛ The person receives a notification e-mail if you selected option **Send notification by e-mail** (see ["Creating Collaborative Workspaces"](#), page 243).

☛ To modify the access level of the person to your collaborative workspace, see ["Modifying Collaborative Workspace Participant Access Level"](#), page 248.

Deleting Participants from Your Collaborative Workspace

Once your collaborative workspace has been created and participants defined, you can delete participants from your collaborative workspace.

☛ To block access to a participant, see ["Modifying Collaborative Workspace Participant Access Level"](#), page 248.

To delete a participant from your collaborative workspace:

1. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **File > Workspace > Manage Participants**.
 - **Web Front-End**: click **Main menu > Collaborative Workspace > Management Participants**.

The collaborative workspace participants dialog box appears.

2. Select the person and click **Disconnect** .

The person is deleted from the list of participants in your collaborative workspace and can no longer connect.

☛ The person receives a notification e-mail if you selected option **Send notification by e-mail** (see ["Creating Collaborative Workspaces"](#), page 243).

Modifying Collaborative Workspace Participant Access Level

To modify collaborative workspace participant access level:

1. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **File > Workspace > Manage Participants**.
 - **Web Front-End**: click **Main menu > Collaborative Workspace > Management Participants**.

The collaborative workspace participants dialog box appears.
2. Select the line of the person concerned.
3. In the **Access Level** field, select the access level of the participant to the collaborative workspace.

☛ See ["Collaborative workspace participant access level"](#), page 240.

☛ See ["Modifying the collaborative workspace owner"](#), page 250.

Modifying Your Collaborative Workspace Characteristics

If you are owner or manager of the collaborative workspace, you can modify its following characteristics:

- sending or not of automatic notifications to participants
 See *"Sending automatic notifications to participants", page 249.*
- its description
 See *"Modifying collaborative workspace status description", page 249.*
- its owner
 See *"Modifying the collaborative workspace owner", page 250.*
- its name
 See *"Modifying the collaborative workspace name", page 250.*

Accessing collaborative workspace properties

To access collaborative workspace properties:

1. Connect to your collaborative workspace.
 See *"Connecting to a collaborative workspace", page 252.*
2. From your **HOPEX** desktop:
 - **Windows Front-End:** in the **HOPEX** menu bar, select **File > Workspace > Properties.**
 - **Web Front-End:** click **Main menu > Collaborative Workspace > Properties.**

The collaborative workspace properties dialog box appears.

Sending automatic notifications to participants

You can automatically send e-mail notification to warn each participant of modifications to this collaborative workspace:

- change of status of collaborative workspace
- addition/deletion of participants
 *Participants of **Blocked** level do not receive an update notification e-mail if the **Send notification by e-mail** option is selected.*

To send automatic notifications to participants:

1. Access collaborative workspace properties.
 See *"Accessing collaborative workspace properties", page 249.*
2. Select **Characteristics.**
3. To modify sending or not of e-mail notifications to participants, select or clear the option **Send notification by e-mail.**

Modifying collaborative workspace status description

To modify your collaborative workspace characteristics:

1. Access collaborative workspace properties.
 See *"Accessing collaborative workspace properties", page 249.*

2. Select **Characteristics**.
3. To modify collaborative workspace description, enter your modifications in the **Comment** frame.

Modifying the collaborative workspace owner

You can modify the collaborative workspace owner

To modify your collaborative workspace owner:

1. Modify the collaborative workspace owner access level.
 See ["Modifying Collaborative Workspace Participant Access Level", page 248](#).
2. In the participants dialog box, select another user and specify **Owner** access level.

Modifying the collaborative workspace name

To modify your collaborative workspace name:

1. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **File > Workspace > Rename**.
 - **Web Front-End**: click **Main menu > Collaborative Workspace > Rename**.

The collaborative workspace renaming dialog box appears.
2. In the **Name** field, enter a new name.
3. Click **OK**.

Adding/Deleting Objects in Your Collaborative Workspace

If you are owner of a collaborative workspace, you can add or delete objects. When you add an object to your collaborative workspace, this is extracted from the repository and locked for users who are not participants in your collaborative workspace.

To add or delete objects in your collaborative workspace:

1. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **File > Workspace > Manage Objects in Check Out**.
 - **Web Front-End**: click **Main menu > Collaborative Workspace > Manage Checked-Out Objects**.

The dialog box of objects included in the collaborative workspace appears.
2. To cancel the Check Out of one or several of the listed objects, objects not yet modified in the workspace, select the object (use the [CTRL] key to select several), then click **Cancel Check Out** .
3. (Optional) To reserve repository objects for your collaborative workspace, click **Check Out Objects** .
4. (Optional) Clear **Propagation** if you do not want to add objects that depend on the selected object as a function of the chosen perimeter.

5. By default, export perimeter is as defined in the properties of the Export tool. To modify default perimeter, in the **Perimeter** field, select the propagation perimeter.
6. In the **Objects to Reserve in Check Out** frame, click the **Add Objects to List** button .
7. Perform object search and select objects in the result dialog box.
8. Click **OK**.
Objects appear in the list of objects to be reserved for your collaborative workspace.
*☛ In case of an error, select the object (use the [CTRL] key to select several), then click **Remove Objects from Propagation List** .*
9. Click **Next**.
The list of objects and their dependent objects appears.
10. In case of an error, select the object (use the [CTRL] key to select several) that you do not want to reserve, then click **Remove Objects from Propagation List** .
11. Click **Finish**.
12. Click **OK**.
The selected objects are reserved for your collaborative workspace. They are locked for users who are not participants in your collaborative workspace.
*☛ If you selected option **Send notification by e-mail**, a message is sent to all your collaborative workspace participants.
To select the notification by e-mail option, see "Modifying Your Collaborative Workspace Characteristics", page 249.*

Working in a Collaborative Workspace

Actions you can perform as a participant depend on your collaborative workspace access level.

☛ (see ["Collaborative workspace participant access level", page 240](#) and ["Modifying Collaborative Workspace Participant Access Level", page 248](#)).

☛ So that each participant receives a modification notification e-mail, the send notification by e-mail option must be selected, see ["Sending automatic notifications to participants", page 249](#).

Depending on your collaborative workspace access level, you can perform the following actions:

- ["Connecting to a collaborative workspace", page 252](#)
- ["Communicating your work progress in the collaborative workspace", page 253](#)
- ["Organizing a review", page 254](#)
- ["Giving your opinion on work in review", page 254](#)
- ["Consulting opinions of other participants on work in review", page 254](#)
- ["Consulting participant work status", page 255](#)
- ["Closing a collaborative workspace", page 255](#)
- ["Dispatching or discarding collaborative workspace updates", page 256](#)
- ["Exiting a session from a collaborative workspace", page 257](#)

Connecting to a collaborative workspace

Depending on his/her collaborative workspace access level, a participant can connect to this collaborative workspace to:

- update objects in Check Out in this workspace.
 Available for participants of access level **Contributor**, **Owner**, or **Manager**.
- consult objects in Check Out in this workspace.
 Available for participants of access level **Viewer**.

Only participants of access level **Blocked** cannot connect to the collaborative workspace.

To connect to a collaborative workspace:

1. Start the **HOPEX** application.
The authentication dialog box appears.
2. In the **Login** field, enter your login.
3. (If you have a password) In the **Password** field, enter your password.
4. In the environment drop-down menu, select your work environment.
 If you can access one environment only, this is automatically taken into account and the environment selection field does not appear.
5. Click **SIGN IN**.
When you have been authenticated, a new dialog box appears.
6. In the repository drop-down menu, select your work repository.
 If you can access only one repository, this is automatically taken into account and the repository selection field does not appear.
 If you already have a private workspace open, the repository is automatically selected and this field is grayed. To change repository, you must first dispatch or discard your current private workspace.
7. In the profile drop-down menu, select the profile with which you want to work.

8. (You already have at least one collaborative work space available) Select the collaborative workspace to which you want to connect.

☛ A user has at most one private workspace in progress in an environment, but can have in parallel several available collaborative workspaces.

9. Click **LOGIN**.
Your desktop opens and objects in Check Out in the collaborative workspace are available. Authorized participants can update these objects.

☛ See ["Collaborative workspace participant access level"](#), page 240.

Communicating your work progress in the collaborative workspace

Participants of **Contributor**, **Owner**, or **Manager** access level can communicate progress of their work in the collaborative workspace by means of the following actions:

- **Work completed**
The participant can warn other participants when his/her work is completed.
- **Work again**
The participant can then resume work and warn other participants.

To define progress state of your work:

1. Connect to your collaborative workspace.
☛ See ["Connecting to a collaborative workspace"](#), page 252.
2. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **File > Collaborative Workspace**.
 - **Web Front-End**: click **Main menu > Collaborative Workspace**.
3. Select the action to be performed.

Organizing a review

Participants of **Owner** or **Manager** status can organize review of updates carried out in the collaborative workspace.

☛ *All participants can communicate on work in progress in the collaborative workspace, see "Communicating on collaborative workspace updates", page 255.*

When work is completed, or at a request for opinion on current state, you can organize a review of updates carried out in the collaborative workspace.

☛ *When the collaborative workspace is in review, all participants can give their opinion, see "Giving your opinion on work in review", page 254.*

To organize a review:

1. Connect to your collaborative workspace.
 - ☛ See "Connecting to a collaborative workspace", page 252.
2. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **File > Collaborative Workspace**.
 - **Web Front-End**: click **Main menu > Collaborative Workspace**.
3. Select **Review**.
The collaborative workspace passes to **In Review** state.

Giving your opinion on work in review

You can give your opinion to other users on updates carried out in the collaborative workspace when it is in the **In Review** state.

To give your opinion on work in review:

1. Connect to your collaborative workspace.
 - ☛ See "Connecting to a collaborative workspace", page 252.
2. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **File > Workspace**.
 - **Web Front-End**: click **Main menu > Collaborative Workspace**.
3. Select your opinion (**I like**, **I don't like**).

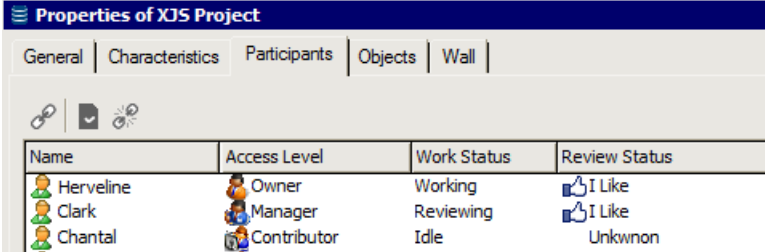
☛ *To consult the opinions of participants on updates carried out in the collaborative workspace, see "Consulting opinions of other participants on work in review", page 254.*

Consulting opinions of other participants on work in review

To consult opinions of other participants :

1. Access collaborative workspace properties
 - ☛ See "Accessing collaborative workspace properties", page 249.

2. Select **Participants**.
The **Review Status** indicates the opinion of each participant.



Name	Access Level	Work Status	Review Status
Herveline	Owner	Working	I Like
Clark	Manager	Reviewing	I Like
Chantal	Contributor	Idle	Unknown

Consulting participant work status

To consult work status of another participant:

1. Access collaborative workspace properties
 ➤ See ["Accessing collaborative workspace properties", page 249.](#)
2. Select **Participants**.
 The **Work Status** field indicates the work status of each participant.
 ➤ See ["Work status of a participant", page 242.](#)

Communicating on collaborative workspace updates

As work progresses, all authorized participants (**Contributor**, **Manager** and **Owner** access levels) can exchange progress of their work on the **Wall** of the workspace.

➤ See ["Threads of Posts and Alerts on Objects", page 259.](#)

Closing a collaborative workspace

Once updates have been completed, or to lock access to the collaborative workspace, a participant of **Owner** status can **Close** the collaborative workspace.

➤ Only participants of **Owner** status can perform this action. Other participants can no longer access the collaborative workspace when it is closed.

Participants of **Owner** status can reopen the workspace to participants via the **Resume work** action.

When the workspace has been closed, you can **Discard** or **Dispatch** updates carried out in the collaborative workspace in the repository.

➤ See ["Dispatching or discarding collaborative workspace updates", page 256.](#)

To close your collaborative workspace:

☛ You must be **Owner** of the collaborative workspace.

- 1. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **File > Workspace > Close**.
 - **Web Front-End**: click **Main menu > Collaborative Workspace > Close**.

You access actions **Discard** or **Dispatch** the collaborative workspace.

Other participants can no longer connect to the collaborative workspace.

Dispatching or discarding collaborative workspace updates

Only the collaborative workspace **Owner** can **Discard** or **Dispatch** updates carried out in his/her collaborative workspace .

In a collaborative workspace, once it has been closed, if you are its **Owner**, you can:

☛ To close your collaborative workspace, see "[Closing a collaborative workspace](#)", page 255.

- **Discard**
All updates carried out in the collaborative workspace are lost.
- **Dispatch and Terminate**
This action allows you to update the repository and make available to other users the updates you have carried out in your collaborative workspace.
Your collaborative workspace is no longer available.
- **Dispatch and Continue**
This action allows you to update:
 - the repository, to make available to other users the updates you have carried out in your collaborative workspace.
 - your collaborative workspace, with updates carried out in the repository by other users.
 Your collaborative workspace is still available with the same objects in Check Out and the same users. You can, if needed, free objects in Check Out that you do not need anymore.
All authorized participants can connect to the collaborative workspace.

To dispatch or discard your collaborative workspace:

1. Connect to your collaborative workspace.
☛ See "[Connecting to a collaborative workspace](#)", page 252.
2. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **File > Collaborative Workspace**.
 - **Web Front-End**: click **Main menu > Collaborative Workspace**.

3. Select either:
 - **Discard**
The collaborative workspace disappears. Updates are lost. Objects in Check Out are freed unchanged.
 - **Dispatch and Terminate**
All updates carried out in the collaborative workspace are dispatched in the repository. They can be accessed by all users.
The collaborative workspace disappears.
 - **Dispatch and Continue**
A window appears listing objects that you are going to dispatch and keep in Check Out.
(optional) Select objects that you want to free from your private workspace and click **Remove objects from the list** ).
Click **OK**.
All updates carried out in the collaborative workspace are dispatched in the repository. They can be accessed by all users.
The collaborative workspace is updated, with updates carried out in the repository by other users.
The collaborative workspace is available to all authorized participants.

Exiting a session from a collaborative workspace

Exiting **HOPEX** from a collaborative workspace is the same whether you are its **Owner** or not.

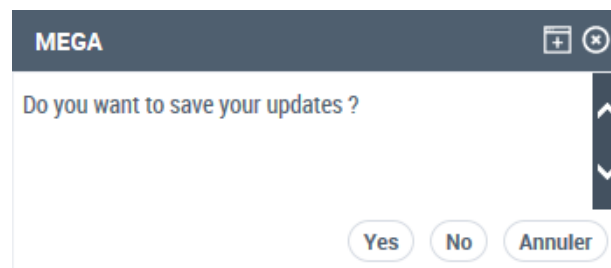
While the collaborative workspace is in **Shared** or **In Review** state, a participant can exit and rejoin the collaborative workspace at any time.

➔ See "[Collaborative workspace states](#)", page 242.

From **HOPEX**, to exit your work *session*:

1. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **File > Exit**.
 - **Web Front-End**: click **Logout** .

The **HOPEX** exit dialog box appears.



2. Click:

- **Yes** to save your modifications in the collaborative workspace. You will be able to continue your modifications in a subsequent work session.

These modifications are not saved in the repository. Users not participants in the collaborative workspace do not see these modifications.

- **No** to cancel your modifications in the collaborative workspace. Your modifications are not saved in the collaborative workspace, but the latter remains available to carry out other updates.

☛ Click **Cancel** to remain in your collaborative workspace.

THREADS OF POSTS AND ALERTS ON OBJECTS

You can create and participate in threads of posts on objects.

You can create alerts on objects to follow their modification. This can be useful for example at workflow validation, for tasks defined with an end date, or for participants of a collaborative workspace.

The following points are covered here:

- ["Managing Threads of Posts", page 259](#)
- ["Managing Your Alerts on Object Modification", page 261](#)

Managing Threads of Posts

In the interests of collaborative work, you can issue a post on an object.

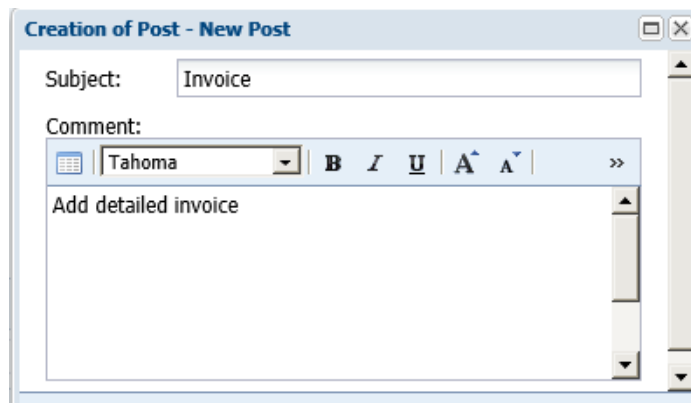
All users subscribing to alerts on this object modifications receive a notification and/or post as soon as you dispatch your modifications, and according to their alert management.

➡ See ["Managing Your Alerts on Object Modification", page 261](#).

Creating threads of posts on objects

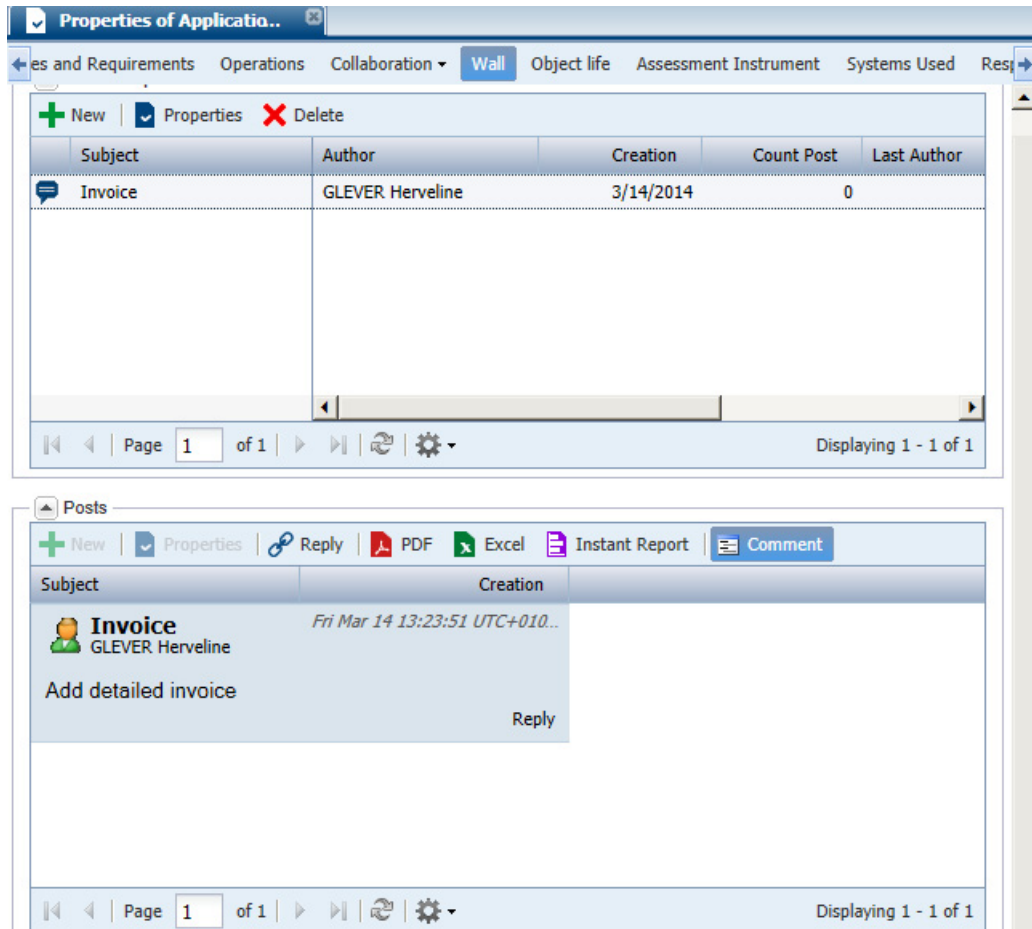
To create a thread of posts on an object:

1. Access the object properties page.
2. Select **Wall** tab.
3. In the **Thread of posts** frame, click **New**  .
The **Creation of Post** dialog box appears.
4. In the **Subject** field, enter the thread subject.
5. Enter your post in the **Comment** frame.



The screenshot shows a dialog box titled "Creation of Post - New Post". It has two main sections: "Subject:" and "Comment:". The "Subject:" field contains the text "Invoice". The "Comment:" section includes a rich text editor with a toolbar showing options for font face (set to "Tahoma"), bold, italic, underline, and text color. The text area below the toolbar contains the text "Add detailed invoice".

6. Click **OK**.
A thread of posts is created.
Your post appears in the **Posts** frame.



If you are working in:

- a private workspace, other users can access your thread of posts when you have dispatched your updates.
- a collaborative workspace, other participants can access your thread of posts when you have exited your session (saving your updates).

➤ See ["Exiting a session from a collaborative workspace", page 257](#).

Users subscribing to alerts on object modifications are notified.

➤ See ["Managing Your Alerts on Object Modification", page 261](#).

Participating in threads of posts

To participate in a thread of posts:

1. Access the properties of the object in whose thread of posts you want to participate.

2. Select the **Wall** tab.
3. In the **Thread of posts** frame, select the thread that interests you.
4. In the **Posts** frame, click **Reply**.
The dialog box for creation of a new post appears.
5. Enter your post in the **Comment** frame.
6. Click **OK**.
If you are working in:
 - a private workspace, you must dispatch your updates so that other users receive a notification and see your post.
 - a collaborative workspace, you must exit your session, saving your updates, for other participants to receive a notification and see your post. Other repository users do not see thread posts until the collaborative workspace is dispatched in the repository.

☛ To receive a notification, users must be subscribers, see *"Managing Your Alerts on Object Modification", page 261*).

Organizing threads of posts on an object

You can organize a thread of posts on an object according to its:

- subject
- creator
- creation date
- number of posts
- author of latest post
- date of latest post

To create a thread of posts on an object:

1. Access the properties of the object in whose thread of posts you want to participate.
2. Select the **Wall** tab.
3. In the **Thread of posts** frame, click the header of the corresponding column.

Managing Your Alerts on Object Modification

To follow modifications carried out on an object, you can:

- subscribe to an alert.
☛ See *"Subscribing to an alert on an object", page 261*.
- automatically subscribe to alerts on all objects for which you have issued a post.
☛ See *"Subscribing to alerts on objects for which you have issued a post", page 262*.

When you subscribe to an alert on an object, this alert also includes modifications to all its component objects.

Subscribing to an alert on an object

You can subscribe to an alert on an object from the properties of this object.

To subscribe to an alert on an object:

1. Access the object properties page.
2. Depending on your desktop, select:
 - (**Windows Front-End** and **Web Front-End**) **General > Alerts on Changes**.

E.g.: EA, HOPEX Information Architecture, HOPEX Business Architecture.

- (other **Web Front-End** desktops) **Wall** then expand **Subscriber**.

E.g.: HOPEX Explorer, HOPEX IT Portfolio Management.

3. Select **I Subscribe**.
Your name appears in the **Subscriber** list.

☞ The **Subscriber** table lists all persons following this object.

Accessing alert management.

To access management of your alerts on objects:

1. Connect to **HOPEX**.
2. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **Tools > Alert Management**.
 - **Web Front-End**: in the toolbar, click **My Account** and select **Alert Management**.

The **Alerts Management** dialog box opens.

3. You can:
 - view all alerts to which you have subscribed (**My Subscriptions** tab).
 - subscribe to automatic receipt of notifications and/or e-mails for modifications of objects on which you have issued a post.
☞ See *"Subscribing to alerts on objects for which you have issued a post"*, page 262.
 - consult properties of an alert already created (in the **My Subscriptions** tab, select the object and click **Properties**).
 - configure management of your alerts.
☞ See *"Configuring management of your alerts."*, page 263.
 - view your alerts of **Notification** type.
☞ See *"Viewing your alerts of notification type"*, page 263.
 - cancel subscription to an alert.
☞ See *"Canceling subscription to an alert"*, page 264.

Subscribing to alerts on objects for which you have issued a post

You can automatically subscribe to alerts on all objects for which you have issued a post.

☞ See *"Creating threads of posts on objects"*, page 259.

To subscribe to automatic alerts:

1. Access alert management.
☞ See *"Accessing alert management."*, page 262.
2. Select the **My Subscriptions** Tab.

3. Select **Automatically subscribe to objects for which I create a post.**
4. Click **OK.**
When a user dispatches his/her work in which he/she has modified an object for which you have subscribed to automatic alert, you receive an alert.

➡ See *"Configuring management of your alerts."*, page 263.

Configuring management of your alerts.

You can receive information by notification or e-mail on modifications to objects you are following.

You can define:

- notification receipt frequency:
 - none
 - immediate
 - daily or weekly digest with choice of day
- content of notifications:
 - with or without details
- e-mail receipt frequency:
 - none
 - immediate
 - daily or weekly digest with choice of day
- content of e-mails:
 - with or without details
- format of e-mails:
 - text
 - HTML

To configure management of your alerts:

1. Access your alert management dialog box.
➡ See *"Accessing alert management."*, page 262.
2. Select the **Alerts Settings** tab.
3. (Optional) In the **Notification** frame, select receipt frequency and notification content.
When a user dispatches modifications on an object you are following, you receive a notification.
4. (Optional) In the **Email** frame, select receipt frequency, and notification content and format.
When a user dispatches modifications on an object you are following, you receive an e-mail.

Viewing your alerts of notification type

To view your alerts:

1. Connect to **HOPEX**.

2. From your **HOPEX** desktop:
 - **Windows Front-End**: in the **HOPEX** menu bar, select **View > Collaboration**, then in the **Collaboration** tab, expand the **My Notifications** folder.
 - **Web Front-End**: in the **HOPEX** menu bar, select **My Notifications**. The **Unread Notifications** and **Read Notifications** folders appear.
3. Click the **Unread Notifications/Read Notifications** to consult your notifications.

Canceling subscription to an alert

To cancel subscription to an alert:

1. Access your alert management dialog box.
 ➡ See *"Accessing alert management."*, page 262.
2. In the **My Subscriptions** tab, select the objects for which you no longer wish to be alerted.
3. Click **Unsubscribe** .

CHAT SERVICE (WEB FRONT-END)

The Chat Service allows **HOPEX (Web Front-End)** users to informally discuss **HOPEX** objects or other subjects. A chat is independent of the desktop in which the user is working.

The following points are detailed here:

- ["Managing Your Contacts", page 265](#)
- ["Creating Chats", page 267](#)
- ["Configuring Chats", page 267](#)
- ["Creating Multiple Chats", page 268](#)
- ["Displaying Your Current Chats", page 269](#)
- ["Participating in Chats", page 269](#)
- ["Exiting Chats", page 270](#)
- ["Deactivating/Activating the Chat Service", page 270](#)

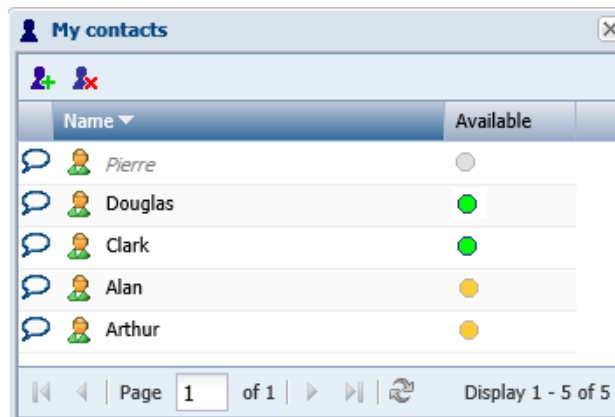
Managing Your Contacts

Accessing your contacts management

To add a person to your contacts:

1. Connect to **HOPEX (Web Front-End)**.

- In your **HOPEX** desktop, click **My Contacts** . The **My Contacts** management dialog box appears.



In the **Available** field of each contact, a:

- green button  indicates that this contact is available
- yellow button  indicates that this contact is unavailable
- gray button  indicates that this contact does not wish to be contacted

☛ Click the header of a column to sort your contacts by **Name** or **Availability**.

Adding a person to your contacts

To create a chat you must have added persons to your list of contacts.

To add a person to your contacts:

- Access your contacts management dialog box.
☛ See ["Accessing your contacts management", page 265.](#)
- Click **Add Contacts** .
The add persons dialog box appears.
- Select the person (you can select several).
- Click **OK**.
The selected person is added to your list of contacts.

Deleting a person from your contacts

To delete a person from your contacts:

- Access your contacts management dialog box.
☛ See ["Accessing your contacts management", page 265.](#)
- Select the line of the person you wish to delete from your contacts.
- Click **Remove Contacts** .
The selected person is deleted from your list of contacts.

Creating Chats

☞ See also ["Creating Multiple Chats", page 268](#).

To create a chat:

1. Access your contacts management dialog box.
☞ See ["Accessing your contacts management", page 265](#).
2. Click **Chat With <Name of Person>**  alongside the contact with whom you wish to chat.
☞ You can send a message to a contact who is unavailable. Your message is available in the chat window of your contact.
☞ To create a multiple chat, see ["Configuring Chats", page 267](#).

The chat with the contact window appears.

3. In the **Send Message** frame, enter your message.
4. Press the <Enter> key or click **Send**.
Your message is displayed in the chat window.
A notification window appears in the desktop of your contact

Configuring Chats

You can:

- name a chat
☞ By default, the name of the chat is the name of the chat participants.
- add a participant to a chat
☞ To directly create a multiple chat, see ["Creating Multiple Chats", page 268](#).
- delete a participant from a chat

To configure a chat:

1. Access the chat concerned.
☞ See ["Participating in Chats", page 269](#) or ["Creating Chats", page 267](#).
2. Click **Options** .
The chat **Options** window opens.
3. (Optional) To name a chat, in the **Chat With <Name of Participant, <Name of Participant>** enter the name of the chat.
4. (Optional) To add a participant to your chat, in the **Participants** frame, click **Add Participants** .
The add persons dialog box appears.
 - Select the person (you can select several).
 - Click **OK**.
 The selected person is added to the list of chat participants.

5. (Optional) To delete a participant from the chat, in the **Participants** frame:

- Select the person.
- Click **Remove Participants** .

The selected person is deleted from the list of chat participants.

Creating Multiple Chats

You can directly create a multiple chat.

☛ To create a multiple chat from a simple chat, see ["Configuring Chats", page 267](#).

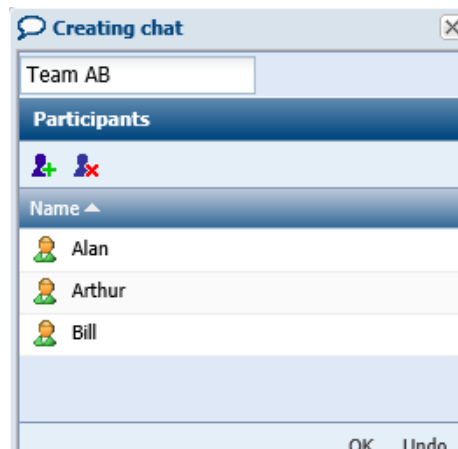
To create a multiple chat:

1. Display your current chats.
 - ☛ See ["Displaying Your Current Chats", page 269](#).
2. In the **Chats** window, click **Create Chat** .
3. (Optional) In the **Enter Name** field, enter the chat name.

Example: work group name: Team A.

☛ If you do not specify this field, the chat default name is the chat participants names.

4. In the **Participants** field, click **Add Participants** .
- The add persons dialog box appears.
5. Select the persons you want to add to your chat group.

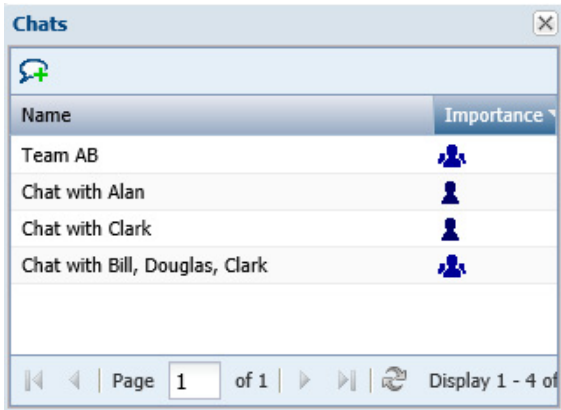


6. Click **OK**.
Your multiple chat (chat group) is created.

Displaying Your Current Chats

To display your current chats:

1. Connect to **HOPEX (Web Front-End)**.
2. From your **HOPEX** desktop, click **Chats** .
3. Select **View All Chats**.



The **Name** field indicates persons participating in the chat. The **Importance** field indicates if the chat is multiple  or simple .

☛ Click the header of the corresponding column (**Name** or **Importance**) to sort your chats by person or number of persons included in the chat.

Participating in Chats

You can participate in chats with one or several persons.

To participate in a chat:

1. Connect to **HOPEX (Web Front-End)**.
2. From your **HOPEX** desktop, click **Chats** .

☛ The number alongside **Chats**  indicates the number of your current chats.

3. Select the chat in which you wish to participate.

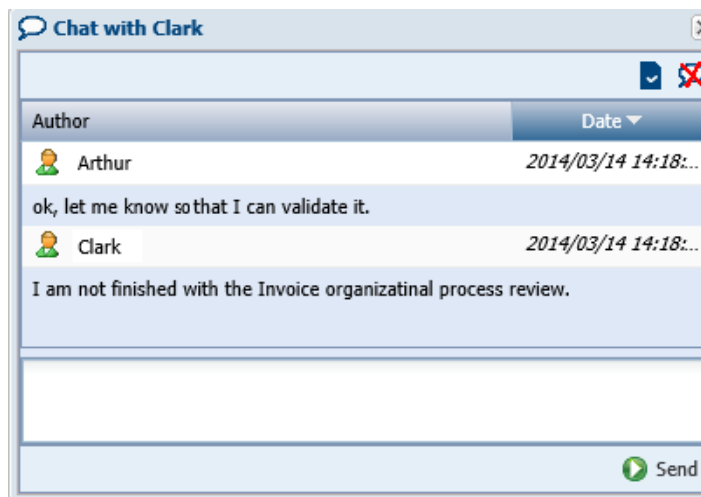
☛  indicates that the chat is simple,  indicates that the chat is multiple.

The chat dialog box appears.

4. In the **Send Message** frame, enter your message.

☛ To enter a line break, press <Cap> + <Enter> keys.

- Press the <Enter> key or click **Send** . Your message is displayed in the chat window.



☛ To sort messages as a function of the person or the chronological order of message display, click the header of the corresponding column.

Exiting Chats

To exit a chat:

- Access the chat concerned.
☛ See *"Participating in Chats"*, page 269.
- Click **Exit Chat** .

Deactivating/Activating the Chat Service

By default the Chat Service is activated.

If you do not want to be contacted by users of this service, you can deactivate it.

To deactivate/activate the Chat Service:

- Connect to **HOPEX**.
- From your **HOPEX** desktop:
 - Windows Front-End**: in the **HOPEX** menu bar, select **Tools > Options**.
 - Web Front-End**: in the **Miscellaneous** toolbar, click **My Account** and select **Options**.
- Select the **Collaborative Environment** folder.

4. In the right pane, clear/select **Activate Chat Service**.

☛ When you deactivate your Chat Service, you appear as unavailable in the contacts management dialog box (see ["Managing Your Contacts", page 265](#)).

EXCHANGING DATA WITH EXCEL



HOPEX proposes data import and export wizards simplifying data exchanges with Excel, thanks notably to use of file templates and more comprehensive management of links and link attributes.

- ✓ ["Operation of Excel Import/Export Wizards", page 274](#)
- ✓ ["Using the Export Wizard", page 275](#)
- ✓ ["Running the Import Wizard", page 283](#)
- ✓ ["Creating Predefined Template Files \(Windows Front-End\)", page 286](#)
- ✓ ["Data Processed by the Excel Import/Export Wizard", page 289.](#)

OPERATION OF EXCEL IMPORT/EXPORT WIZARDS

Export Wizard

The export tool produces an Excel file in which the user can work. This file can subsequently be reimported in **HOPEX**.

The Excel file comprises worksheets in which you can define:

- A list of objects (occurrences) of a given type.
 - ☛ *By default, the Excel worksheet carries the name of the selected type (MetaClass), but you can change this name.*
- A list of objects connected by a link to occurrences of a given type.
 - ☛ *Only those links (MetaAssociations) between two concrete MetaClasses are accepted.*
 - ☛ *By default, the Excel worksheet carries the name of the MetaAssociationEnd, but you can change this name.*

Import Wizard

Data contained in the import file should be clearly structured so as to be correctly interpreted in **HOPEX**. This being so, it is recommended that a previously exported file be used as a model.

Import and export formats are compatible, but certain exportable data cannot be imported (such as calculated attributes in **HOPEX**, which cannot be modified by the user).

The file imported in **HOPEX** allows you to:

- create or modify a list of objects.
- connect objects by a given link.

The results file indicates anomalies encountered.

Creating or modifying a list of objects.

If the identifiers of MetaClasses and MetaAttributes are not supplied in the import file, the wizard executes a query by their name in the **HOPEX** repository.

If the identifiers of objects (occurrences) are not indicated, objects are created.

It is possible to assign an external value to attributes (tabulated value attributes).

Connecting occurrences by a given link.

If the identifiers of MetaClasses and MetaAttributes are not indicated, they are queried by name in the repository and entered in the file.

If the identifiers of objects are not indicated, the objects are queried by name in the repository; the link is only made if the objects exist and are unique.

USING THE EXPORT WIZARD

Running the Export Wizard

You can run the Export Wizard from:

- your **HOPEX** workspace (Windows Front-End or Web Front-End)
- the **Administration** desktop (Web Front-End)

Accessing the export wizard

To run the wizard for export of data to an Excel file:

1. From:
 - **HOPEX (Windows Front-End)** : click **File > Export > Excel (*.xls ; *.xlsx)**.
 - **HOPEX (Web Front-End)** : click **Main Menu > Export > Excel**.
*☛ If this file is not available, open the options window, select **Data Exchange > Export > Tools/Third Party Formats** and check that option **Excel (.xls, .xlsx)** is selected.*
 - the **Administration** desktop (**Web Front-End**): in the **Tools** pane, select the **Excel > Export** sub-folder.
The export wizard appears.
2. Select the export mode for the file:
 - **New Export File**: no file is selected as template, you must define file parameters (which constitute the structure) as well as objects to be exported.
☛ See "New export file", page 275.
 - **From Template**: you can use an existing Excel file as a template, or a template supplied as standard with **HOPEX**. The wizard automatically displays the structure of the file used as a model. You can modify this structure so that the generated file will differ from the template file. You can also reuse objects of the existing file.
☛ See "Existing export file", page 276.

New export file

To export data in a new file:

1. In the export wizard, select **New Export File**, then click **Next**.
2. Enter the name of the file to be created.
3. (Windows Front-End) If necessary, define another backup location.
4. If necessary, change the format type to .xls (by default .xlsx).
5. Click **Next**.
6. Define file configuration. See "Defining File Parameters", page 276.
7. Click **Next**.
8. Select objects to be exported. See "Selecting Objects to be Exported", page 279.
9. Click **Finish** to start export.

Existing export file

To initialize the export file from an existing file:

1. In the export wizard, select **From Template** mode, then click **Next**.
2. Select the file to be used as template:

- Either by scrolling the list of files in the **Predefined Template File**.



A **Predefined Template file** is an export file template supplied as standard with **HOPEX**.



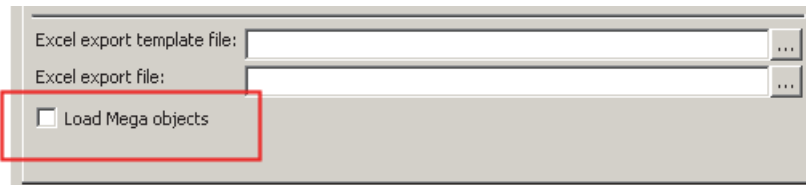
For more details on predefined files, see ["Creating Predefined Template Files \(Windows Front-End\)", page 286](#).

- Or by indicating the name and location of a **User Template File**.



A **User Template File** is a file created at a previous export.

3. In **Excel Export File**, indicate name and location of the export file.
4. To reuse objects of the existing file, select the **Load HOPEX Objects** check box.



5. Click **Next**.
6. Define file configuration. See ["Defining File Parameters", page 276](#).
7. Click **Next**.
8. Select objects to be exported. See ["Selecting Objects to be Exported", page 279](#).
9. Click **Finish** to start export.

Export steps

Whatever the selected mode, file export is in three steps:

- ["Defining File Parameters", page 276](#)
- ["Selecting Objects to be Exported", page 279](#)
- ["Running Export", page 280](#)

At each of these steps, it is possible to pass to the next step or return to the previous step.

Defining File Parameters

When export mode (new file or existing file) and file name have been defined, click **Next**.

The first step consists of defining Excel worksheets to be produced at export. These worksheets can be type:

- MetaClass (object list + characteristics)
- MetaAssociationEnd (links + link characteristics).

Two cases can be presented:

- If you run export from an existing file, worksheet default parameters are proposed.
- In the case of a new file, the dialog box is empty:

You will:

- create a worksheet for each object type (for example "Application"), and
- in the worksheets, create columns for each characteristic ("Name", "Comment", etc.).

Creating an Excel worksheet

To create a worksheet:

1. See ["Accessing the export wizard", page 275](#).
2. In the Excel export wizard dialog box, **Excel Worksheet**, click **New** . A worksheet appears.
3. Modify the name of the worksheet if necessary.
4. Indicate the object type it contains.

➡ See ["Worksheet datatypes", page 277](#).

Worksheet datatypes

In a worksheet you can define:

- a MetaClass, or
- a link type

To specify a MetaClass, for example an application:

1. Select the worksheet in question.
2. Click in the **MetaClass** column, then click on the arrow and select **List MetaClasses**. The query dialog box appears.
3. Select the MetaClass and click **OK**.

Example: "Application".

To specify a link type:

1. Select the worksheet in question.
2. In the **MetaClass** column, select the master MetaClass.
Ex. "Application".
3. In the **MetaAssociationEnd** column, select the MetaAssociationEnd.
Example: "Service defined".
4. In the **Slave MetaClass** column, select the slave MetaClass.

Example: "IT Service".

➡ When the link sends to a concrete MetaClass, the column of the slave MetaClass is completed automatically. When it sends to an abstract MetaClass, the list of concrete MetaClasses is proposed.

Creating worksheet columns

Columns of an Excel worksheet specify attributes of the object defined in the Excel worksheet.

To create a column:

1. Select the Excel worksheet for which you wish to create a column.
2. In the **Worksheet Column** area, click the **New** button.
3. The column appears. Modify its name if required.
4. To indicate the attribute to be displayed in the column, click in the **MetaAttribute/LegAttribute/Macro** column and select **List MetaAttribute/LegAttribute/Macro**.

A dialog box lists MetaAttributes, LegAttributes and Macros available on the object type specified in the Excel worksheet. If the worksheet object type is a link, the dialog box lists the link attributes.

➡ For more details on macros, see *"Using Macros in Excel Import/Export Files"*, page 287.

5. Select a MetaAttribute and click **OK**.

Automatic name

When selected, the **Automatic Name** check box indicates that the file column takes the name of the MetaAttribute (for example "Short name"). If you clear this, the column takes the name indicated under Column ("Column 1").

Column	MetaAttribute / LegAttribute	Automatic name	Order
Column1	Short Name	☒	1
Column2	Application Code	☒	2
Column3	Comment	☒	3

Excel file configuration example

In the following example, the file contains three worksheets:

- the first worksheet contains applications
- the second worksheet contains links of "Defined Service" type between applications and services
- the third worksheet contains application services

For each application, the name, code, comment and type are displayed.

Worksheet	MetaClass	MetaAssociationEnd	Slave MetaClass
app	Application		
app_serv	Application	Defined-Service	IT Service
serv	IT Service		

Worksheet's columns:

Column	MetaAttribute / LegAttribute	Automatic name	Order
Short Name	Short Name	☒	1
Application Code	Application Code	☒	2
Comment	Comment	☒	3
Aggregation of		☒	4
Application Type	Application Type	☒	5
Comment Body	Comment Body	☒	6

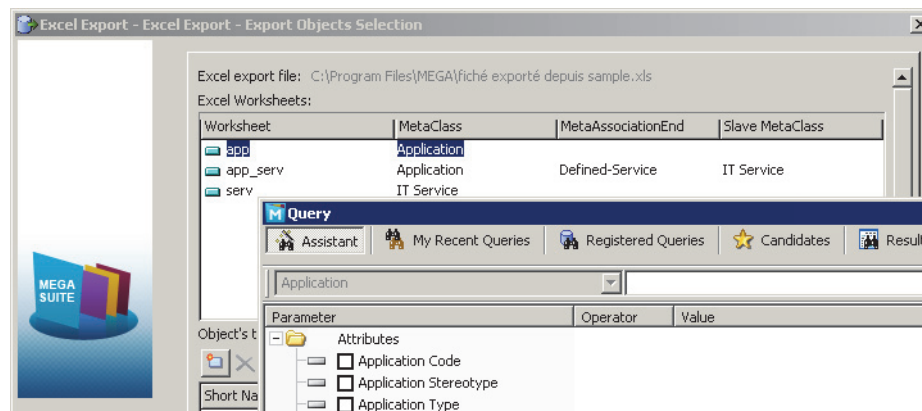
At this stage you can click the wizard **Finish** button. You obtain an export model which you can then complete.

Selecting Objects to be Exported

When the object types have been defined in Excel parameterization dialog box, you can select the objects to be exported.

To indicate objects to be exported:

1. See ["Accessing the export wizard", page 275](#).
2. In the **Selection of Excel Objects to be Exported** dialog box of the wizard, section **Excel Worksheets**, select the worksheet in which you wish to insert the objects, for example the applications worksheet.
 - ☛ If you selected an existing file as a model and selected **Load HOPEX Objects**, the objects can appear by default in the worksheets.
 - ☛ The first two lines of an Excel worksheet are reserved for file configuration; if the file is to be subsequently reimported, ensure that these first two lines are retained.
3. In the **Objects to be Exported** space, click the **New** button.
The query dialog box appears, with "Application" object type selected.



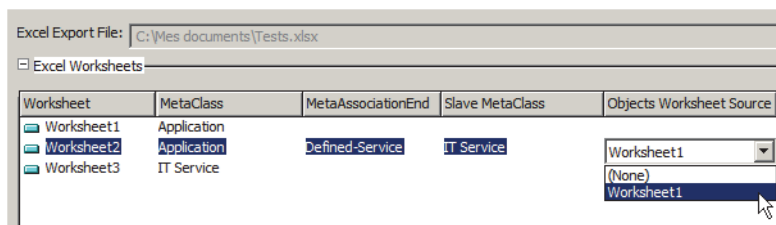
4. Click **Find**.
The list **HOPEX** repository applications appears.
5. Select applications to be exported and click **OK**.
The applications appear in the wizard.

You may need to work in the same list of applications for certain Excel file link worksheets.

To use an existing list of objects in an Excel link worksheet:

1. In the **Selection of Excel Objects to be Exported** dialog box of the wizard, section **Excel Worksheets**, select the worksheet in which you wish to insert the objects, for example the applications worksheet "WorkSheet1".
 - ☛ The list proposed presents only the possible source worksheets.

- Click in the **Object Source Worksheets** column and select the name of the worksheet that contains objects to be exported.



The name of the selected worksheet appears in the field.

☛ If you define a list of objects in section **Objects to be exported**, this list will be ignored and only the objects of the worksheet will be taken into account.

- Click **Finish** to start export.

Running Export

You can run export from the Excel file configuration window.

To run export:

- "Accessing the export wizard", page 275.
- In the wizard, after having indicated the list of objects to be exported, click **Next**.

☛ For more details, see "Selecting Objects to be Exported", page 279.

The file opens automatically in an Excel table.

- Click **Open Export File** to reopen the generated file.
- You can modify export file parameters by clicking **Previous**.
- When the export file has been finalized, click **Finish**.

Example of generated files

Below is an applications worksheet presenting:

- In column A: the list of applications, by absolute identifier.
- Column B: the list of applications, by short name.
- In the columns that follow: attributes of applications (short name, code, comment, etc.).

In each column, the grayed first two lines indicate the datatype of the column and its absolute identifier.

A1	Application			
A	B	C	D	E
1 Application	Short Name	Application Code	Comment	Aggregation of
2 B1EDB2562C14016F	0000000040000063	55EF6704336F00B1	0000000040000029	
3 OIZYqujAm0	Advisor Client			
J3vdefw35nZ0	APPCO.com		APPCO.com is the corporate web site. It provides a wealth of information on products and services. It includes an online web store. Customers can place and track orders via this application.	
4				
n2vdqUw359T0	Application SCM		This Supply Chain Planning application enables APPCO to plan and design global supply chains effectively, while optimizing the flow of materials, resources, cash, and information. SCM keeps track of production parts ordered and consumed and informs the Production Activity Control System when Production parts are available.	
5				
DNMIUZSN51r4	Assembly Manager	PACS_AM	Assembly Manager is used to ensure that the necessary assembly parts arrive on the shop floor at the correct time. This application provides the capability to track the assembly parts consumed and to follow-up the production activity.	
6			Nunc dictum, justo nec ultrices posuere, ligula dui convallis urna, eget scelerisque lacus sem sed enim. Proin dolor magna, aliquam sed, scelerisque a, ultrices sed, lectus. Suspendisse potenti. Class aptent	

Below is a worksheet presenting links of "Defined Service" type between applications and application services: It presents:

- Column A: the list of applications, by absolute identifier.
- Column B: the list of applications, by short name.
- Column C: the link type ("Defined Service").
- Column D: the list of application services, by absolute identifier.
- Column E: the list of application services, by short name.

A1	Application			
A	B	C	D	E
1 Application	Short Name	Defined-Service	IT Service	Short Name
2 B1EDB2562C14016F	0000000040000063	75CD75E72D4502DD	B1EDB25D2C1401AF	0000000040000063
3 2nq0LWHf9TT0	Internet Ordering		sU07jVif9rP0	ST-Search Available Products
4 2nq0LWHf9TT0	Internet Ordering		QSU7JGMf9b96	SB-Update Shopping Cart
5 2nq0LWHf9TT0	Internet Ordering		l9FdKHif9fC4	ST-Consult Product with Availa
6 2nq0LWHf9TT0	Internet Ordering		4f(mgly9gJ0	ST-Update Shopping Cart
7 2nq0LWHf9TT0	Internet Ordering		0e(m4oyg9J01	SB-Create Shopping Cart Entry
8 2nq0LWHf9TT0	Internet Ordering		Xf7ziwIh9nn1	SB-Delete Shopping Cart Entry
9 2nq0LWHf9TT0	Internet Ordering		5h7znxIh9jp1	SB-Archive Shopping Cart
10 2nq0LWHf9TT0	Internet Ordering		nh7zqJlh9Ds1	ST-Order
11 2nq0LWHf9TT0	Internet Ordering		9h7zX8Jh9fO2	SB-Create Shopping Cart
12 2nq0LWHf9TT0	Internet Ordering		(f7zn8Jh9vQ2	ST-Create Shopping Cart
13 mxtdasM9Nj0V2	Stock Management		9VU7Yilf91H0	SM-Provide Product Availability
14 mxtdasM9Nj0V2	Stock Management		Ge(m7yg9fv0	SM-Check Product Availability
15 UPCEsk4b9bH2	Product Repository		2SU7bCf9XC0	SB-Search Product by Name
16 UPCEsk4b9bH2	Product Repository		rU07oEif9vE0	SB-Search Product by Code
17 UPCEsk4b9bH2	Product Repository		pU07opL9Hs3	SM-Search Product
18 URCEs24b9rq2	New APPCO.com		moqCL1f9TVB	Search Client
19 URCEs24b9rq2	New APPCO.com		MpcqQL1f91XB	Search Product

Running the Export Wizard from a List

You can create an Excel table from a list by clicking the Excel button located above the list.

By default, the Excel file created contains all elements of the list, and the attributes presented are attributes of the list.

You can also use the Excel export wizard to obtain an Excel file, which you can then import.

To create an Excel import/export table from a list:

- 1 Open the options window, select folder **Data Exchange > Import/Export Synchronization > Tools/Third Party Formats** and check that option **Export Excel: Availability in Listviews** option is selected.

Depending on the type of list, the Excel export file is presented in different ways:

- **If** the list presents a set of objects of the same type, for example the list of risks in the repository.
Then the Excel table created presents:
 - in rows, objects of the list and,
 - in columns, the values of attributes presented in the list.

☛ If a predefined template file exists for the MetaClass of list objects, this file is used by default for export.

☛ If there are several predefined template files, you must select the template to be used. For more details on MetaClasses associated with a predefined template file, see "[Creating Predefined Template Files \(Windows Front-End\)](#)", page 286.
- **If** the list presents a set of objects, perhaps of different types, connected to an object by a MetaAssociation (this is the case for example for lists presented in certain properties pages),
Then the Excel table created presents two tabs per object type contained in the list. One tab presents all objects of the type, and the other presents the object connected by the MetaAssociation.
- **If** the list presents a group of objects of different types without a link to a common object.
Then the Excel table cannot be created.

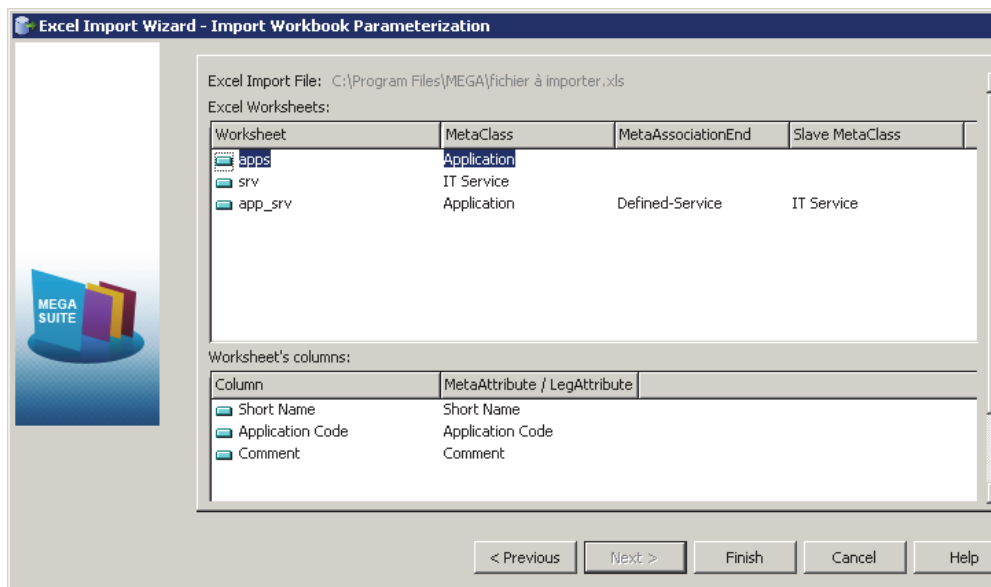
RUNNING THE IMPORT WIZARD

Excel import enables creation of new objects and modification of existing objects. Excel data to be imported in **HOPEX** should be structured. You can use an Excel file previously exported with **HOPEX** to define file parameters and content. See ["Example of generated files"](#), page 280.

Importing Excel data in HOPEX

To import Excel data in **HOPEX**:

1. From:
 - **HOPEX Windows Front-End**, click **File > Import > Excel (*.xls ; *xlsx)**.
 - **HOPEX Web Front-End**, click **Main Menu > Import > Excel**.
The import wizard opens.
 - the **Administration** desktop (**Web Front-End**): in the **Tools** pane, select the **Excel > Import** sub-folder.
The import wizard opens.
2. To the right of the **Excel Import File** field, click **Browse** .
3. Indicate the file type and file to be imported.
4. Click **Next**.
The wizard displays the worksheets and columns detected in the file.
If the file parameters have not been recognized by the wizard, you can enter them in this dialog box.



5. Click **Next**.

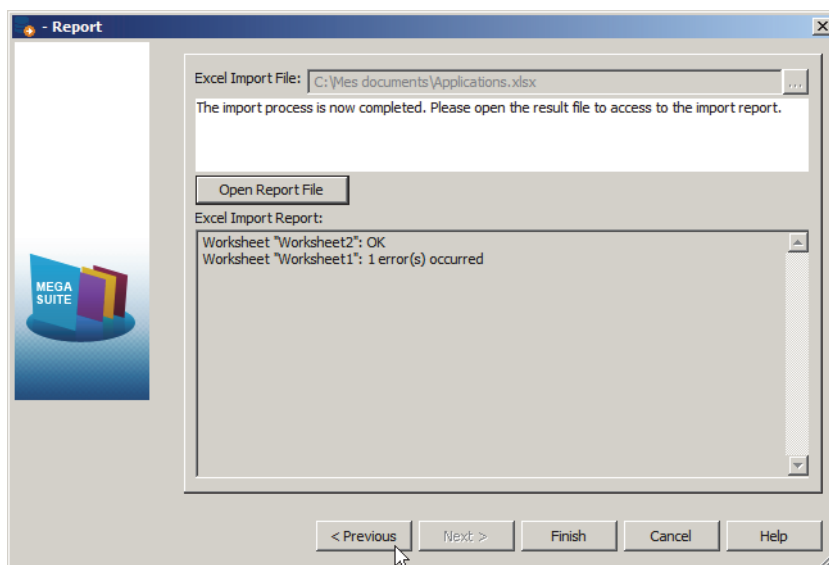
The wizard provides a report of import results in an Excel file. This file opens automatically, indicating in red any data that poses a problem. In the following example, the file has identified an application that exists in **HOPEX** but of which the identifier has been modified in the import file.

	A	B	C
1	Application	Short Name	Application Code
2	B1EDB2562C14016F	0000000040000063	55EF6704336F00B1
3	OIZYiqujArn0	APPCO.com	
4	OIZYiqujArn0OIZYiqujArn0OIZYiqujArn0		



The first two lines of an Excel worksheet are reserved for file configuration. Ensure that the first two lines of the imported file remain identical to those obtained after an export.

6. Click the **Open Report** button of the import wizard to access the detailed report of import errors.



7. Click:

- **Finish** so that imported data will be visible in **HOPEX**.
- **Previous** to modify import parameters.
- **Cancel** to discard the report.

Technical limitation of Excel import

If you wish to import attribute values of Enumeration type (values available in drop-down lists for example), you have to make sure that data language in HOPEX and in the Excel file are identical.

If for example your Excel file is in French and data language in HOPEX is in English, you might get the following error message at import: `"value" outside table`.

☛ *Data language and GUI language are different concepts.*

CREATING PREDEFINED TEMPLATE FILES (WINDOWS FRONT-END)

Predefined template files are supplied with certain solutions, for example **HOPEX LDC**.

☛ *This function is available with **HOPEX Windows Front-End** only.*

Each predefined template file is associated with an Excel file. Management of this Excel file is assured by **HOPEX** from system business documents.

☛ *For more details, see ["Using Business Documents"](#), page 427.*

Creating Excel Templates

To create an Excel template:

1. From the **HOPEX Windows Front-End** desktop, select **View > Navigation Windows > Utilities**.
2. Right-click the **Excel Templates** folder and select **New > Excel Template**.
3. Open the properties dialog box of the Excel template you have just created.
4. Click the arrow at the right of the **System Business Document** field and select **Create System Business Document**.
The system business document creation dialog box opens.
5. Define the **System Business Document** name and the **File Location** of the Excel template you want to use.
6. Click **OK**.
The system business document is created.
☛ *The system business document must belong to document category **Excel Import/Export Templates** or to a sub-category. For more details, see ["Classification"](#), page 428.*
7. In the **MetaClass** section, click the **Connect** button to select the MetaClasses representing the main concepts managed by the template.
☛ *In the context of Excel export, MetaClasses supported by Excel worksheets serve in lists to identify templates to be used as priority. For more details, see ["Running the Export Wizard from a List"](#), page 282.*
8. In the **Excel Worksheet** section, click the **New** button for each Excel worksheet you want to add to your file.
9. Click **OK** to finish.

Creating Excel Template Worksheets

An Excel template worksheet should define information required for creation of an Excel import/export worksheet.

☛ *For more details, see ["Creating an Excel worksheet"](#), page 277.*

Information defined in columns of the Excel worksheet is Excel template data referenced by the system business document.

To create an Excel template worksheet:

1. Open the properties dialog box of the Excel template you want to attach to the worksheet.
2. In the **Excel Worksheet** section, click the **New** button.
3. In the properties of the Excel template worksheet you have created to specify a link type:
 - In the **MetaClass** column, select the master MetaClass (for example "Application").
 - In the **MetaAssociationEnd** column, select the MetaAssociationEnd (for example "Defined Service").
 - In the **Slave MetaClass** column, select the slave MetaClass (for example "Application Service").
4. In the **Macro** section, click the **Connect** button to specify the macros that will be proposed by the wizard to fill the columns of the Excel export files.

☛ For more details, see *"Using Macros in Excel Import/Export Files"*, page 287.

5. Click **OK** to finish.

Using Macros in Excel Import/Export Files

A macro enables export to Excel and import to **MEGA** of calculated attribute values, for example: the result of a sum of whole numbers.

☛ For more details on configuration of notifications or e-mails, see *"Creating Excel Template Worksheets"*, page 286:

To use the VB macro creation wizard on an object of **Business Document** type:

1. In **Tools > Options, Repository** folder, check that **Metamodel Access** option is set to "Expert".
2. Open the **Excel WorkSheet** properties.
3. In the **Macro** section, click the **New** button.
The macro creation wizard opens.
4. Select the check box corresponding to the type of macro you want to use, for example:
 - "(VB) Script macro"
 - "existing macro": to use an existing macro, of which field **Reusable** is selected.
5. Click **Next**.
6. Enter the **Name** of the macro.
7. If the macro you have created can be reused for another Excel import/export, select the **Reusable** box.
8. Click **Finish**.
The constraint appears in the properties dialog box.

The macro created contains by default the code of functions enabling encoding of operation of:

- Export, with the ColumnExport function that has as parameters:
 - The object being exported.
 - The list of header columns in the form of megafields.
 - ☛ *This parameter is a character string that should be broken down using character "#" as separator.*
 - The index in the list of columns of the column being exported.
- Import, with the ColumnImport function that has parameters:
 - The object being imported.
 - ☛ *This object can be an object created by import or an existing object modified by import.*
 - The value of the Excel cell being imported.
 - The list of header columns in the form of megafields.
 - ☛ *This parameter is a character string that should be broken down using character "#" as separator.*
 - The list of values of cells of the row being imported.
 - ☛ *This parameter is a character string that should be broken down using character "#" as separator.*
 - The index in the list of columns of the column being imported.

DATA PROCESSED BY THE EXCEL IMPORT/EXPORT WIZARD

Data Displayed

Metamodel view and product view

The MetaClasses, MetaAssociations and MetaAttributes that appear in the Excel worksheet reflect the view of the metamodel (Beginner, Intermediate, Advanced, Expert, System).

For example, if you are connected in Intermediate mode, only those objects corresponding to the intermediate metamodel will be displayed.

Similarly, only those concepts accessible with the products you have available are proposed.

Management of links and link attributes

In addition to MetaClasses and MetaAttributes, the export wizard supports:

- Links and link attributes
- Tagged values
- Certain MetaAssociationEnds that present maximum cardinality of 1 (eg: "Aggregation of" on an Application).
- Macros

➤ For more details, see ["Using Macros in Excel Import/Export Files", page 287](#).

Languages

By default, only those MetaAttributes in the current language are displayed.

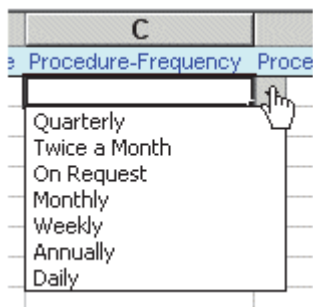
An option allows you to manage MetaAttributes in each available language (for example the Short name of an object in French, English, etc.).

To activate this option:

1. From the **HOPEX** desktop menu, select **Tools > Options**.
2. Select **Data Exchange > Import/Export Synchronization > Tools/Third Party Formats**.
3. Select the option **Import/Export EXCEL: MetaAttributes Translation Availability** and click **OK**.

Value lists

Columns representing MetaAttributes with tabulated values present drop-down lists enabling selection of one of these values.



A list of values cannot be defined on an unlimited number of cells in a column. Automatic creation of a list of values is limited to the first 500 cells of the column.

To modify this value:

1. Open the options window.
2. Expand the folders **Data Exchange > Import/Export Synchronization > Tools/Third Party Formats**.
3. Specify the new value in the field **Excel: Maximum number of rows to be completed in sheet**.

The number of characters composing all values should not exceed 256. Beyond this figure, the cell displays the internal value (independent of language) instead of the external value. A tool tip accessible in the first cell displays correspondence between internal and external values.

Dates format

By default, dates format of files generated by Excel import/export is: yyyy/mm/dd.

To modify this format:

1. From the **HOPEX** desktop menu, select **Tools > Options**.
2. Select **Data Exchange > Import/Export Synchronization > Tools/Third Party Formats**.
3. In the option **EXCEL Import/Export: Dates Format**, define the format and click **OK**.

Non-Modifiable Data

For export, MetaAttributes that cannot be modified by the user appear in a grayed column in the Excel page.

It is possible to export properties that cannot be modified, such as calculated attributes (for example "Name" MetaAttributes that contain the object owner), but it is not possible to import these. The wizard indicates that you do not have

permission to update these properties. In the case of object names, favor the "Short name".

C	D	E	F	G	H
Name	You don't have the right to modify this MetaAttribute.				
0000000040000002					
World@Hand::MEGA Notation					
Diagrams::Travel & Vacation					
Business::Catalog::Catalog Management					

Whether export or import, the first two lines of an Excel worksheet are reserved for file configuration. Ensure that no data is entered in these first two lines.

File Formats

The wizard supports two file formats:

- xls
- xlsx

MANAGING DICTIONARIES IN HOPEX



This chapter describes in detail how to manage and use dictionaries in **HOPEX**. The **HOPEX** dictionary allows you to save terms used in your enterprise or organization, connect concepts and organize them by subject area. The aim of this is to help users understand the terms used in the company.

☛ *Functions described here are available with all **HOPEX** modeling products.*

- ✓ ["Defining Your Business Vocabulary", page 294](#)
- ✓ ["Managing Subject Areas", page 296](#)
- ✓ ["Managing Concepts", page 297](#)
- ✓ ["Managing Dictionary Languages", page 300](#)
- ✓ ["Using Dictionaries", page 302](#)

DEFINING YOUR BUSINESS VOCABULARY

The aim is to create a dictionary that describes and defines elements of your business vocabulary.

Basic Notions

A **HOPEX** dictionary presents concepts linked to terms used in the enterprise vocabulary.

Term and concept

Concept

In **HOPEX**, the basic component of a dictionary is the **Concept**.

The concept is represented by icon .



A concept expresses the essential nature of a being, an object, or a word through its essential characteristics or its specific qualities.

For more details, see "[Managing Concepts](#)", page 297.

Term

A **Term** is associated with a concept.

The term is represented by icon .



A term is a word or word group, that is used for a specific meaning in a specific context.

A term is specific to a language. It enables creation and viewing of the concept in the language chosen by the user.

Links between concept and term

Terms cannot be translated.

The same term in different languages can represent totally different concepts.

Example: the term "car" in English refers to a private car, while the same term in French represents a collective transport vehicle.

The same term can be connected to several concepts in the same language.

For example, the term "ring" in English refers to both the sound of a telephone and a (finger) ring.

Subject area

Each concept gives a specific definition of a term in its subject area.

 A subject area is a branch of knowledge, a discipline or a field of study.

 For more details, see ["Managing Subject Areas", page 296](#).

Accessing Dictionaries

The dictionary enables consultation of definitions associated with each **HOPEX** object. Dictionary elements are accessible in the **Dictionary** navigation window.

To access the dictionary:

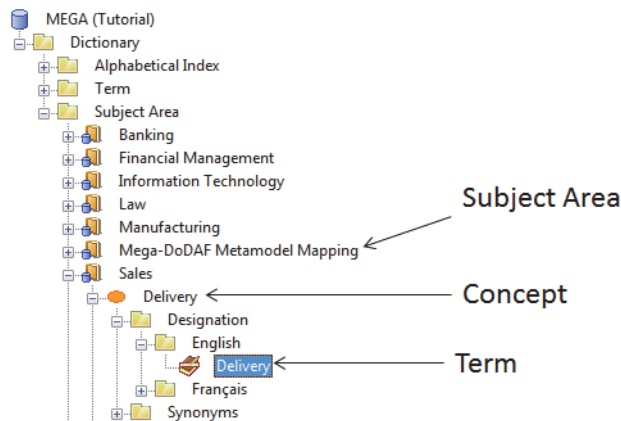
- From the desktop, select **View > Navigation Windows > Dictionary**. The **Dictionary** tab appears in the navigation pane on the left of your screen.

In the **Dictionary** navigation window, you can consult dictionary terms to familiarize yourself with usage and concepts.

You can:

- find terms defined, sorted in alphabetical order.
- access concepts, sorted by subject area.

 For more details on dictionary use, see ["Using Dictionaries", page 302](#).



MANAGING SUBJECT AREAS

The terms connected to concepts can be classified by subject area.



A subject area is a branch of knowledge, a discipline or a field of study.

To create a subject area from the **Dictionary** folder:

1. In the **Dictionary** navigation window, expand the **Dictionary** folder.
 To access dictionaries, see ["Accessing Dictionaries", page 295](#).
2. Right-click the **Subject Area** folder and select **New > Subject Area**.
The **Create Subject Area** dialog box appears.
3. Click **Next**.
4. Enter the name of the subject area and click **OK**.
The new subject area is created and appears in the list.

Subject areas are indicated by the  icon.

 See also: ["Accessing Subject Area Concepts and Terms", page 302](#).

MANAGING CONCEPTS

A concept must be connected to a term.

When creating a concept, you can:

- use an already existing term.
- create a new term, automatically connected to the concept.

Creating Concepts

To create a concept from a subject area:

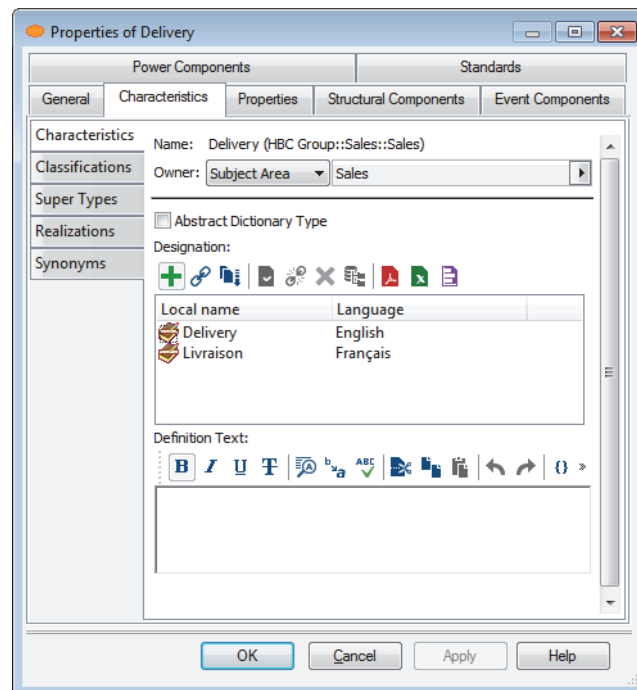
1. In the **Dictionary** navigation window, right-click the folder of the subject area concerned and select **New > Concept**.
The concept type creation wizard opens. The owner subject area is displayed by default.
2. In the **Local Name** field, enter the name of the concept and click **Next**.
 *If a term with the same name already exists in the repository, this term is automatically connected and appears in the **Existing Terms** section.*
3. In the **Definition Text** field, enter the text of the concept definition and click **Finish**.

The name of the new concept and its associated term (ie. its designation) appear in the tree under the subject area.

Concept Properties

With **HOPEX**, the concept is described by:

- its **Name**
A concept carries the name of its associated term in the language chosen by the user.
When creating a concept, if no term is explicitly connected or created, a new term is automatically created in the data language. This term carries the name of the concept created.
To modify the name of a concept in a given language, you must therefore change the name of the associated term.
- the **Dictionary Abstract Type** check box, which enables specification of the concrete or abstract character of a concept
For example, the "Order" concept is an abstract concept, while "Trip Order" is a concrete concept.
- the **Designation** indicates the term associated with the concept in the different languages.
For more details, see "Managing Dictionary Languages", page 300.
- the **Definition Text**.



Creating Synonyms

Description of a concept can be supplemented by specification of synonymous terms, that is terms that have the same meaning as the definition.



A synonym is a term interchangeable with another term in the context of a concept with the same meaning.

For example, in the Financial area, the term "Advance" is recognized as a synonym of "Down payment".

To add a synonym to a concept:

1. In the properties dialog box of the concept that interests you, select the **Characteristics** tab, then the **Synonyms** subtab.
2. Click the **New**  icon.
3. In the term creation wizard that opens, enter the name of the synonym in the **Name** box, and click **OK**.
4. Select the **Language** if required.
The name of the synonym appears in the properties dialog box.
The newly created term appears in the list of terms of the current language.



You can also connect an existing term as a synonym by clicking



Connect icon. In the query dialog box, click  Select the term from among those proposed and click **OK**.

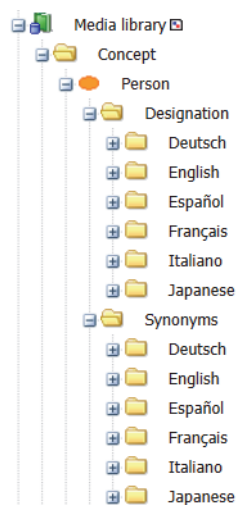
MANAGING DICTIONARY LANGUAGES

Knowledge sharing by all org-units concerned is assured in all required languages through multilingual support: repository content is managed and published in as many languages as required.

You can easily switch from one language to another to enter or consult data or to generate reports.

☛ *This is possible only if your **HOPEX** environment is configured to support multiple languages.*

*To configure the list of languages, see the **HOPEX Administration - Supervisor** guide, chapter "Managing Options", "Managing Languages", "Installing Additional Languages".*



Specifying the Data Language

HOPEX allows you to enter data in several languages. You can easily switch from one language to another to enter or consult data or to generate documents.

To specify the work language in **HOPEX Windows Front-End**:

- 1 In the desktop, select **Tools > Language**, then specify your work language.
You do not therefore need to end a session in order to display data in another language.

To specify the data language in **HOPEX Web Front-End**:

- 1 From the main menu at the top of the page, click the button corresponding to the language of your interface and select the language of your choice in the drop-down menu.

The language you are interested in may not appear here. In this case, you have to make it available first.

To make one or several languages available in the workspace:

1. Open the **Options** window.
2. In the navigator, select **Languages**
3. In the right pane, select the desired languages and click **OK**.

Impact Of Data Language on Dictionaries

Impact at viewing

Each concept carries the name of its associated term in the data language.

If no term is associated with the concept in the data language, the concept carries the name of the term used at the time of its creation, with an extension corresponding to the short name of the language.

Impact at creation

By default, at creation of a concept a term is automatically created. This term carries the same name as the concept, and it is classified in the language corresponding to the data language.

USING DICTIONARIES

Accessing Subject Area Concepts and Terms

To access subject area concepts:

1. In the **Dictionary** navigation window, expand the "Subject Areas" folder. The list of subject area concepts appears.
2. Expand the tree of the concept that interests you. The designation term and synonymous terms are accessible in all languages.

☛ For more details on available languages, see *"Managing Dictionary Languages"*, page 300.

Connecting Concepts to Repository Objects

Consulting concepts associated with an object

In **HOPEX**, you can consult concepts associated with an object:

- from the object pop-up menu.
- from the object properties dialog box.

From the object pop-up menu

To consult concepts associated with an object:

1. Right-click an object (in the navigator, in a diagram, etc.) and in the pop-up menu that appears, select **Concept**. An HTML page is generated. It displays concepts associated with the object.

Export Order

Concept

- Exportbestellung (DE)
See also:  Lieferung (DE)
- Ordine export (IT)
See also:  Consegna (IT)
- Export order
See also:  Delivery
- Commande export (FR)
See also:  Delivery

From the object properties dialog box

To access objects from the object properties dialog box:

1. Right-click an object (in the navigator, in a diagram, etc.) and select **Properties** in the pop-up menu.
2. In the object properties dialog box, select the **General** tab, then the **Concepts** subtab.
3. Right-click the name of the concept to be consulted and select **Properties**.
4. Select the **Characteristics** tab to view the text of the definition.

☛ You can create or connect a concept to an object from the object properties dialog box. For more details, see ["Connecting concepts to objects", page 303](#) and ["Creating Concepts", page 297](#).

Connecting concepts to objects

To connect a **concept** to an object:

1. Right-click the object and select **Properties**.
2. Select the **General** tab, then the **Concepts** subtab.
3. Click the **Connect** icon.
The query dialog box appears.
4. Enter the name of your concept if required and run the query.
5. In the results list, select the concept that interests you and click **OK**.
Your object is then connected to this concept.

Managing Documentation



GENERATING DOCUMENTATION



- ✓ ["Introduction to Documentation Tools", page 308](#)
- ✓ ["Documents Generated From the Repository", page 309](#)
- ✓ ["Managing Reports \(MS Word\)", page 310](#)
- ✓ ["Managing reports \(Windows Front-End\)", page 319](#)
- ✓ ["Managing reports \(Web Front-End\)", page 330](#)
- ✓ ["Managing Report DataSets", page 339](#)
- ✓ ["Managing Instant Reports", page 348](#)
- ✓ ["Customizing your Reports \(Web Front-End\)", page 387](#)
- ✓ ["Creating and Generating a Web Site", page 401](#)

INTRODUCTION TO DOCUMENTATION TOOLS

HOPEX offers several documentation tools that supplement description of models supplied as standard, providing a response to internal and external communication needs. Documentation is an essential task in modeling. A modeling approach does not simply consist of the presentation of schemas, however complete and accurate these may be.

These tools can be divided into three categories according to the type of document provided:

- tools that **generate** documentation from repository data:
 - Reports (MS Word)
 - Analysis reports
 - Report DataSets
 - Web sites

☛ See *"Documents Generated From the Repository"*, page 309.

☛ The features covered here are available as standard, irrespective of options.
- tools that **store** in HOPEX documents of which content is independent of the repository:
 - External references
 - Business documents

☛ See *"Using External References"*, page 419 and *"Using Business Documents"*, page 427.
- tools that enable **creation** of customized documentation: books can contain data generated by HOPEX as well as data specific to the user.

☛ See *"Using Books"*, page 409.

DOCUMENTS GENERATED FROM THE REPOSITORY

HOPEX enables generation of several types of document from repository objects:

- reports (MS Word)
 - See *"Managing Reports (MS Word)", page 310.*
 - analysis reports to study interactions between different repository objects.
 - See:
 - *"Managing reports (Windows Front-End)", page 319.*
 - *"Managing reports (Web Front-End)", page 330.*
 - Report DataSets to create repository data tables
 - See *"Managing Report DataSets", page 339.*
 - instant reports offering a statistical graphic analysis of the data of analyzed objects.
 - See *"Managing Instant Reports", page 348.*
 - web sites to generate a set of HTML pages that can be distributed on an Intranet.
 - See *"Creating and Generating a Web Site", page 401.*
- In **HOPEX (Web Front-End)** you can customize your reports.
- See *"Customizing your Reports (Web Front-End)", page 387.*

MANAGING REPORTS (MS WORD)

Thanks to its repository, **HOPEX** automates production of these documents in MS Word format to share information with the teams concerned.

These document models - called report templates (MS Word) - are provided as standard.

See:

- "Report (MS Word) Content", page 310
- "Managing Reports (MS Word) in HOPEX (Windows Front-End)", page 310
- "Creating a report (MS Word) in HOPEX (Web Front-End)", page 317
- "About Reports (MS Word) in HOPEX (Web Front-End)", page 318
- "Accessing Reports (MS Word)", page 318

Report (MS Word) Content

Reports (MS Word) provide a view of the state of repository objects at the time of creation of the report.

Reports (MS Word):

- include a diagram drawing
- show all the objects that figure in the diagram or are linked to it, with their properties and the comments that the designer entered during the design process.

☛ Unlike analysis reports, which present data according to a particular study viewpoint, reports (MS Word) present raw data.

Managing Reports (MS Word) in HOPEX (Windows Front-End)

HOPEX enables generation reports (MS Word) from the desktop **Documentation** window.

The reports are generated in .doc format.

☛ To access the **Documentation** window from the workspace, select **View > Navigation Windows > Documentation**.

See:

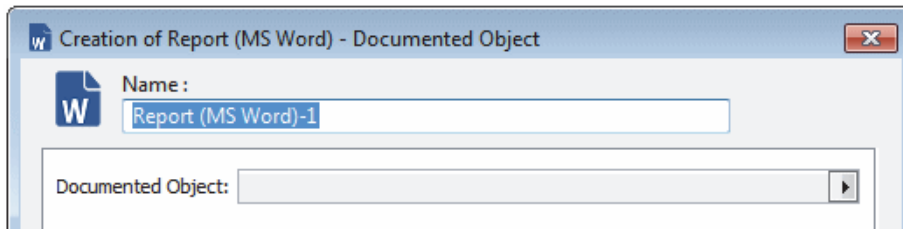
- "Creating a report (MS Word) in HOPEX (Windows Front-End)", page 311
- "Detaching a Report (MS Word) in HOPEX (Windows Front-End)", page 312
- "Distributing a report (MS Word) for review or validation", page 312
- "Revising a report (MS Word)", page 314
- "Approving report (MS Word) revision", page 315
- "Creating a distribution list", page 315

Creating a report (MS Word) in HOPEX (Windows Front-End)

To create a report (MS Word):

1. In the **HOPEX** menu bar, select **View > Navigation Windows > Documentation**.
2. Right-click the **Reports (MS Word)** folder and select **New > Report (MS Word)**.
*Alternatively, right-click an object and select **New > Report (MS Word)**.*

The first step of the **Creation of Report (MS Word)** wizard appears:
Documented object.



3. In the **Documented Object** field, click the arrow and select **Connect**.
4. In the **Element With Report MS Word** list, select the object type you want to document, and click .
5. In the results list, select the object to be documented and click **Connect**. The object appears in the report (MS Word) creation wizard.
6. Click **Next**.
The second step of the **Creation of Report (MS Word)** wizard appears:
Template document.
7. In the **Report Template (MS Word)** field, in the drop-down list, select the report template (MS Word) on which you want base your report.
The report (MS Word) contains a structure, to which the descriptions and comments for the different objects are added.
8. (If needed) A window asks you to enter the parameter values. Most frequently the object name provides the starting point for the query in the repository. Parameters correspond to settings of queries that make up the report (MS Word).
Enter the parameter values in the appropriate fields.
*The **Value** box drop-down menu allows you to run a query*
The number of fields and their titles vary according to the reports (MS Word) created.
9. Click **Next**.
The third step of the **Creation of Report (MS Word)** wizard appears:
Distribution.
10. (Optional) Enter the report (MS Word) distribution list.
For more details, see "Creating a distribution list", page 315.
11. Click **Finish**.
The new report (MS Word) appears in the **Documentation** navigation window and at object level.

12. Double-click the new report (MS Word) icon to automatically generate the document.

 A first window appears during preparation. The document editor then starts loading the report (MS Word).

The report appears in Microsoft Word.

A specific toolbar and a **HOPEX** menu appear in Word.

 If you see strange symbols instead of these screens, check that the Word **Field codes** option is not selected (select **Tools > Options, View** tab).

Detaching a Report (MS Word) in HOPEX (Windows Front-End)

This functionality can be useful in **HOPEX** (Windows Front-End) if you want to distribute a working report (MS Word) (a diagram and its description) to persons who do not have access to **HOPEX**.

For example, within the framework of a quality approach, you can detach reports (MS Word) of processes as well as the quality manual once these have been validated.

This copy of the report (MS Word) reflects the state of an object at a given moment and will no longer be modified by **HOPEX**. Links with HOPEX are cut.

The report (MS Word) generated via the pop-up menu of the object will continue to evolve according to object modifications.

To detach a report (MS Word):

1. From the **Documentation** navigation window, expand the **Reports (MS Word)** folder.
2. Right-click the report (MS Word) to be detached and select **Detach from HOPEX**.
3. In the **Detach from HOPEX** dialog box, select a location and give a name to your report (MS Word).
Links with the repository are broken.

You can now archive your report (MS Word), distribute it in electronic or printed form for information.

Distributing a report (MS Word) for review or validation

From **HOPEX** (Windows Front-End), you can distribute a report (MS Word) via electronic mail for review or validation if the recipients concerned are business persons whose e-mail address has been specified.

 The e-mail address should be specified in the **Characteristics** tab of the properties dialog box of the person or org-unit.

Two commands in the report (MS Word) pop-up menu allow you to trigger its distribution.

The **Send for Review** and **Send for Validation** commands trigger distribution of the report (MS Word) and cause:

- Breaking links with **HOPEX**.
- Sending the report (MS Word) as an attachment to the persons concerned.
For more details on the distribution list, see ["Creating a distribution list", page 315](#).

Sending for review

To send a report (MS Word) for review (checking):

1. Right-click the report (MS Word) and select **Send for Review**.

➤ See ["Accessing Reports \(MS Word\)", page 318](#).

An e-mail is created. The subject of the e-mail is "Review of report (MS Word) <name of the report (MS Word)>" and the e-mail includes the report (MS Word).

2. Enter e-mail addresses of the recipients as follows:

Person/org-unit role	To	Cc
Writer		
Checker	X	
Approver		X
Writer/Approver		X
Writer/Checker	X	
Approver/Checker	X	
For action		
For information		

Sending for validation

To send a report (MS Word) for validation:

1. Right-click the report (MS Word) and select **Send for validation**.

➤ See ["Accessing Reports \(MS Word\)", page 318](#).

An e-mail is created. The subject of the e-mail is "validation of report (MS Word) <name of the report (MS Word)>" and the e-mail includes the report (MS Word).

2. Enter e-mail addresses of the recipients as follows:

Role	To	Cc
Writer		
Checker		X
Approver	X	
Writer/Approver	X	
Writer/Checker		X
Approver/Checker	X	
For action		
For information		

 You can configure this feature (for example, recipient list, e-mail subject, etc.) using VB scripts.

Revising a report (MS Word)

In the report (MS Word) properties, the **Revisions** tab allows you to indicate the date and sender of the revision request as well as the version number.

You can create revision notes to keep track of the various report (MS Word) revision phases. Usually, the user creates a revision note when it has been decided to modify the report (MS Word) or the corresponding object. It is however possible to create a revision note at any time, for example when incorporating an existing procedure in **HOPEX**.

To create a revision note:

1. In the report (MS Word) properties dialog box, select the **Revisions** tab.
 See "[Accessing Reports \(MS Word\)](#)", page 318.
2. In the **Document Version** field, enter the current version of the report (MS Word).
3. Click **Apply**.
 When you create a new revision note, this number is used in the **Revision Version**. This is the report (MS Word) version at the time the revision note was created.
4. Click **New** .

5. Create the note:

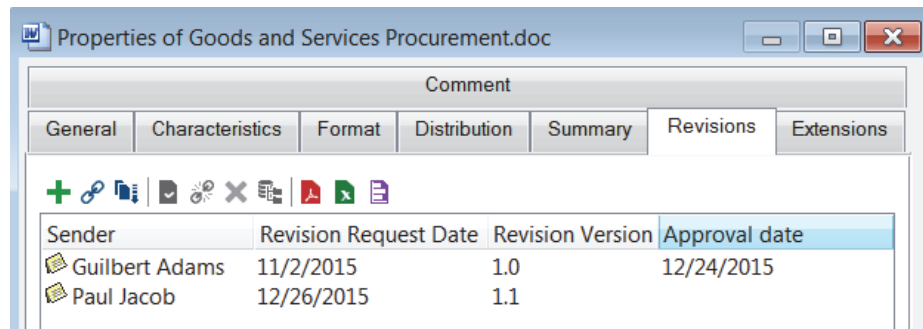
☛ To reuse a note already created, in the **Note** field, click the arrow and select the note. **Type** and **Comment** parameters of the note are automatically specified.

- In the **Note** field, enter the name of the note.
- in the **Type** drop-down list, select the note type.
- In the **Comment** field, enter a comment for the note.
- Click **OK**.

In the **Revision Request Date**, the current date is automatically specified.

In the document **Revision Version**, the document version (if specified step 2) is automatically specified.

6. (Optional) If needed, modify the **Revision Request Date**.
7. (Optional) If needed, modify the **Revision Version**.
8. Click in the **Sender** field, then the arrow and use the query tool to select the note sender.
The note sender name appears in the corresponding field.
9. Click **Apply**.



Sender	Revision Request Date	Revision Version	Approval date
Guilbert Adams	11/2/2015	1.0	12/24/2015
Paul Jacob	12/26/2015	1.1	

Example of a series of revision notes

Approving report (MS Word) revision

You can approve the report (MS Word) revision.

Eg: after approving the report (MS Word) currently under revision.

To specify the approval date of a report (MS Word):

1. In the report (MS Word) properties dialog box, select the **Revisions** tab.
☛ See "[Accessing Reports \(MS Word\)](#)", page 318.
2. Enter (or modify) the date in the corresponding **Approval date** field.

Creating a distribution list

HOPEX enables preparation for distribution of your reports (MS Word) by creation of a distribution list.

In the report (MS Word) properties dialog box, the **Distribution** tab enables:

- selection or creation of persons (or org-units of the enterprise).
- specification of the roles of these persons:



A person holds a position in an organization. It is designated by its name. Example: Mr. Smith.



An org-unit is an element of the enterprise structure such as a department, a service, or a workstation. An internal organization unit is defined based on how detailed you require your view of the enterprise to be. Example: financial management, sales management, marketing department, account manager. An external org-unit is an external entity that exchanges flows with the enterprise. Example: customer, supplier, government office.

- The writer is responsible for originating the report (MS Word).
- The checker is responsible for reviewing the report (MS Word) to check accuracy.
- The approver decides on validity of the report (MS Word), for example that it may be implemented if it is a process.

☛ One person may have several roles:

- "writer/approver"
- "approver/checker" or
- "writer/checker"

☛ Persons or org-units can be recipients of reports (MS Word):

- **For action**, that is they are responsible for implementing the report (MS Word) within the enterprise,
- or simply **For information**.

To create the distribution list of a report (MS Word):

1. In the report (MS Word) properties dialog box, select the **Distribution** tab.

☛ See *"Accessing Reports (MS Word)", page 318*.

2. Click **Connect** .

Your distribution list can include org-units or persons.

3. Select the recipient type ("Org-Unit", "Person (system)", or "Business Person") you want to add in your distribution list.

☛ Depending on the options selected, you can add **Business Persons** and/or **Persons (System)**. For more details, see *"How to manage options concerning business persons and (system) persons?", page 505*.

4. In the list that appears, select the recipient.

☛ To select more than one recipient, use the [Ctrl] key.

5. Add other persons or org-units to the distribution list in the same way.

6. Click in the **Receiver role** field and use the drop-down menu to select each recipient role.

Name	Receiver role
George Edouard	Checker
George Greig	Writer/Approver
Isabella Rossetti	Information
Jacques Dupond	Approuver Approuver/Chec Checker Information Writer Writer/Approve Writer/Checker

☛ To delete persons and/or org-units from the distribution list, select these in the list and click **Disconnect** .

Creating a report (MS Word) in HOPEX (Web Front-End)

HOPEX (Web Front-End) enables you to create documentation of repository objects: the reports (MS Word).

☛ These reports (MS Word) are available in .docx format. They are generated in .rtf format then packaged in .docx format so as to reduce size. For more details, see ["About Reports \(MS Word\) in HOPEX \(Web Front-End\)", page 318.](#)

You can create reports (MS Word) from:

- a repository object
- a navigation window

To create a report (MS Word) from an object:

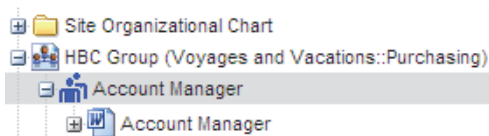
1. Right-click an object and select **New > Report (MS Word)**.
The first step of the **Creation of Report (MS Word)** wizard appears: **Template Document**.
2. (Optional) In the **Name** field, modify the name given by default to your report (MS Word).
3. In the **Report Template (MS Word)**, select the report template (MS Word) on which you want your report to be based.
☛ Only those report templates (MS Word) corresponding to the documented object type are proposed.
4. Click **Next**.
The second step of the **Creation of Report (MS Word)** wizard appears: **Distribution**.
5. Enter the recipients of the report (MS Word).

☛ These can be specified later, see ["Creating a distribution list", page 315.](#)

6. Click **Finish**.

The report (MS Word) opens.

The report (MS Word) appears in the navigation tree.



About Reports (MS Word) in HOPEX (Web Front-End)

Reports (MS Word) available in **HOPEX** (Web Front-End) are .rtf reports packaged as .docx format.

They are automatically detached from **HOPEX**.

Styles, contents and index are not refreshed. You must do this manually.

Accessing Reports (MS Word)

You can access:

- reports (MS Word) concerning an object
- all repository Reports (MS Word)

Accessing reports (MS Word) concerning an object

To access reports (MS Word) concerning an object:

1. Open the properties page of the object.
2. Select the **General** tab and then the **Documents** subtab.
Reports (MS Word) concerning the object are visible in the **Reports (MS Word)** pane.

Accessing all reports (MS Word)

To access all repository Reports (MS Word):

1. Open the **Documentation** navigation window.

➡ To open this window, click  > **Documentation**.

2. Expand the **Reports (MS Word)** folder.

MANAGING REPORTS (WINDOWS FRONT-END)

A company repository can contain a large number of objects and it is important to be able to generate reports that identify and analyze repository data so as to provide a better view of this information.

Reports relate to groups of repository objects and study their interactions.

Eg: you can analyze a set of applications to determine their functional compatibility level regarding a city plan.

A report is created from a report template. **MEGA** provides predefined report templates specific to each **HOPEX** product or Solution.

Eg: process analyses, portfolio analyses, risk analyses.

You can also create new report templates.

➤ For more details on report template creation, see **HOPEX Power Studio - Report Studio**.

➤ **HOPEX** Solutions propose specific reports. For more details, see the user guide corresponding to each **HOPEX** Solution.

See:

- ["Accessing Reports \(Windows Front-End\)", page 319](#)
- ["Opening a report \(Windows Front-End\)", page 319](#)
- ["Accessing report templates available on an object \(Windows Front-End\)", page 320](#)
- ["Launching a report \(Windows Front-End\)", page 321](#)
- ["Customizing the Report Display", page 324](#)
- ["Exporting a Report", page 326](#)

Accessing Reports (Windows Front-End)

You can access reports generated with **HOPEX** from:

- the Home Page of **HOPEX**
You access all reports of your repository sorted by subject;
- the **Documentation** navigation window, under the **Reports** folder
You access all reports of your repository sorted by report template.
- the properties of an object to which it relates, in the **General** tab, **Report** subtab.
You access all reports concerning the object.

Opening a report (Windows Front-End)

To open a report:

1. Access the reports.

➤ See ["Accessing Reports \(Windows Front-End\)", page 319](#).

2. Right-click the report and select **Open** to launch it.
The report is displayed in the read/edit area and comprises report chapters that vary according to the report template.

Accessing report templates available on an object (Windows Front-End)

The report templates proposed as standard by **HOPEX** product are designed to compare objects according to specific criteria.

The **Report Discovery** command of the pop-up menu of an object enables:

- display of a list of report templates relating to the object, from which you can create new reports.
- launch existing reports.

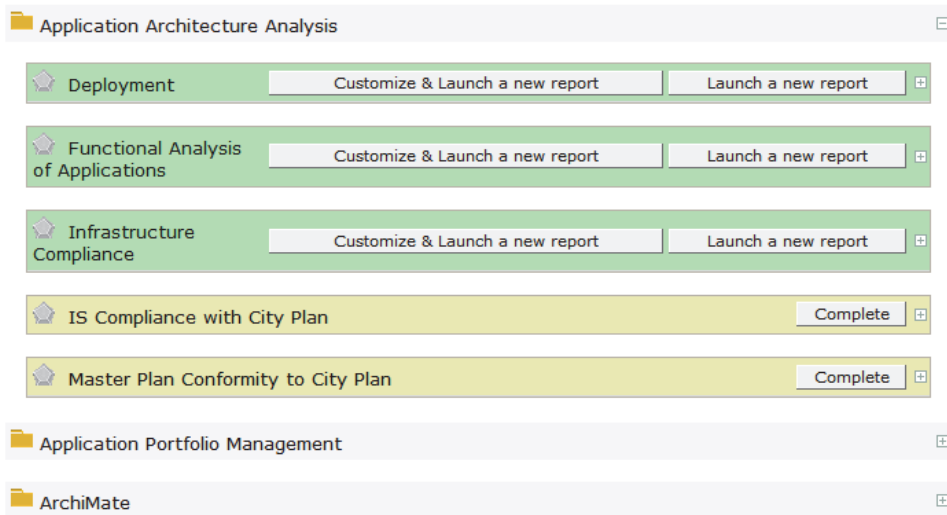
To access report templates and reports available on an object:

1. Right-click the object and select **Report Discovery**.
The list of report templates relating to the object appears in the edit window.

The report templates are classified in folders by category.



- Click the  button of the folder to display the report templates included in this category.



Example of report templates available on an application

Report templates can contain one or several parameters. Certain parameters are defined automatically with the value of the selected object. Other parameters must be specified. Depending on the report template, you can:

- directly launch the report
- modify default values and launch the report
- enter missing parameters and launch the report.

➤ For more details on launching reports, see "[Launching a report \(Windows Front-End\)](#)", page 321.

Launching a report (Windows Front-End)

The parameters define the object groups and their relationship setting in the report. They vary depending on the report template.

E.g.: a "Deployment" report relates the "To Deploy" parameter (defining elements to be deployed) and the "Location" parameter (defining target locations).

➤ Each report template parameter defines a multiplicity indicating whether it is possible to connect more than one value for the parameter in question to a given report. If multiplicity is 1 or 0..1, only one parameter value can be connected.

In the report **Properties** window, the **Parameters** tab enables to define report input data.

To launch a report from an object:

1. Access the reports available for the object.

☛ See "Accessing report templates available on an object (Windows Front-End)", page 320.

2. If your report template includes only one mandatory parameter, this parameter is automatically entered with the selected object. Click:

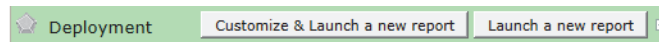
- **Customize & Launch a new report** to modify parameter data before launching the report.

The report **Properties** window opens.

☛ Go to step 3.

- **Launch a new report** to launch the report directly.

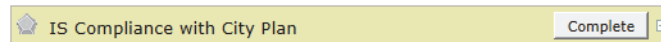
The report is displayed in a new tab of the edit window.



If your report template includes several mandatory parameters, you must complete the report before launching it, click **Complete**.

The report **Properties** window opens.

☛ Go to step 3.



3. To customize or complete the report parameters before launching the report, in the report Properties window, click **Parameters** tab. A parameter can group several objects.
4. To connect an object to a parameter, in the parameter pane, click

Connect .

The query dialog box appears. It allows you to select objects of the parameter.

The query dialog box drop-down list contains the object types that you can select for the parameter.

E.g.: for a deployment report, the "To Deploy" parameter can be defined by some applications, technical infrastructures, nodes, workstations, etc.

5. Select the object type and click **Find**.

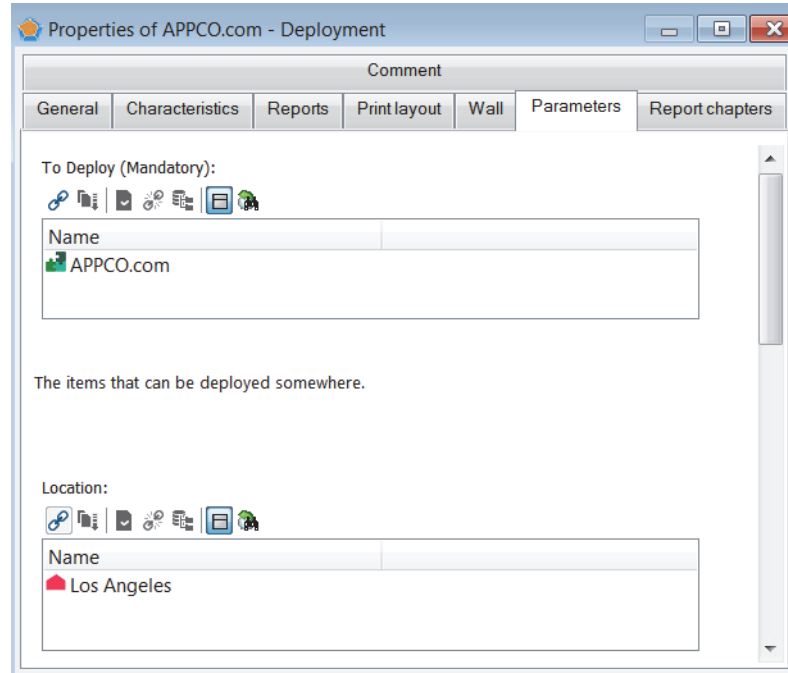
Example: Application.

The list of objects available in the repository appears.

6. Select the objects to be connected to the parameter.
7. Click **OK**.

8. Define other parameters in the same way.

E.g.: in a deployment report, the second parameter corresponds to the "Location" of the deployed elements. The location is defined by "Sites" objects.



9. (Optional) You can customize the report display.

See ["Customizing the Report Display", page 324.](#)

10. Click **OK**.

The report result opens in the center page.

Click to get information on the report.

Report chapters that appear vary according to the report template.

11. Click each chapter title to display its content.

To automatically display the report chapter content, see ["Automatically expanding the report chapter content on opening", page 324.](#)

To export the report content in RTF, PDF, or Excel format, see ["Exporting a Report", page 326.](#)

Customizing the Report Display

See:

- ["Modifying the report name", page 324](#)
- ["Specifying the report chapters to be displayed", page 324](#)
- ["Automatically expanding the report chapter content on opening", page 324](#)
- ["Modifying report display options", page 325](#)
- ["Updating Report Contents", page 325](#)
- ["Modifying report options", page 326](#)

Modifying the report name

To modify the report name:

1. In the report Properties window, select the **Characteristics** tab.
2. In the **Local name** field, enter the report name.
3. Click **Apply**.

Specifying the report chapters to be displayed

Report chapters vary according to report type. In the report results, you can show certain chapters and hide others.

To define the chapters to be displayed:

1. In the report Properties window, click the **Report chapters** tab.
2. In the **Presence** column, clear the chapters you want to hide.
By default, all of the chapters are displayed.

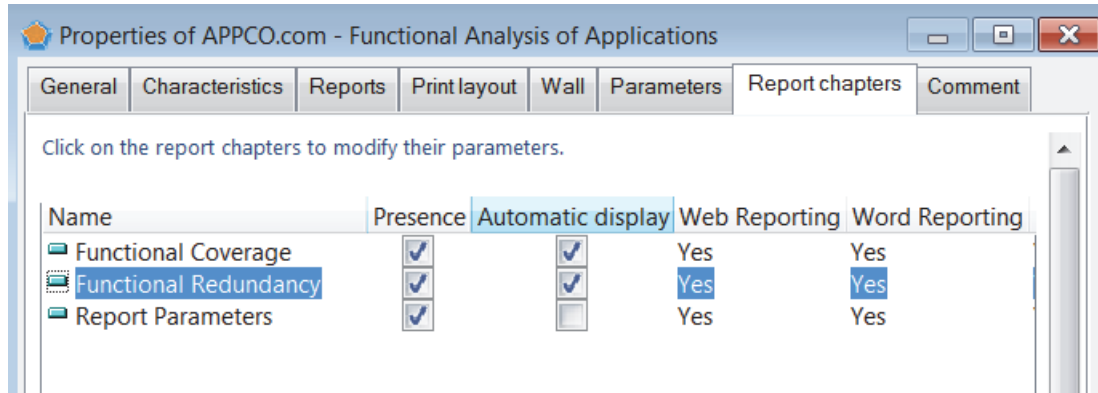
Automatically expanding the report chapter content on opening

In the report result, you must click each chapter title to display its content. You can define automatic opening of report chapters on report launching, so as to expand only the chapters you are interested in.

To expand a report chapter automatically on opening:

1. In the report Properties window, click the **Report chapters** tab.

2. Select **Automatic display** associated with the chapter in question.



Modifying report display options

The appearance of certain **HOPEX** standard reports can be modified.

E.g.: you can present a stacked bar chart with a 3D effect.

When report presentation can be modified, a configuration button appears to the right of the report concerned.

To modify the display parameters of a report chapter:

1. Open the report concerned.
 See *"Launching a report (Windows Front-End)", page 321.*
2. Click  associated with the chapter title you want to modify.
 The **Report Chapter Configuration** properties window opens on the display parameters you can modify.

Updating Report Contents

HOPEX reports are generated dynamically. If the characteristics of an object described in the report change, the report also changes.

To update an existing report:

1. Open the report concerned.
 See *"Launching a report (Windows Front-End)", page 321.*
2. Click **Refresh**  to the right of:
 - the report title to reload the complete page.
 - the title that corresponds to the modified part, to reload part of the page only.

Modifying report options

You can, for example:

- hide export buttons on report chapters
- hide chapter comments
- hide help buttons
- define the Excel export format (.XLS ou .XLSX)
- hide, in the pdf, the name of the person who created the report

To modify report options:

1. Select **Tools > Options**.
2. In the left tree, expand the **Documentation** folder.
3. Select **Reports**.
4. In the right pane of the window, modify the options.

Exporting a Report

You can export report data or report chapter data in RTF , PDF , Excel  format.

Exporting reports in RTF or PDF format

To export a report in RTF or PDF format:

1. Access the report.
 See *"Accessing Reports (Windows Front-End)", page 319*.
2. Right-click the report and select **Open As > RTF** or **PDF** to generate the report in RTF or PDF format.
The report opens in MS-Word or Adobe Acrobat.

To export a report in RTF or PDF format from the report result:

1. Launch the report.
 See *"Launching a report (Windows Front-End)", page 321*.
2. Click the required export format: RTF  or PDF .
The report opens in MS-Word or Adobe Acrobat.

Exporting report results to Excel

You can export certain report data in Excel format.

This feature is available for Java report chapters and does not apply to VB or VBScript reports.

 For more details on macros, see **HOPEX Power Studio - Report Studio** documentation.

By default, export generates an .XLS file. To generate the report in .XLSX see *"Modifying report options", page 326*.

Exporting reports

To export report results in Excel format:

1. Access the report.
 See *"Accessing Reports (Windows Front-End)", page 319.*
2. Right-click the report and select **Open as > Excel**.
The generated file displays an Excel sheet per set of data (e.g.: table, tree, diagram), carrying the name of the set if it has one, or by default the name of the current report chapter followed by a number (beginning at 1).

Exporting a report or a report chapter

When a report chapter can be exported in Excel format, the **Excel** button  appears to the right of the chapter title.

To export report data or report chapter data in Excel format:

1. Access the report.
 See *"Accessing Reports (Windows Front-End)", page 319.*

2. From the report result, click **Excel**  at report title or chapter level

For example a report of "Radar Chart of Initiatives" type analyzes each portfolio initiative according to a set of criteria.

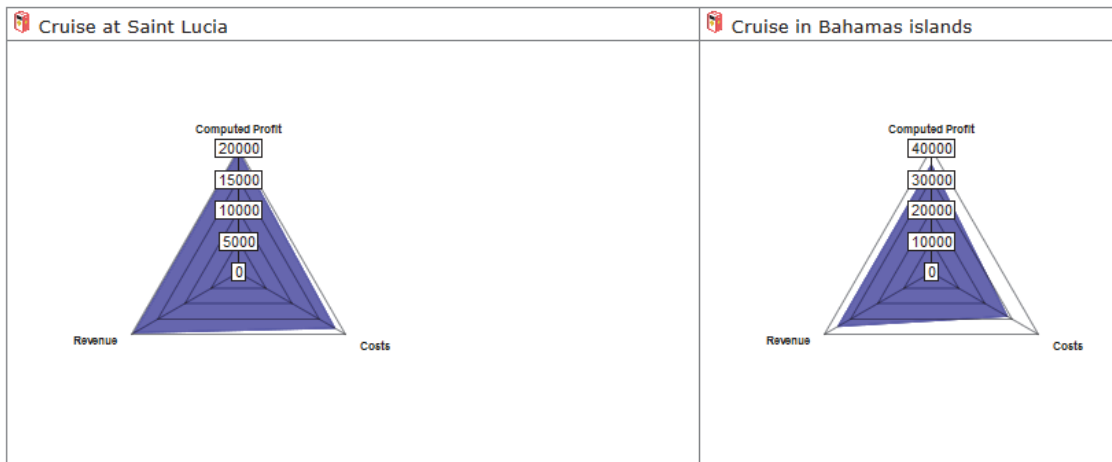
Cruise - Radar chart of Initiatives



1. Report Parameters



2. Radar Chart of Initiatives



The Excel file opens. It contains:

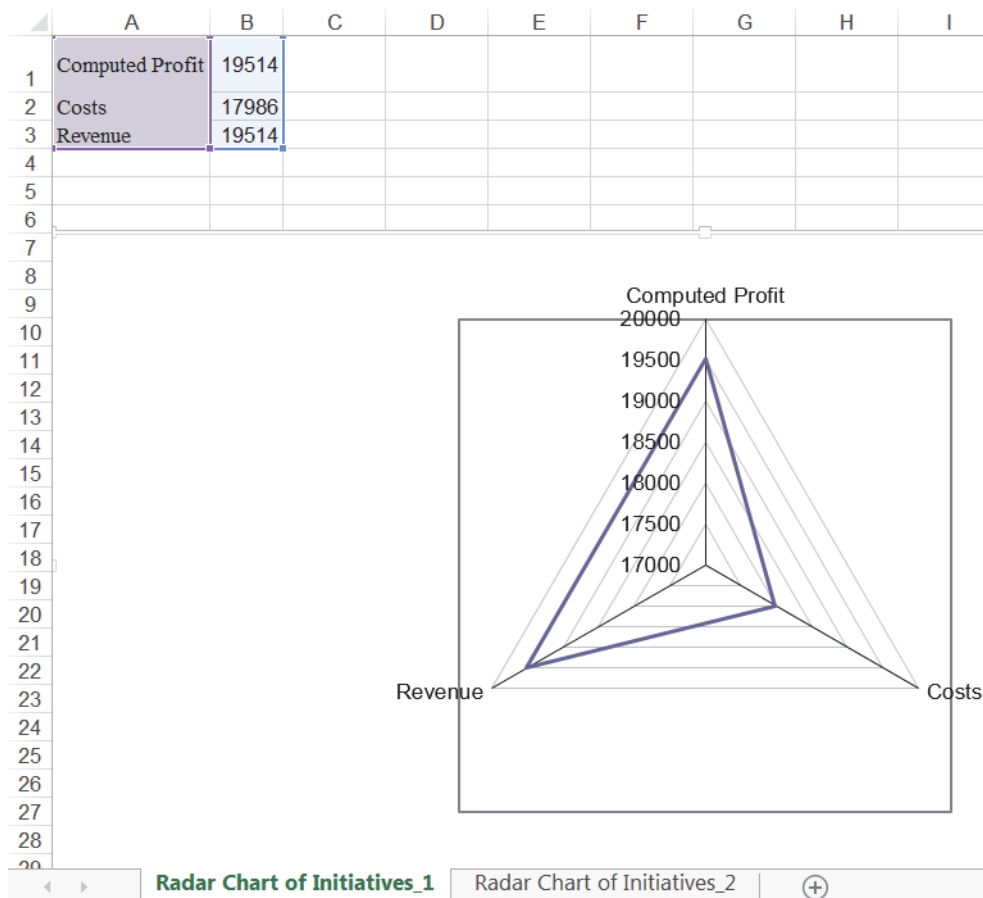
- for each input parameter, a specific sheet that lists the objects used as input.

E.g.: a sheet for the input objects of the first parameter: criteria.

E.g.: a sheet for input objects of the second parameter: initiatives.

- a specific sheet by graphic.

E.g.: a sheet for the radar chart of each initiative.



Excel export limits

Certain charts such as the Gantt chart are not supported.

Views of over three dimensions are not processed.

MANAGING REPORTS (WEB FRONT-END)

A report is created from a report template. **MEGA** provides predefined report templates specific to each **HOPEX** Solution.

Examples: application portfolio management, risk analysis.

A report groups sets of repository objects and studies their interactions. Object types and the viewpoint from which they are analyzed depend on the type of report to be created.

You can for example analyze a set of applications to determine their level of functional compatibility with a corresponding city plan.

In **HOPEX** Solutions, dynamic reports enable repository data analysis according to different perspectives.

☛ When the report allows, you can refine analysis results by launching new reports (instant reports) on all or certain of the objects studied. For more details, see *"Managing Instant Reports", page 348*.

See:

- ["Accessing Reports \(Web Front-End\)", page 330](#)
- ["Accessing report properties", page 332](#)
- ["Opening a report \(Web Front-End\)", page 332](#)
- ["Creating Reports \(Web Front-End\)", page 333](#)
- ["Managing a Report \(Web Front-End\)", page 336](#)
- ["Analyzing Several Objects via a Report", page 337](#)
- ["Viewing and launching a report on an object", page 338](#)

Accessing Reports (Web Front-End)

Accessing the report in **HOPEX** (Web Front-End):

- is similar in all **HOPEX** Solutions.
- is specific in the Enterprise Architect (EA) desktop.

You can also access reports:

- from the properties pages of an object.
 - ☛ See *"Accessing reports available on an object (Web Front-End)", page 331*.
- (according to the **HOPEX** Solution) from the desktop home page.
 - ☛ See *"Customizing the home page of your desktop", page 40*.
- from your dashboard.
 - ☛ See *"Customizing your Dashboard", page 42*.

Accessing Reports in HOPEX (Web Front-End) Solutions

To access reports in a **HOPEX** (Web Front-End) Solution:

1. Connect to **HOPEX** (Web Front-End).
 ➤ See *"Starting HOPEX (Web Front-End)", page 22.*
2. On your **HOPEX** desktop, click the navigation menu .
3. Click the **Reports** navigation pane.
 The reports are classified by subject specific to each **HOPEX** Solution.
 You can open, create, manage and customize reports.
 ➤ See *"Opening a report (Web Front-End)", page 332.*
 ➤ See *"Creating Reports (Web Front-End)", page 333.*
 ➤ See *"Managing a Report (Web Front-End)", page 336.*
 ➤ See *"Customizing your Reports (Web Front-End)", page 387.*

Accessing your Reports in a HOPEX (Web Front-End) Solution.

When you open a report, you can save it in **My Reports** folder.

➤ See *"Opening a report (Web Front-End)", page 332.*

To access your reports in a **HOPEX** (Web Front-End) Solution:

1. Connect to **HOPEX** (Web Front-End).
 ➤ See *"Starting HOPEX (Web Front-End)", page 22.*
2. On your **HOPEX** desktop, click the navigation menu .
3. Click the **Reports** navigation pane.
 Your reports are classified in the **Other reports > My reports** section.
4. In the **Reports > Other reports** navigation pane, click **My reports**.
 Your reports are listed in the **Navigation** edit area, **My reports** section.

You can open, manage and customize your reports.

➤ See *"Opening a report (Web Front-End)", page 332.*
 ➤ See *"Creating Reports (Web Front-End)", page 333.*
 ➤ See *"Managing a Report (Web Front-End)", page 336.*
 ➤ See *"Customizing your Reports (Web Front-End)", page 387.*

Accessing reports available on an object (Web Front-End)

You can access all reports concerning an object.

To access reports available on an object:

1. Open the properties dialog box of the object concerned.
2. Select **Reporting**.
 The list of reports that concerns the object appears.
3. Click the report you are interested in.
 The report is displayed in the **View** edit area.

Accessing reports from the EA Desktop Web Front-End

To access reports from the EA Desktop (Web Front-End):

1. Connect to **HOPEX** (Web Front-End).
 See *"Starting HOPEX (Web Front-End)", page 22.*
2. In your **EA** desktop, click the navigation menu .
3. Click the **Repository** navigation pane.
4. In the **Repository** navigation pane, click **Documentation** .
 The Documentation tree appears in the **Navigation** edit area.
5. In the **Navigation** edit area, expand the **Reports** folder.
 The reports are classified in the associated report template folders. You can access, manage and customize your reports.
 See *"Opening a report (Web Front-End)", page 332.*
 See *"Creating Reports (Web Front-End)", page 333.*
 See *"Managing a Report (Web Front-End)", page 336.*
 See *"Customizing your Reports (Web Front-End)", page 387.*

Accessing report properties

To access the properties of a report:

1. Access the reports.
 See *"Accessing Reports (Web Front-End)", page 330.*
2. Select a report.
3. Click **Properties** .
 (EA desktop) In the reports tree, right-click a report  and select **Properties**.

The report properties appear in the **View** edit area.

You can manage and customize your report.

- 
- See
- "Managing a Report (Web Front-End)", page 336.*
-
- 
- See
- "Customizing your Reports (Web Front-End)", page 387.*

Opening a report (Web Front-End)

Some reports are automatically launched from repository data. Other reports require you to define input parameters.

- 
- see
- "Creating Reports (Web Front-End)", page 333.*

To open a report:

1. Access the reports.
 See *"Accessing Reports (Web Front-End)", page 330.*

2. Select the report concerned.

☛ (EA desktop) In the reports tree, right-click a report  and select **Open**.

The report is displayed in the **View** edit area.

The report is displayed in the **Navigation** edit area.

☛ If you open a report saved in your reports, the report opens in the **View** edit area.

3. (if necessary) Enter the report parameters.

This consists in defining report input data, which constitute the analysis scope.

☛ The parameters define the object groups and their relationship setting in the report. They vary depending on the report template. A parameter value can group several objects.

4. (if necessary) Expand the report chapters to display them.

☛ To expand a report chapter automatically at opening, see ["Expanding a Report Chapter Automatically on Opening", page 388](#).

The chapter comments appear under the chapter title.

☛ To mask the chapter comment, see ["Modifying report options", page 400](#)

You can:

- edit the report .
 - ☛ See ["Editing a Report", page 387](#).
- export the report.
 - ☛ See ["Exporting a report in PDF, RTF, or Excel format", page 336](#).
- (report saved in your reports) customize the page setup of the report in .pdf format .
 - ☛ See ["Customizing the Page Setup of the Report in PDF Format", page 399](#).

For more details on the functional content of each report, refer to the "Reports" chapter of the documentation specific to the Solution.

Creating Reports (Web Front-End)

To create a report you must:

- define the report template on which the report is based.
 - ☛ A report is created from a report template. **MEGA** supplies predefined report templates for each Solution (e.g.: process analyses, application architecture analyses).
- (if necessary) specify the report parameters.
 - E.g.: the risk identification report.
 - ☛ This consists of defining report input data.
 - The parameters define the object groups and their relationship setting in the report. They vary depending on the report template. A parameter value can group several objects.
- (optional) define the report chapters.
 - ☛ Report chapters vary depending on the selected report type.

To create a report:

1. Access the reports.
 ➤ See *"Accessing Reports (Web Front-End)", page 330.*
2. In the **Reports** navigation pane, click **My reports**.
3. In the **Navigation** edit area, click **New** .
 The report creation window opens.
 ➤ (EA desktop) In the **Navigation** edit area, expand the **Reports** folder.
The reports are classified in the associated report template folders.
*In the navigation tree, right-click the report template concerned and select **New > Report**.*
4. In the **Local Name** field, enter the report name.
5. (Optional) In the **Owner** field, select an owner.
6. Click **Next**.
 ➤ (EA desktop) The description of the report template appears.
7. (HOPEX Solution) Select the report template on which your report will be based.
8. Click **Next**.

9. Specify the report parameters.
This consists in defining report input data, which constitute the analysis scope.

The parameters define the object groups and their relationship setting in the report. They vary depending on the report template. A parameter value can group several objects.

E.g.: with the risk identification report you can presents distribution of risks according to several criteria: by process, by risk type, by entity and by objective.

Parameters

Local name:

Risk Identification IT

Name:

Risk Identification IT

Begin Date:

1/1/2016

End Date:

7/31/2016

Context Org-Unit:

Properties

Disconnect

Connect Org-Unit by Tree

	Short Name
☐	IT Department - Africa
☐	IT Department - America
☐	IT Department - Asia
☐	IT Department - Europe
☐	IT Employee

«

<

Page 1

of 1

>

»

Displaying 1

Context Process:

Properties

Disconnect

Connect Process

	Short Name
☐	IT GRC Overview

Previous

Next

OK

Cancel

10. Click **Next**.

The page to configure the chapters appears.

☛ *Report chapters vary depending on the selected report type.*

11. (optional) Define the configuration for each report chapter. In the chapter line:

- to hide the chapter: clear **Presence**.

☛ *By default, all chapters are present.*

- to display the chapter expanded at report opening: select **Automatic Opening**.

☛ *By default, all the chapters appear folded at report opening.*

12. Click **OK**.

(HOPEX Solution) The report is accessible in the list of your reports.

(EA Desktop) The report is saved in the folder of the associated report template.

☛ *To open the report, see "Opening a report (Web Front-End)", page 332.*

☛ *To customize the report, see "Customizing your Reports (Web Front-End)", page 387.*

Managing a Report (Web Front-End)

Refreshing report contents

If the described object is modified, the report is updated when next opened.

To update a report:

1. Open the report concerned.

☛ *See "Opening a report (Web Front-End)", page 332.*

2. Click the refresh button :

Exporting a report in PDF, RTF, or Excel format

When you open a report, this appears in an HTML page.

You can export report data or report chapter data in RTF , PDF , Excel  format.

☛ *To hide the export buttons on report chapters, see "Modifying report options", page 400.*

To export the report content:

1. Open the report concerned.

☛ *See "Opening a report (Web Front-End)", page 332.*

2. From the report result, click the required export format located to the right:
 - of the report title to export the content of the entire report
 - of the report chapter to export the chapter content.

☛ The first time you open a separate window, your navigator may request authorization to open unexpected windows. If this is the case, accept.

☛ Use the  button to modify the setup of the generated PDF file. For more details, see ["Customizing the Page Setup of the Report in PDF Format"](#), page 399.

Viewing the content of a data series

With certain reports you can view the content of a chart data series.

Example: in a quantitative type chart.

To view the content of a data series:

1. Open the report.
 - ☛ See ["Opening a report \(Web Front-End\)"](#), page 332.
2. In the chart, click the series for which you want to view the content. Roll the mouse over the series to highlight it.

If you have opened the report:

- from your reports: a new **List** tab appears in the **Result** edit area. It lists the content of the series.
- from a report: the content of the series replaces the display of the report in the **Navigation** area.

In the list, you can click:

- **Properties** , to view the properties of an element in the series.
- **PDF**  or **Excel** , to export the elements of the series in .pdf or .xls format.
- **Instant Report** , to generate an instant report for the series.

☛ See ["Launching an Instant Report"](#), page 364.

Analyzing Several Objects via a Report

Reports allow you to analyze several objects simultaneously.

You can for example determine the responsibilities of different org-units via the "Process Analysis" report.

To launch a report on a number of objects:

1. Display a list of objects
 - Example: a list of actors.
2. Select a number of objects.
3. Right-click the selection of objects and select **Documentation > Report Discovery**.
The report of available reports appears.

4. In the **Available Reports** section, expand the folder that corresponds to the report that interests you.

Example: Select the "Process Analysis" folder.

5. Click **Launch New Report**.

The report is generated automatically.

 To customize the report, click **Customize and Launch New Report**. For more details, see "[Launching a report \(Windows Front-End\)](#)", page 321.

In the report that appears, expand the "Org-Unit Responsibilities" folder.

You can see in which processes the org-units intervene.

Viewing and launching a report on an object

To view and launch a report available on an object:

1. Right-click the object on which you want to generate a report and select **Documentation > Report Discovery**.
The list of available reports appears.
2. In the **Available Reports** section, expand the folder that corresponds to the report that interests you.
3. Click **Launch New Report**.
The report is generated automatically.

 To customize the report, click **Customize and Launch New Report**. For more details, see "[Launching a report \(Windows Front-End\)](#)", page 321.

MANAGING REPORT DATASETS

You can create data tables (Report DataSets) from the **HOPEX** repository objects. The data displayed in the table is read-only. With this table, you can use standard export and instant report features.

To create a Report DataSet, Report DataSet definitions are available.

See:

- ["Accessing Report DataSets", page 339](#)
- ["Accessing the properties of a Report DataSet", page 340](#)
- ["Creating a Report DataSet", page 343](#)
- ["Configuring and Using a Report DataSet", page 345](#)

Accessing Report DataSets

Access to the Report DataSets in **HOPEX** (Web Front-End):

- is similar in all **HOPEX** Solutions.
 - ☛ See ["Accessing to Report DataSets in a HOPEX Solution \(Web Front-End\)", page 339.](#)
- is specific in the Enterprise Architect (EA) desktop.
 - ☛ See ["Accessing Report DataSets from the EA Desktop \(Web Front-End\)", page 340.](#)

Accessing to Report DataSets in a HOPEX Solution (Web Front-End)

To access Report DataSets in a **HOPEX** Solution (Web Front-End):

1. Connect to **HOPEX** (Web Front-End).
 - ☛ See ["Starting HOPEX \(Web Front-End\)", page 22.](#)
2. On your **HOPEX** desktop, click the navigation menu .
3. Click the **Reports** navigation pane.
4. In the **Reports** navigation pane, click **My DataSet Reports**.
The **Navigation** edit area lists your Report DataSets and specify the following characteristics for each Report DataSet:
 - its confidentiality mode (public/private)
 - the Report DataSet Definition on which it is based
 - the date and time it was last generated
 - its generation time

You can access, create and manage your Report DataSets.

- ☛ See ["Accessing the properties of a Report DataSet", page 340.](#)
- ☛ See ["Creating a Report DataSet", page 343.](#)
- ☛ See ["Configuring and Using a Report DataSet", page 345.](#)

Accessing Report DataSets from the EA Desktop (Web Front-End)

To access Report DataSets from the EA desktop (Web Front-End):

1. Connect to **HOPEX** (Web Front-End).
 See *"Starting HOPEX (Web Front-End)", page 22.*
2. In your **EA** desktop, click the navigation menu .
3. Click the **Repository** navigation pane.
4. In the **Repository** navigation pane, click **Documentation** .
 The Documentation tree appears in the **Navigation** edit area.
5. In the **Navigation** edit area, expand the **Report DataSets** folder.
 Report DataSets are classified in the associated Report DataSet definition folders.

You can access, create and manage your Report DataSets.

-  See *"Accessing the properties of a Report DataSet", page 340.*
-  See *"Creating a Report DataSet", page 343.*
-  See *"Configuring and Using a Report DataSet", page 345.*

Accessing Report DataSets (Windows Front-End)

To access Report DataSets in **HOPEX** (Windows Front-End):

1. Connect to **HOPEX** (Windows Front-End).
 See *"Accessing HOPEX Windows Front-End", page 46.*
2. In the **Documentation** navigation window, expand the **Report DataSets** folder.
 Report DataSets are classified in the associated Report DataSet definition folders.

You can access, create and manage your Report DataSets.

-  See *"Accessing the properties of a Report DataSet", page 340.*
-  See *"Creating a Report DataSet", page 343.*
-  See *"Configuring and Using a Report DataSet", page 345.*

Accessing the properties of a Report DataSet

To access the properties of a Report DataSet:

1. Access Report DataSets.
 See *"Accessing Report DataSets", page 339.*

2. From a desktop:
 - Web Front-End: in the Report DataSet list, select a Report DataSet and click **Properties**  .
The Report DataSet properties appear in the **View** edit area.
 - ☛ In the EA desktop, right-click Report DataSet and select **Properties**.
 - Windows Front-End: In the Report DataSet tree, right-click Report DataSet and select **Properties**.
The Report DataSet properties window opens.
 - ☛ See *"Properties of a Report DataSet", page 341*.

Properties of a Report DataSet

A Report DataSet is created from objects from the **HOPEX** repository.

In the Report DataSet properties, the **Characteristic** page specifies the characteristics of the Report DataSet:

- **Report DataSet Definition** is the definition on which the Report DataSet is based
- **Report DataSet Sharing** defines the confidentiality mode of the Report DataSet:
 - public: the Report DataSet is shared with the other users
 - private: the Report DataSet is confidential to the user who created it.

☛ See *"Making a Report DataSet confidential", page 345*.

In the Report DataSet properties, the **Data** page contains the following sections:

- **Parameters**, which defines the objects to be extracted from the **HOPEX** repository.
- **Report DataSet**, which presents the Report DataSet data in table format.

The data displayed in the table is read-only.

For example, a Report DataSet with an "Application technologies" Definition contains the following data for each application selected (objects to be extracted):

- "Application"
- "Rating"
- "Technologies"
- "Vendor"
- "Costs"
- "Number of users".

☛ See *"Creating a Report DataSet", page 343*.

 **Data** ▾

Parameters

Applications to extract:

 New
  Connect
  Reorganize
  Properties
  Disconnect
  Delete

☐	Local name
☐	Account
☐	Account Management
☐	Accounting Link
☐	Advisor Client
☐	APPCO.com

« ‹ | Page **1** | of 1 | › » |  |  ▾
 Displaying 1 - 50 of 50

Report DataSet

Last Generation: Generation Time:

 Refresh
  PDF
  Excel
  Instant Report

	Application	Rating	Technologies	Vendor
	Billing	4	Office 2010	Microsoft
	Billing	4	Internet Explorer 9	Microsoft
	Billing	4	.NET Framework 3.5 SP1	Microsoft

From the **Data** properties page, you can:

- perform the following operations:
 - "Making a Report DataSet confidential", page 345.
 - "Refreshing Report DataSet data", page 345
 - "Hiding Report DataSet column display", page 346
 - "Restricting the display of Report DataSet rows (display only specified data)", page 346
 - "Exporting a Report DataSet", page 346
- launch an instant report

➡ See "Launching an instant report from a Report DataSet", page 367.

Creating a Report DataSet

To create a Report DataSet you must:

- define the Report DataSet Definition on which the Report DataSet will be based.

***MEGA** provides predefined Report DataSet Definitions for each product.*

Example: Application Technologies.

- (if necessary) enter the Report DataSet parameters.

E.g.: the applications concerned.

☛ This consists of defining report input data.

The parameters define the object groups and their relationship setting in the report. They vary according to the Report DataSet Definition. A parameter value can group several objects.

Creating a Report DataSet (Windows Front-End)

To create a Report DataSet (Windows Front-End):

1. Access Report DataSets.
☛ See "Accessing Report DataSets (Windows Front-End)", page 340.
2. In the list of Report DataSet definition folders , select a Report DataSet definition.
3. Right-click the relevant Report DataSet definition folder and select **New > Report DataSet**.
4. Enter the **Name** of your Report DataSet.
5. Click **OK**.
Your Report DataSet is created.
6. Access the Report DataSet properties and select the **Data** tab.
7. In the **Parameters** section, enter the required parameters.
8. In the **Report DataSet** section, click **Refresh**  .
The Report DataSet is populated with the selected data.

☛ See "Configuring and Using a Report DataSet", page 345.

Creating a Report DataSet (Web Front-End)

To create a Report DataSet (Web Front-End):

1. Access Report DataSets.
☛ See "Accessing Report DataSets from the EA Desktop (Web Front-End)", page 340.
2. In the **Navigation** edit area, click **New**  .
The Report DataSet creation window opens.
*☛ (EA desktop) In the **Navigation** edit area, expand the **Report DataSets** folder.*
The Report DataSets are classified in the associated Report DataSet definition folders.
*In the navigation tree, right-click the Report DataSet folder and select **New > Report DataSet**.*
3. Enter the **Name** of your Report DataSet.
4. (Optional) In the **Owner** field, select an owner.

5. (HOPEX Solution) In the **Report DataSet Definition** field, use the drop-down list to select the Report DataSet definition on which your Report DataSet will be based.
6. In the **Parameters** section, enter the required parameters.

Creation of Report DataSet

Name:

Report DataSet Definition: ▼ ▶

Parameters

Applications to extract:

+ New 🔗 Connect 📁 Reorganize 💬 Properties ☰

☐		Local name
☐		Demand Management
☐		EDI Provider
☐		CAD Viewer
☐		Customer Management
☐		Firewall

« < | Page of 1 | > » | ↺ | ⚙️ ▼ | Displayin

OK
Cancel

7. Click **OK**.
 Your Report DataSet is created and fed by the selected data.
 (HOPEX Solution) The report is accessible in the list of your Report DataSets.
🔗 See ["Accessing to Report DataSets in a HOPEX Solution \(Web Front-End\)"](#), page 339.
 (EA Desktop) The report is saved in the Report DataSet definition folder.
🔗 See ["Accessing Report DataSets from the EA Desktop \(Web Front-End\)"](#), page 340.
 To manage and customize your Report DataSet, see ["Configuring and Using a Report DataSet"](#), page 345.

Configuring and Using a Report DataSet

When the Report DataSet is created, go to the properties page to perform the following operations:

- "Making a Report DataSet confidential", page 345.
- "Refreshing Report DataSet data", page 345
- "Hiding Report DataSet column display", page 346
- "Restricting the display of Report DataSet rows (display only specified data)", page 346
- "Launching an instant report from a Report DataSet", page 367
- "Exporting a Report DataSet", page 346

Making a Report DataSet confidential

A Report DataSet is public by default. It is stored in **HOPEX** and shared with other users.

You can:

- make your Report DataSet confidential.
- define the persons who have access to your Report DataSet.

To make your Report DataSet confidential:

1. Access the Report DataSet properties.
 See *"Accessing the properties of a Report DataSet", page 340.*
2. In **HOPEX**:
 - Web Front-End: from the drop-down menu, select **Characteristics**.
 - Windows Front-End: select the **Characteristics** tab.
3. In the **Report DataSet Sharing** field, select 'Private' from the drop-down list.
4. (optional) Click **Connect**  and select the persons with whom you want to share the Report DataSet.
5. Click **Connect** (Web Front-End) / **Close**(Windows Front-End).
The Report DataSet is confidential and accessible to the persons you have selected.

Refreshing Report DataSet data

(Web Front-End) In your Report DataSet lists, the date and time of the last Report DataSet generation is specified as well as the time required for generation.

To refresh Report DataSet data:

1. Access the Report DataSet properties.
 See *"Accessing the properties of a Report DataSet", page 340.*
2. In **HOPEX**:
 - Web Front-End: from the drop-down menu, select **Data**.
 - Windows Front-End: select the **Data** tab.

The **Report DataSet** section specifies the date and time of the last Report DataSet generation, as well as the time required for generation.

3. In the **Report DataSet** section, click **Refresh** .

Hiding Report DataSet column display

To facilitate readability of the Report DataSet, you can hide the columns that you do not want to display. The hidden column data remains included in the Report DataSet.

Example: in a Report DataSet with "Application Technologies" Definition, you can hide the "Vendor" column.

To hide Report DataSet columns:

1. Access the Report DataSet properties.
 See *"Accessing the properties of a Report DataSet", page 340.*
2. In **HOPEX**:
 - Web Front-End: from the drop-down menu, select **Data**.
 - Windows Front-End: select the **Data** tab.
3. in the **Report DataSet** section, from a column title, select **Columns**, then clear all the column titles that you want to hide.
The cleared columns are hidden in the **Report DataSet**.

Restricting the display of Report DataSet rows (display only specified data)

To facilitate readability of the Report DataSet, you can hide the Report DataSet rows whose column cell values are not specified. The hidden row data remains included in the Report DataSet.

Example: in a Report DataSet with "Application Technologies" Definition, you can hide the rows of the applications whose "Vendor" is not specified.

To hide Report DataSet rows:

1. Access the Report DataSet properties.
 See *"Accessing the properties of a Report DataSet", page 340.*
2. In **HOPEX**:
 - Web Front-End: from the drop-down menu, select **Data**.
 - Windows Front-End: select the **Data** tab.
3. In the **Report DataSet** section, in the title of the column concerned (that which contains unspecified cells), click the arrow and select **Filters > Display specified values only**.
The rows that correspond to the unspecified values of the column concerned are automatically hidden in the **Report DataSet**.

Exporting a Report DataSet

You can export a Report DataSet in PDF or Excel format.

To export a Report DataSet:

1. Access the Report DataSet properties.
 See *"Accessing the properties of a Report DataSet", page 340.*

2. In **HOPEX**:
 - Web Front-End: from the drop-down menu, select **Data**.
 - Windows Front-End: select the **Data** tab.
3. In the **Report DataSet** section, click the export format (**PDF**  or **Excel** ).

MANAGING INSTANT REPORTS

You can generate instant reports, which give access to a more detailed analysis of a list of objects.

☛ *This is a standard feature for **HOPEX** Solutions. For other products, **HOPEX Productivity Pack** is required.*

Instant reports offer statistical graphic analysis of the data of analyzed objects. They offer a rapid view of trends, or easy comparison of objects according to certain characteristics.

See:

- ["Introduction to instant reports", page 348](#)
- ["Instant Report Types and Examples", page 351](#)
- ["Launching an Instant Report", page 364](#)
- ["Handling an Instant Report", page 383](#)
- ["Saving an instant report as a report", page 384](#)
- ["Sharing an instant report as a Widget", page 385](#)

Introduction to instant reports

When a list includes attributes enabling automatic report calculation, this functionality is proposed.

You can launch instant reports from:

- a list of objects
 - ☛ *See ["Launching an instant report from a List", page 365](#).*
- a Report DataSet
 - ☛ *See ["Launching an instant report from a Report DataSet", page 367](#).*

By default the report is launched on all of the objects in the list (no objects selected). To restrict the analysis to specific objects, select the objects concerned before launching the report.

You can:

- choose the characteristics of objects to be represented
 - ☛ *"Attributes Available in Instant Reports", page 349*
 - E.g. : the cost of objects.
- define the type of graph in which to display the data
 - E.g. : quantitative, table, time.
 - ☛ *See ["Instant Report Types and Examples", page 351](#).*
- (table type instant report from a Report DataSet), add filters to each input data item
 - ☛ *See ["Define and customize the data of a table-type instant report \(Report DataSet\)", page 370](#).*

You can save an instant report:

- in your reports
 - ☛ See *"Saving an instant report as a report", page 384.*
- as Widget
 - ☛ See *"Sharing an instant report as a Widget", page 385.*

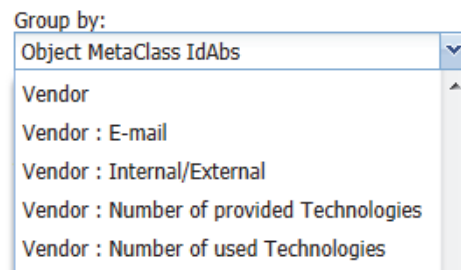
You can customize your instant report (Web Front-End):

- ☛ See *"Customizing your Reports (Web Front-End)", page 387.*

Grouping characteristics of objects concerned

Characteristics of grouping can relate not only to attributes of the elected object, but also to attributes of an object that is connected to it by a multiplicity = 1. The attributes of the connected object subject of regrouping are presented as follows : "Connected object: connected object attribute".

Example: the Supplier object appears in the list of characteristics of the Technology object, with the different attributes to which grouping can relate.



Attributes Available in Instant Reports

Object attributes taken into account in instant reports are:

- those that naturally enable grouping of objects
 - E.g.: tabulated value attributes (including booleans).
- those that position the object in time:
 - E.g.: to create a Gantt diagram: life cycle

Unless otherwise specified, these eligible attributes are proposed by default to constitute a new report.

Other attributes can constitute grouping criteria, but require a declaration at the level of their metamodel definition.

The **Instant Reports** attribute on MetaAttributes/_LegAttributes enables specification of attribute behavior related to reports:

- Graphable: the attribute participates in the instant reports mechanism
- Non Graphable: the attribute is excluded from the instant reports mechanism

The screenshot shows a software interface with four tabs: 'General', 'Characteristics', 'Data Access', and 'Texts'. The 'Characteristics' tab is active. It contains two sub-sections: 'Standard' and 'Advanced'. The 'Standard' section has a 'Name' field set to 'BackupContent'. The 'Advanced' section contains several fields: 'MetaAttribute Type' (set to 'VarChar'), 'MetaAttribute Length' (set to '4'), 'MetaAttribute Format' (set to 'Standard'), '_Sequence' (set to '0'), 'Is Indexable' (set to 'Yes'), '_GUIName' (empty), 'MOF Type' (empty), 'Index Ranking' (set to '10'), and 'Instant Reports' (set to '(None)'). A mouse cursor is hovering over the 'Instant Reports' dropdown menu, which is open and shows three options: '(None)', 'Graphable', and 'Not Graphable'. Below the 'Instant Reports' field is a checkbox labeled 'MetaAttributeValues' which is currently unchecked.

By default, tabulated value attributes and _legattributes are included in the mechanism.

This attribute is also available on links.

Instant Report Types and Examples

Depending on the objects selected, you can launch different types of instant reports:

- **from an object list:**
 - Matrix
 - ☛ See *"Matrix-type instant report from an object list", page 351.*
 - Quantitative: distribution of values (bar chart)
 - ☛ See *"Quantitative-type instant report from an object list", page 356.*
 - Breakdown: breakdown of objects related to values of a specific criterion
 - ☛ See *"Breakdown-type instant report", page 358.*
 - Multidimensional: two- or three-dimensional representation depending on the chosen criteria.
 - ☛ See *"Multidimensional-type instant report", page 362.*
 - Time: evolution of values in time
 - ☛ See *"Time report", page 364.*
- **from a Report DataSet :**
 - Matrix
 - ☛ See *"Matrix-type instant report from a Report DataSet", page 352.*
 - Quantitative: distribution of values (bar chart)
 - ☛ See *"Quantitative-type instant report from a Report DataSet", page 356.*
 - Breakdown: breakdown of objects related to values of a specific criterion
 - ☛ See *"Breakdown-type instant report", page 358.*
 - Multidimensional: two- or three-dimensional representation depending on the chosen criteria.
 - ☛ See *"Multidimensional-type instant report", page 362.*
 - Table
 - ☛ See *"Table-type instant report from a Report DataSet", page 360.*

Matrix-type instant report from an object list

From an object list, the user selects a link or query, the source of which is a MetaClass of objects of the list.

In the example below, a matrix indicates which org-units are responsible for selected applications.

- Source MetaClass: application
- Selected link: manager org-unit

	Eric Barbier	Ian Sharp	Yannick Martin	Emilio Palotti
(Uninitialized)				
(Uninitialized)				
(Uninitialized)				
Account	✓			
Account Management		✓		
Accounting Link				
App3				
App4				
App5				
Application source				

In the case of the link you can also choose to display a link attribute, for example the link creation date. The matrix then displays in the cells not a tick but the link creation date.

Matrix-type instant report from a Report DataSet

From a Report DataSet, all the Report DataSetcolumns are available to make up the rows and columns of the matrix.

For example, a Report DataSet with an "Application technologies" definition contains the following information for each application selected:

- "Rating"
- "Technologies" (the type of technology used)
- "Vendor"
- "Costs"
- "Number of users".

With this Report DataSet, you can make up the following matrices:

- Matrix 1: each cell presents the number of applications, ranked by "Vendor" and "Rating".
 - Line: "Rating"
 - Column: "Vendor"
 - Apply Computation On: "Application"
 - Compute: "Count"

Matrix

Line:

Rating

Column:

Vendor

Apply Computation On:

Application

Compute:

Count

Rating x Vendor

	[Empty]												
0 Star	29							6	3	2			
1 Star		1						2	1				
2 Stars								1	1				
3 Stars			2	2	1	2		9	6			1	4
4 Stars				2			1	4	3		1		2

- Matrix 2: each cell of the matrix presents the sum of costs of an application by technology type.
 - Line: "Application"
 - Column: "Technologies"
 - Apply Computation On: "Cost"
 - Compute: "Sum"

Matrix														
Line:	Application													
Column:	Technologies													
Apply Computation On:	Cost													
Compute:	Sum													
		Application x Technologies												
		[Empty]	.NET Framework 3.5	.NET Framework 3.5 SP1	.NET Framework 4.0	.NET Framework 4.5	Apache HTTP Server 2.2	Apache HTTP Server 2.4	ASP.NET 4.0	Cognos Business Intelligence 10.2	DB2 v9.7	Debian Squeeze	Debian Weezy	GIP .SSI
														Internet Explorer 9
														Internet information Services (IIS) 8
		Account		0.0							0.0			
		Account Management		24000.0										2
		Accounting Link		0.0										
		Advisor Client	0.0											

- Matrix 3: each cell of the matrix presents the "Rating" of an application by "Vendor".
 - Line: "Application"
 - Column: "Vendor"
 - Apply Computation On: "Rating"
 - Compute: "Maximum"

Matrix

Line:

Application

Column:

Vendor

Apply Computation On:

Rating

Compute:

Maximum

Application x Vendor

	[Empty]	 altirik	 Apache Software Foundation	 Debian	 HP	 IBM	 MEGA	 Microsoft	 Oracle	 Redhat	 Sage	 salesforce.com	 SAP
 Account						3		3					
 Account Management							4	4	4				4
 Accounting Link								3	3				
 Advisor Client	0												
 APPCO.com	0												
 Application SCM	0												
 Assembly Manager	0												
 Attendance Tracking	0												

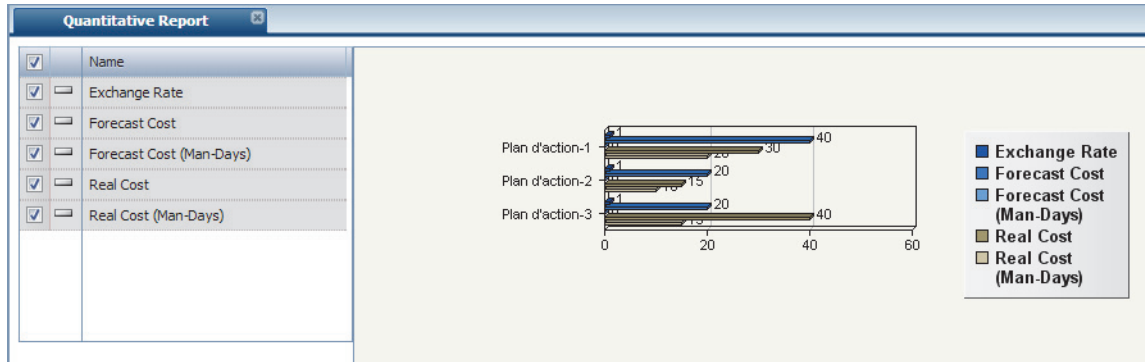
You can click in each specified cell of the table to display the rows of the Report DataSet that meet the criteria used in the rows and columns of the matrix.

Example: in the previous matrix 3 example, click in the "Account Management" Application cell of the "MEGA" vendor. You thus obtain other useful information such as its cost.

Matrix		List					
	PDF		Excel				
	Application	Rating	Technologies	Vendor	Cost	Number of users	
☐	Account Management	4 Stars	MEGA Modeling 2009 R7	MEGA	€24,000....	0	

Quantitative-type instant report from an object list

The quantitative report is based on one or more numerical attributes on which you can perform arithmetic operations. The quantitative report displays a bar chart.



Quantitative-type instant report from a Report DataSet

From a Report DataSet, all the columns of the Report DataSet are available to make up distributed data and to define the grouping criterion. The other columns are used to make up series of data displayed in the graphic.

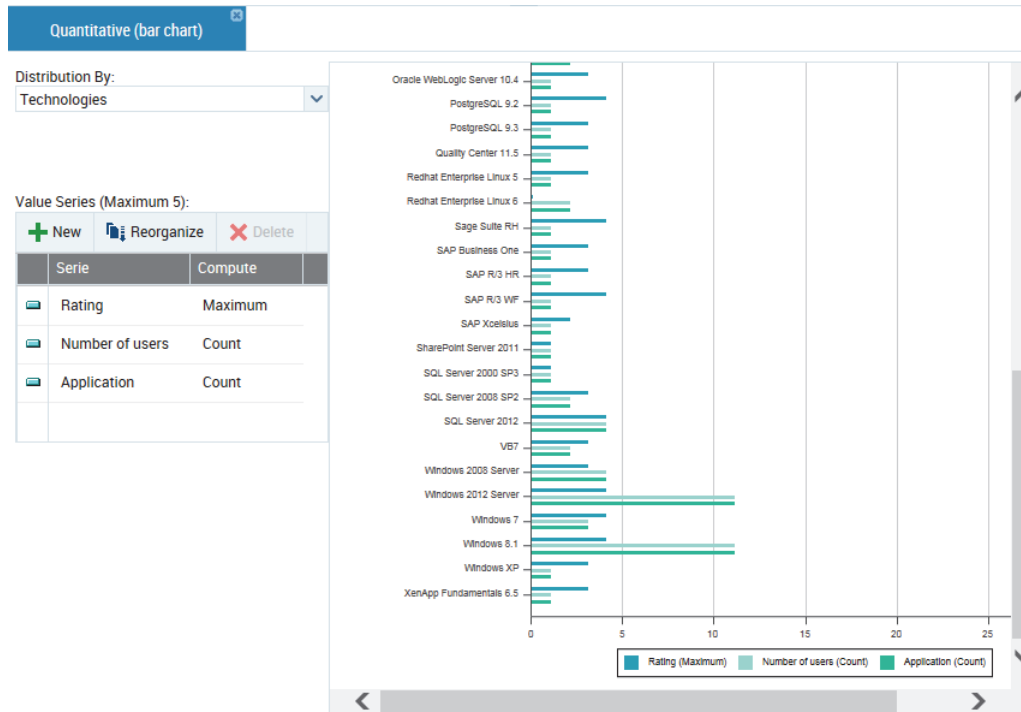
In the same graphic you can add a maximum of five data series. The bars are stacked one on top of each other.

For example, a Report DataSet with an "Application technologies" definition contains the following information for each application selected:

- "Rating"
- "Technologies" (the type of technology used)
- "Vendor"
- "Costs"
- "Number of users".

With this Report DataSet, you can for example aggregate the following bar charts distributed according to the "Technologies" parameter. The following information appears for each technology:

- its maximum rating (Series: "Rating", Compute: "Maximum")
- the number of people that use it (Series: "Number of users", Compute: "Count")
- the number of applications that use it (Series: "Application", Compute: "Count")



You can click in each series (bar) to obtain its complete corresponding characteristics:

Example: in the example for the "Windows 8.1" Technology, click the "Application number" series. You thus obtain other useful information such as its cost.

Quantitative (bar chart)		List				
PDF		Excel				
	Application	Rating	Technologies	Vendor	Cost	Number of users
☐	Account	3 Stars	Windows 8.1	Microsoft	€0.00	0
☐	Account Management	4 Stars	Windows 8.1	Microsoft	€24,000....	0
☐	Accounting Link	3 Stars	Windows 8.1	Microsoft	€0.00	0
☐	Customer Management	1 Star	Windows 8.1	Microsoft	€0.00	0
☐	e-Strategy	3 Stars	Windows 8.1	Microsoft	€11,000....	0
☐	Electronic Document Manage...	3 Stars	Windows 8.1	Microsoft	€0.00	0
☐	Equipment Purchase	0 Star	Windows 8.1	Microsoft	€0.00	0
☐	Logistic management	2 Stars	Windows 8.1	Microsoft	€0.00	0
☐	Manufacturing Management	3 Stars	Windows 8.1	Microsoft	€0.00	0
☐	MS Excel	0 Star	Windows 8.1	Microsoft	€0.00	0
☐	Purchasing System	4 Stars	Windows 8.1	Microsoft	€0.00	0

Breakdown-type instant report

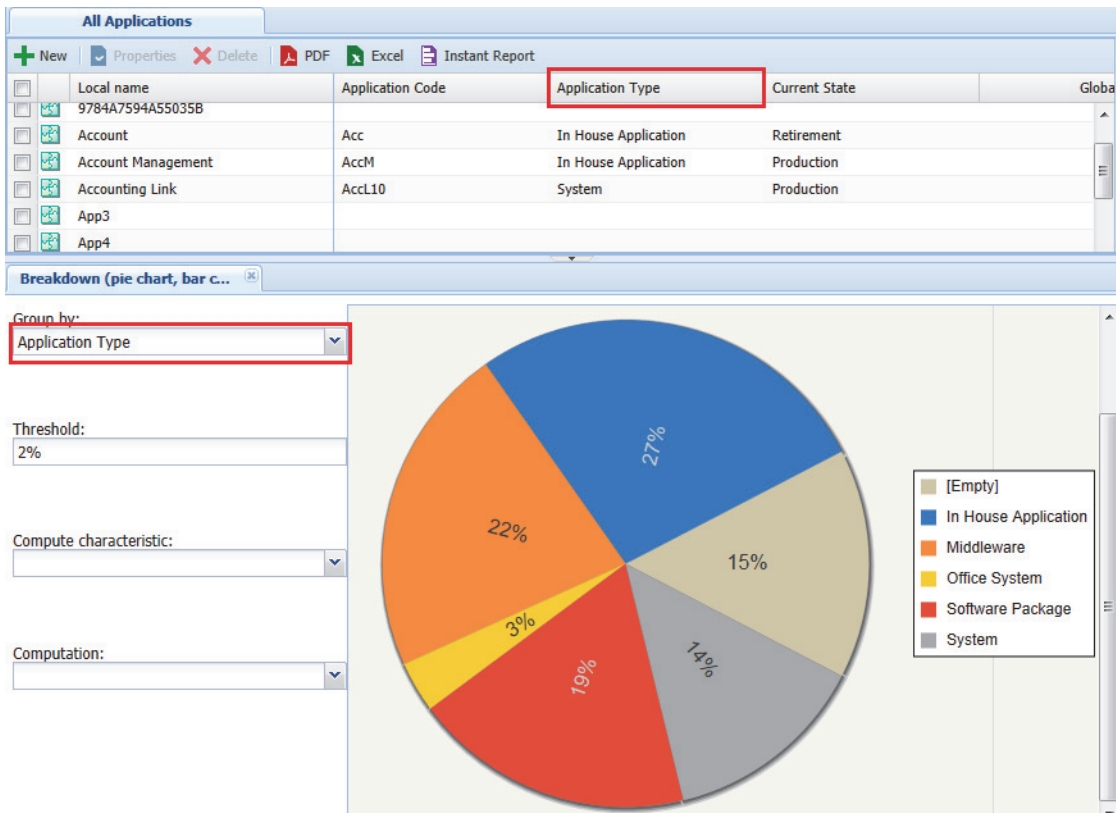
The breakdown report is based on a qualitative criterion to present the breakdown of objects of the list related to this criterion. Presentation can be as a Pie Chart or a Bar Chart.

A qualitative criterion can be of different types, for example:

- a character string (code)
- a number
- a percentage
- a tabulated value attribute
- a boolean

In the example below, a pie chart displays breakdown of selected applications by type.

The selected grouping characteristic is "application type".

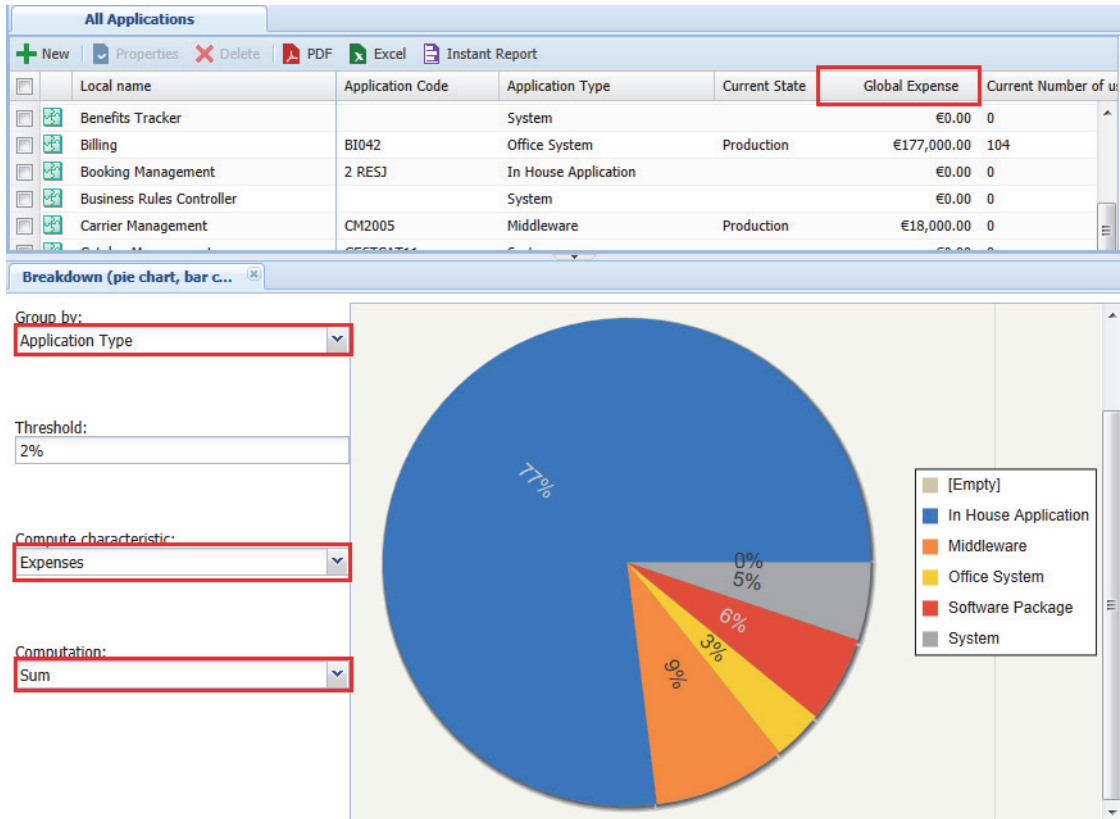


Calculations from a grouping criterion

In the context of a breakdown report, when analyzed objects also include numerical value characteristics, you can associate these values with the grouping criterion and simple calculations carried out. The most common calculations are proposed (sum, average, maximum and minimum values).

In the example below, the pie chart indicates how application costs are broken down according to their type.

- Grouping characteristic: application type
- Calculation characteristic: expenses
- Selected calculation: sum



From this graphic you can generate a new instant report.

Table-type instant report from a Report DataSet

From a Report DataSet, all the Report DataSet columns are available to make up the rows and columns of the table.

For example, a Report DataSet with an "Application technologies" definition contains the following information for each application selected:

- "Rating"
- "Technologies" (the type of technology used)
- "Vendor"
- "Costs"
- "Number of users".

It contains as many rows as objects and as many columns as object characteristics.

The report obtained presents this information in table format that you can customize (e.g.: sorting on columns, grouping, addition of breaks).

➡ see *"Define and customize the data of a table-type instant report (Report DataSet)"*, page 370.

+ Configuration

— Report

Refresh

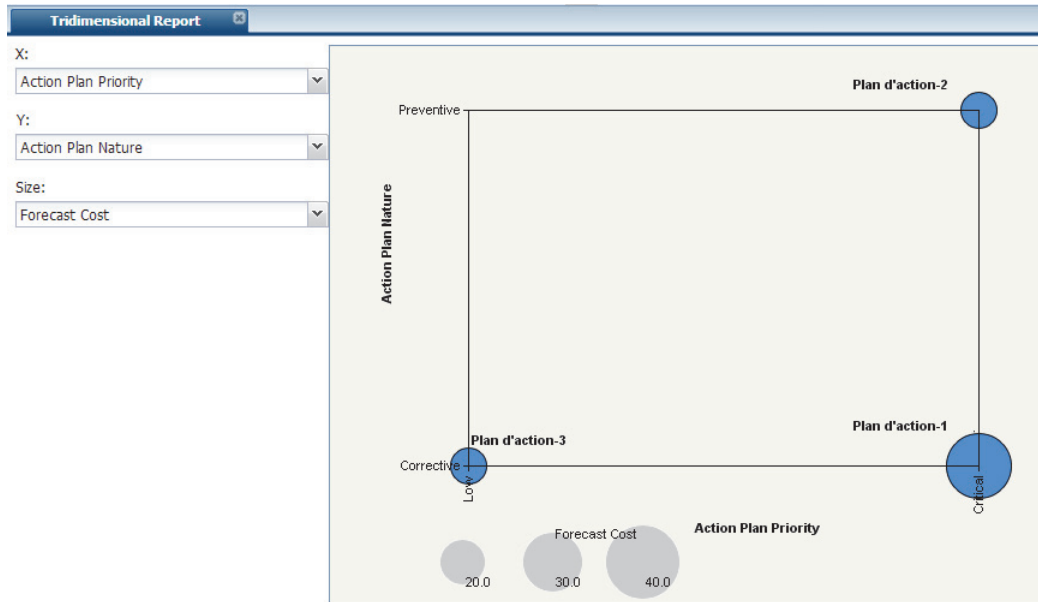


Application	Rating	Technologies	Vendor	Number of users	Cost
RG - Application Report Generator	★ 0 Etoile			0	0,00 €
RLM - Oracle Release Management	★ 0 Etoile			0	0,00 €
Recherche du client	★ 3 Etoiles	.NET Framework 4.5	Microsoft	0	0,00 €
Recherche du client	★ 3 Etoiles	SQL Server 2000 SP2	Microsoft	0	0,00 €
Recherche du client	★ 3 Etoiles	Windows XP	Microsoft	0	0,00 €
Recherche du client	★ 3 Etoiles	Windows 2008 Server	Microsoft	0	0,00 €
Recherche du client	★ 3 Etoiles	Office 2013	Microsoft	0	0,00 €
Relationship Selling	★ 0 Etoile	.NET Framework 4.5	Microsoft	0	0,00 €
Relationship Selling	★ 0 Etoile	SQL Server 2000 SP3	Microsoft	0	0,00 €
Relationship Selling	★ 0 Etoile	Windows Vista	Microsoft	0	0,00 €
Relationship Selling	★ 0 Etoile	Windows 2008 Server	Microsoft	0	0,00 €
Relationship Selling	★ 0 Etoile	Office 2013	Microsoft	0	0,00 €
Risk Management	★ 5 Etoiles	Internet Explorer 7	Microsoft	0	24 000,00 €
Risk Management	★ 5 Etoiles	.NET Framework 4.5	Microsoft	0	24 000,00 €

Multidimensional–type instant report

Bubble chart

The tridimensional report relates to a choice of any three criteria displayed in a BubbleChart. You position criteria in X, Y, and Size.



When you choose only two criteria, the number of objects determines bubble size. Each bubble represents a set of objects that can in turn be the source of the report.

When an attribute (numerical) is selected to determine bubble size, each bubble represents a distinct occurrence.

☛ The tridimensional report is only available if objects have at least two attributes.

Heat Map

The use of two qualitative criteria enables proposal of heat map charts.

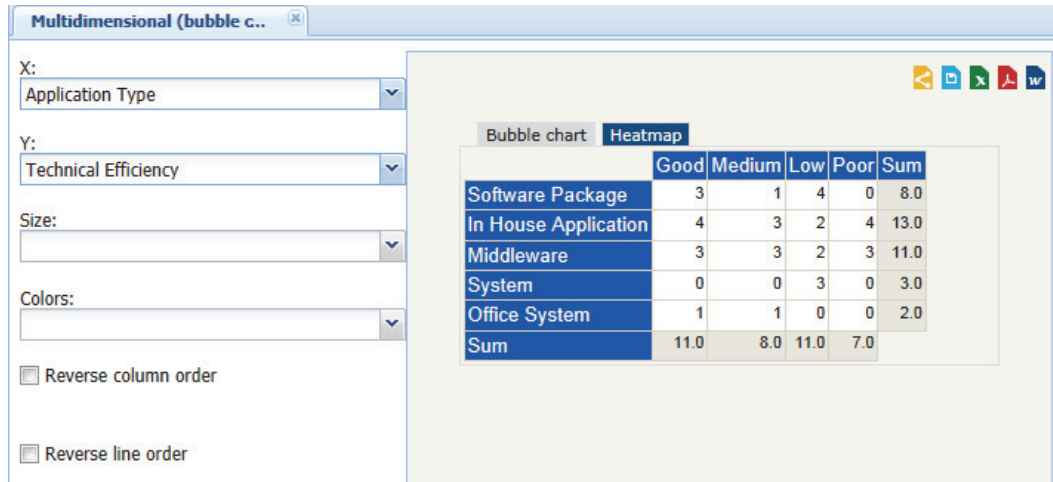
☛ This type of chart is only available with discrete values (Enumeration type MetaAttributes)

☛ You must select X-axis and Y-axis values to make the Heat map tab appear.

A heat map presents effectiveness (Good, Average, etc.) of a list of applications according to their type (office system, system, etc.).

The order in which attribute values are presented depends on two check boxes:

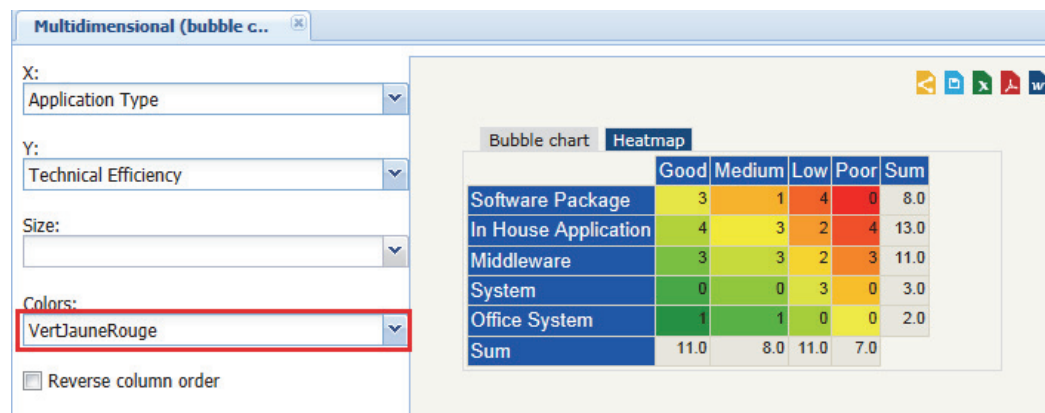
- Column Order
- Line Order



You can configure colors to clearly indicate lowest scoring applications (in red for example).

By default, the colors displayed in the heat map are calculated as shading between three colors. Default colors are:

- Green
- Yellow
- Red



This chart enables launch of a new instant report.

Time report

Objects are used to constitute a Gantt chart. The time report is only available if all objects have a life cycle.

This chart does not enable launch of a new instant report.

Launching an Instant Report

You can launch a report:

- from a list of objects

☛ See *"Launching an instant report from a List", page 365*.

E.g. : a list available in a tile on your home page, in a search result, or in the result of an analysis report when the latter allows this.

☛ To add a tile to you home page, see *"Customizing the home page of your desktop", page 40*

- from a Report DataSet

☛ See *"Launching an instant report from a Report DataSet", page 367*.

Launching an instant report from a List

To launch an instant report:

1. Display the relevant object list.

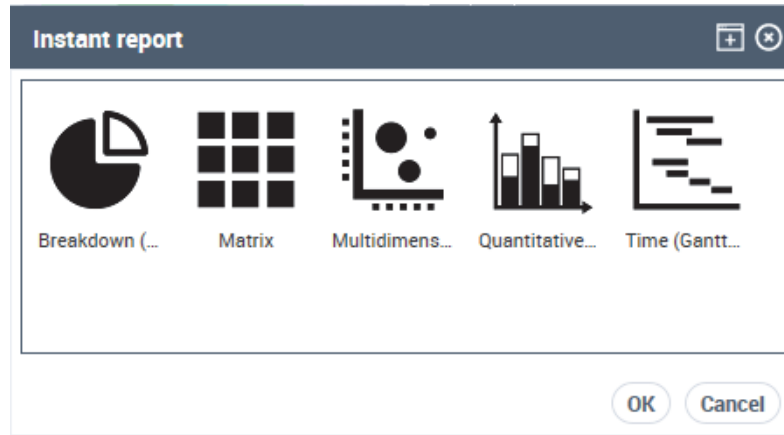
E.g. : in your home page, from the **All technologies** tile, display the list of all technologies.

All Technologies			
New Properties Delete Create Objects Life Workflow			
☐	Local name ↑	Technology Code	Company Standard
☐	 Internet Explorer 8	IE8	 Prohibited
☐	 Internet Explorer 9	IE9	 Accepted
☐	 Internet information Services (IIS) 6		 Prohibited
☐	 Internet information Services (IIS) 7		 Expected
☐	 Internet information Services (IIS) 8		 Expected
☐	 Java SE 6	Mustang	 Accepted
☐	 Java SE 7	Dolphin	 Expected
☐	 Linux		 Unknown

2. (optional) By default the instant report is launched on all the objects included in the list. Select the objects concerned to restrict the instant report to the selected objects.

3. Click **Instant Report** .

☛ If the button is hidden, click  to access it.



4. Select the required instant report.
You can create different types of instant reports: matrix, multidimensional, quantitative (bar chart), as well as breakdown-type instant reports in the form of a pie chart or bar chart and time-type instant reports.

☛ See *"Instant Report Types and Examples"*, page 351.

Example: breakdown (pie chart, bar chart)

5. Click **OK**.

The instant report is displayed in the **View** edit area.

6. Depending on the type of instant report selected, you can enter the parameter information for the instant report.

For example, for an instant report:

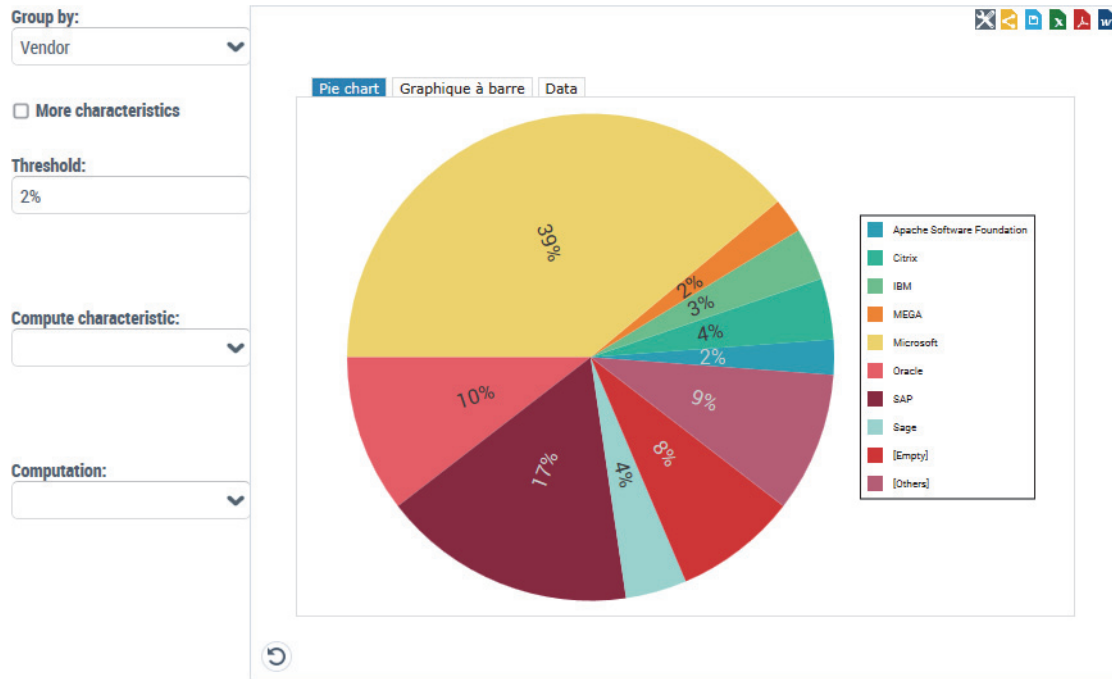
- of breakdown type, in the **Group by** field, you can select a grouping characteristic from the list of attributes offered.
- of quantitative type (bar chart), you can select information to be taken into account in the graphic display.

Objects are automatically displayed according to the selected grouping.

☛ To customize your report (Web Front-End), see *"Customizing your Reports (Web Front-End)"*, page 387.

Example: "Provider".

For all selected technologies, you get their breakdown according to their Vendor.



Launching an instant report from a Report DataSet

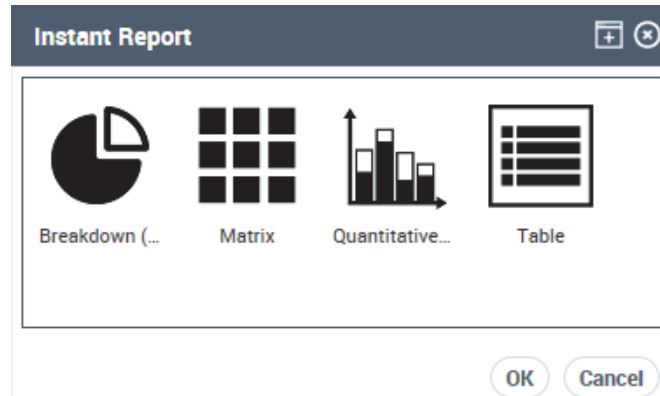
To generate an instant report from the Report DataSet :

1. Access the Report DataSet properties.
See *"Accessing the properties of a Report DataSet"*, page 340.
2. In **HOPEX**:
 - Web Front-End: from the drop-down menu, select **Data**.
 - Windows Front-End: select the **Data** tab.
3. (If necessary) In the **Parameters** section, click **Connect** and select the input parameters.
E.g.: with a Report DataSet that has the "Application Technologies" definition, you can add applications.
4. In the **Report DataSet** section, click **Refresh** .
5. In the **Report DataSet** section, click **Instant Report** .

6. Select the required instant report.
You can create different types of instant reports; matrix, quantitative (bar chart), breakdown-type instant reports in the form of a pie chart or bar chart or table-type instant reports.

➤ See *"Instant Report Types and Examples"*, page 351.

Example: Table



7. Click **OK**.

The instant report is displayed in the **View** edit area, **Report** section.
It contains as many rows as objects and as many columns as object characteristics.

+ Configuration					
— Report					
Refresh					
					
Application	Rating	Technologies	Vendor	Number of users	Cost
 RG - Application Report Generator	★ 0 Etoile			0	0,00 €
 RLM - Oracle Release Management	★ 0 Etoile			0	0,00 €
 Recherche du client	★ 3 Etoiles	 .NET Framework 4.5	 Microsoft	0	0,00 €
 Recherche du client	★ 3 Etoiles	 SQL Server 2000 SP2	 Microsoft	0	0,00 €
 Recherche du client	★ 3 Etoiles	 Windows XP	 Microsoft	0	0,00 €
 Recherche du client	★ 3 Etoiles	 Windows 2008 Server	 Microsoft	0	0,00 €
 Recherche du client	★ 3 Etoiles	 Office 2013	 Microsoft	0	0,00 €
 Relationship Selling	★ 0 Etoile	 .NET Framework 4.5	 Microsoft	0	0,00 €
 Relationship Selling	★ 0 Etoile	 SQL Server 2000 SP3	 Microsoft	0	0,00 €
 Relationship Selling	★ 0 Etoile	 Windows Vista	 Microsoft	0	0,00 €
 Relationship Selling	★ 0 Etoile	 Windows 2008 Server	 Microsoft	0	0,00 €
 Relationship Selling	★ 0 Etoile	 Office 2013	 Microsoft	0	0,00 €
 Risk Management	★ 5 Etoiles	 Internet Explorer 7	 Microsoft	0	24 000,00 €
 Risk Management	★ 5 Etoiles	 .NET Framework 4.5	 Microsoft	0	24 000,00 €

8. (Optional) You can customize the table to obtain a more precise description of the result and facilitate the analysis. For this, in the **Configuration** section, add one or as many filters as necessary to the input characteristics of the report.

➡ See *"Define and customize the data of a table-type instant report (Report DataSet)"*, page 370.

Define and customize the data of a table-type instant report (Report DataSet)

To obtain a more detailed description, improve the table and facilitate its analysis, in the **Configuration** section you can:

- define the input characteristics of the report, that is, the table columns (**Configuration** tab),
- add filters to the data values, that is, the cells of the table columns (**Filters** tab).

You can add as many configurations as necessary to the input characteristics of the report and their values.

☛ See *"Defining the columns in a table-type instant report"*, page 370.

You can add filters to the table columns and cells.

☛ See *"Adding a filter to the columns and to the column data values in a table-type instant"*, page 372.

☛ See *"Adding a filter to the columns and to the column data values (with initial values) in a table-type instant report"*, page 373.

See:

- *"Defining the columns in a table-type instant report"*, page 370
- *"Adding a filter to the columns and to the column data values in a table-type instant"*, page 372
- *"Adding a filter to the columns and to the column data values (with initial values) in a table-type instant report"*, page 373
- *"Example 1: column configuration with break"*, page 376
- *"Example 2: column definition (display, order) and value computation"*, page 378
- *"Example 3: filters on the table columns"*, page 380
- *"Example 4: filter on the table columns and cells (initial values)"*, page 382

Defining the columns in a table-type instant report

☛ See the examples: *"Example 1: column configuration with break"*, page 376 and *"Example 2: column definition (display, order) and value computation"*, page 378.

☛ You can also add filters to the cells of the table, see *"Adding a filter to the columns and to the column data values in a table-type instant"*, page 372.

By default, the instant report includes all of the Report DataSet columns. You can modify its content and define the table columns and their position.

You can:

- display / hide one or more columns:
- modify the display order of columns (by drag-and-drop).
- sort columns by ascending or descending order:
 - You can also define as many sorts as columns.
 - For each sort defined, you can define its priority, that is define as many sort priorities as column sorts
- define a characteristic for grouping the rows
- add breaks to the table

☛ See *"Example 2: column definition (display, order) and value computation", page 378.*

- add information to the break:
 - define the column considered by the information
 - define the information calculation
 - define a calculation performed on cell values

☛ See *"Example 1: column configuration with break", page 376.*

To define the columns in a table-type instant report:

1. Launch the instant report on the Report DataSet.
 - The instant report is displayed in the **View** edit area, **Report** section. It contains as many rows as objects and as many columns as object characteristics.
 - In the **View** edit area, the **Configuration** section, **Configuration** tab, presents all the possible columns of the table. It contains as many columns as object types and object characteristics.

☛ See *"Launching an instant report from a Report DataSet", page 367.*

☛ You can add as many sorting characteristics as possible columns.

2. To hide the display of a column in the table, in the column title, click .

☛ To reintegrate a hidden column, click **Add field** and select the column concerned.

Example 2: using a Report DataSet with an "Application Technologies" definition, delete the "Rating", type of "Technologies" used and the "Number of users" columns.

3. (if needed) Modify the display order of columns with a drag-and-drop.

Example 2: drag-and-drop the "Application" column after the "Vendor" column.

4. In the column, in the **Sort** field, select **Asc** or **Desc** to sort the table data according to this characteristic, ascending or descending.

Example 1: from a Report DataSet with an "Application Technologies" definition, on the "Rating" column, select

"Desc" to sort the applications by rating level, from the best noted to the worst noted.

Example 2: from a Report DataSet with an "Application Technologies" definition, on the "Vendor" column, select "Desc" to sort the vendors in alphabetical order.

The **Priority** field appears with the value "1".

 If you already have configured a column you can select the column priority. By default, the last column created takes the last order of priority.

5. (if needed) In the **Priority** field, modify the column priority.
6. Select **Group by** to group the table rows according to the column considered.

Example 1: from a Report DataSet with an "Application Technologies" definition, on "Rating", select **Group by** to group the applications according to their rating level.

Example 2: from a Report DataSet with an "Application Technologies" definition, on "Vendor", select **Group by** to group the applications according to their Vendor.

7. (optional) In the **Value computation** field, select the computation value to perform on the column cells in the column.

Example 2: from a Report DataSet with an "Application Technologies" definition, on "application", in the Value computation field, select "Count" to display the number of applications by "Vendor" and on "Cost", in the Value computation field, select "Sum" to display the sum of costs per "Vendor".

8. (optional) Add a break in the table to highlight the defined group.
9. (optional) Add information to a break:

Example 1: from a Report DataSet with an "Application Technologies" definition, on "Rating", at the break, select the values **Column**: "Technologies" and **Operation**: "Count" to display on the break the number of technologies contained in the defined grouping.

 To add additional information to the break, click **Add field** and specify the fields.

 To delete information from a break, click .

10. In the **Report** section, click **Refresh**.
The report display takes the configuration applied into account.

 You can configure several elements.

Adding a filter to the columns and to the column data values in a table-type instant

 See the example: ["Example 3: filters on the table columns", page 380.](#)

Filters are specific to the data type.

For example, the following filtering operators are available for a column whose cells are:

- numerical values: equals, inferior, superior or shows a value.
- character strings: contains, starts with, ends with, contains a value
- Objects or multivalued attributes: choice of one or more objects (single or multiple choice), contains values

☛ See *"Example 3: filters on the table columns", page 380* and *"Example 4: filter on the table columns and cells (initial values)", page 382*.

You can define as many filters as columns (characteristics) to the table.

☛ You can also add a filter to the data values with initial values, see *"Adding a filter to the columns and to the column data values (with initial values) in a table-type instant report", page 373*.

To add a filter to the column cells in a table-type instant report:

1. Launch the instant report on the Report DataSet.
 - The instant report is displayed in the **View** edit area, **Report** section. It contains as many rows as objects and as many columns as object characteristics.
 - In the **View** edit area, **Configuration** section, the **Filters** tab is used to add a customized filter on each of the cells in the table.

☛ See *"Launching an instant report from a Report DataSet", page 367*.

2. Click **+** to add a filter.
The list of columns appears.
3. Select the column to which you want to add a filter.

Example 3: from a Report DataSet with an "Application Technologies" definition, select "Vendor".

4. Click **+** and select the filtering operator.
The filtering operator depends on the type of data.

from a Report DataSet with an "Application Technologies" definition, for the "Vendor" characteristic select "Multiple choice".

5. Click **+** to add a filter to another column.

Example 3: from a Report DataSet with an "Application Technologies" definition, select "Cost". Repeat for "Application".

The number of filters defined on the cells is specified in the **Filters** tab title.

Adding a filter to the columns and to the column data values (with initial values) in a table-type instant report

☛ See the example *"Example 4: filter on the table columns and cells (initial values)", page 382*.

You can define as many filters as columns to the table.

☛ You can also configure the columns of the table, see *"Defining the columns in a table-type instant report", page 370*.

To add a filter to the column cells in a table-type instant report:

1. Launch the instant report on the Report DataSet.
 - The instant report is displayed in the **View** edit area, **Report** section. It contains as many rows as objects and as many columns as object characteristics.
 - In the **View** edit area, **Configuration** section, the **Filters** tab is used to add a customized filter on each of the cells in the table.

☞ See *"Launching an instant report from a Report DataSet"*, page 367.

2. Click **+** to add a filter.
The list of characteristics (columns) appears.
3. Select the characteristic (column) to which you want to add a filter.

Example 4: from a Report DataSet with an "Application Technologies" definition, select "Vendor".

4. Click **+** and select the filtering operator.
The filtering operator depends on the type of data.

Example 4: from a Report DataSet with an "Application Technologies" definition, for the "Vendor" characteristic select "Multiple choice" then in the "Multiple choice" field select the "Microsoft" and "Oracle" values.

5. Click **+** to add a filter to another characteristic

Example 4: from a Report DataSet with an "Application Technologies" definition, select "Cost". Then select the "Higher" operator and in the "Higher" field enter "50000".

The number of filters defined on the cells is specified in the **Filters** tab title.

Example of column definition on a table

For example, in the instant report obtained from a Report DataSet with an "Application technologies" definition you can define the columns:

- "Application"
- "Rating"
- "Technologies" (the type of technology used)
- "Vendor"
- "Number of users"
- "Costs"

Application Sort None ☐ Group by Value Computation None	Rating Sort None ☐ Group by Value Computation None	Technologies Sort None ☐ Group by Value Computation None
Vendor Sort None ☐ Group by Value Computation Count	Number of users Sort None ☐ Group by Value Computation None	Cost Sort None ☐ Group by Value Computation Sum

Example 1: column configuration with break

For example, in an instant report generated from a Report DataSet with an "Application technologies" definition you can:

- classify the applications by descending level of rating
- perform a grouping and define an operation at a value break on this grouping criteria
- at the level of the break indicate the number of Technologies included in this rating level.

Rating 

Sort
Desc 

Priority
1 

☒ Group by

Value Computation
None 

At break

Column
Technologies 

Operation
Count 



+ Add field

 To configure this filter, see *"Defining the columns in a table-type instant report"*, page 370

This report result presents the applications sorted by descending level of rating. At each change of level a break indicates the number of Technologies included in this rating level.

Report

Refresh

Application	Rating	Technologies	Vendor	Number of users	Cost
SAP CRM Europe	★ 5 Etoiles	SAP Business Objects 4.1	SAP	22	1 370 000,00 €
SAP CRM Europe		SAP NetWeaver	SAP	22	1 370 000,00 €
SAP CRM Europe		PostgreSQL 9.3	PostgreSQL	22	1 370 000,00 €
SAP CRM Europe		Debian Squeeze	Debian	22	1 370 000,00 €
SAP CRM Europe		Office 2013	Microsoft	22	1 370 000,00 €
		5			
SAP Italy	★ 4 Etoiles	Windows 8.1	Microsoft	0	500 000,00 €
SAP Italy		Oracle 11gR2	Oracle	0	500 000,00 €
SAP Italy		SAP ERP PLM	SAP	0	500 000,00 €
SAP Italy		SAP ERP SCM	SAP	0	500 000,00 €
SAP Italy		SAP Business All-in-One	SAP	0	500 000,00 €
SAP Italy		SAP R/3 QM	SAP	0	500 000,00 €
SAP Italy		SAP R/3 SD	SAP	0	500 000,00 €
SAP Italy		SAP R/3 PM	SAP	0	500 000,00 €
SAP Italy		SAP R/3 PP	SAP	0	500 000,00 €
SAP Italy		SAP R/3 PS	SAP	0	500 000,00 €
SAP Italy		SAP R/3 WF	SAP	0	500 000,00 €
SAP Italy		SAP NetWeaver	SAP	0	500 000,00 €
SAP Italy		.NET Framework 3.5 SP1	Microsoft	0	500 000,00 €
SAP Italy		Windows 2012 Server	Microsoft	0	500 000,00 €
		14			
Recherche du client	★ 3 Etoiles	.NET Framework 4.5	Microsoft	0	0,00 €
Recherche du client		SQL Server 2000 SP2	Microsoft	0	0,00 €

Example 2: column definition (display, order) and value computation

For example, in an instant report generated from a Report DataSet with an "Application technologies" definition you can:

- hide the columns:
 - "Rating"
 - "Technologies" (the type of technology used)
 - "Number of users".
- modify the display order of columns
 - column 1: "Vendor"
 - column 2: "Application"
 - column 3: "Costs"
- sort in increasing order and group the rows of the table by "Vendor"
- instead of displaying all the "Applications" by "Vendor", display their number
- display the sum of the "Costs" by "Vendor"

The screenshot displays the configuration interface for a report with three columns: Application, Vendor, and Cost. Each column has a configuration panel with the following options:

- Application Column:**
 - Sort: Asc (dropdown)
 - Priority: 1 (dropdown)
 - Group by: ☐ (checkbox)
 - Value Computation: None (dropdown)
 - At break: + Add field (button)
- Vendor Column:**
 - Sort: None (dropdown)
 - Group by: ☐ (checkbox)
 - Value Computation: Count (dropdown)
- Cost Column:**
 - Sort: None (dropdown)
 - Group by: ☐ (checkbox)
 - Value Computation: Sum (dropdown)

To the right of these panels is a large box with a blue plus sign and the text "Add field".

👉 To configure this filter, see *"Defining the columns in a table-type instant report"*, page 370

The report result presents the Vendors sorted in alphabetical order and for each vendor specifies the number of applications and their total cost

Vendor	Application	Cost
	53	0,00 €
 Apache	3	48 000,00 €
 Citrix	2	0,00 €
 Debian	7	1 811 000,00 €
 HP	1	36 000,00 €
 IBM	2	11 000,00 €
 MEGA	2	48 000,00 €
 Microsoft	43	3 120 050,00 €
 Oracle	21	1 297 050,00 €
 PostgreSQL	3	1 370 000,00 €
 Redhat	4	0,00 €
 Sage	3	282 000,00 €
 salesforce.com	1	36 000,00 €
 SAP	9	2 440 050,00 €
 vmware	2	30 000,00 €

Example 3: filters on the table columns

For example, in an instant report generated from a Report DataSet that has an "Application Technologies" definition, you can filter the table data with the following three filters on the cells:

- applications
- vendors
- costs

Configuration

Filters 3

Reset all filters

Vendor	Multiple Choice Initial Value No value selected +
Cost	+
Application	+
+	

The three filters are available in the report result: Application Vendor Cost .

Click + to enlarge each filter and filled it. The report result is automatically updated as soon as a filter is filled.

For example, you can display:

- the applications that contain "management" in their name,
- for the "Microsoft" vendor " (selected in the multiple-choice list),
- and whose costs are greater than €50,000.

Application

Contains

management

Begins with

Ends with

Consider all Values

Vendor

Microsoft

Consider all Values

Cost

Less than

Greater than

50000

Equal to

Consider all Values

Application	Rating	Technologies	Vendor	Cost	Number of users
Booking Management	★ 0 Star	ASP.NET 4.0	Microsoft	€180,000.00	0
Booking Management	★ 0 Star	Windows 8.1	Microsoft	€180,000.00	0
Booking Management	★ 0 Star	Internet information Services (IIS) 8	Microsoft	€180,000.00	0
Booking Management	★ 0 Star	.NET Framework 4.0	Microsoft	€180,000.00	0
Booking Management	★ 0 Star	Internet Explorer 9	Microsoft	€180,000.00	0
Booking Management	★ 0 Star	.NET Framework 3.5 SP1	Microsoft	€180,000.00	0
Booking Management	★ 0 Star	Windows 2012 Server	Microsoft	€180,000.00	0

➡ To configure this filter, see ["Adding a filter to the columns and to the column data values in a table-type instant"](#), page 372

Example 4: filter on the table columns and cells (initial values)

For example, in an instant report generated from a Report DataSet that has an "Application Technologies" definition, you can filter the table data with the following three filters on the cells:

- display only the applications that contain the word "management"
- display only the "Microsoft" and "Oracle" vendors
- display costs greater than €50,000

Configuration

Filters 3

Reset all filters

Vendor

Multiple Choice

InitialValue
Microsoft, Oracle

+

Cost

Superior

InitialValue
50000

+

Application

Contains

InitialValue
management

+

The report result filters the applications that contain "management" in their name, whose "Vendors" are "Microsoft" and "Oracle", and whose costs are greater than €50,000.

Application

Vendor

Cost

Application	Rating	Technologies	Vendor	Number of users	Cost
Booking Management	★ 0 Star	ASP.NET 4.0	Microsoft	0	€180,000.00
Booking Management	★ 0 Star	Windows 8.1	Microsoft	0	€180,000.00
Booking Management	★ 0 Star	Internet information Services (IIS) 8	Microsoft	0	€180,000.00
Booking Management	★ 0 Star	Oracle 11gR2	Oracle	0	€180,000.00
Booking Management	★ 0 Star	.NET Framework 4.0	Microsoft	0	€180,000.00
Booking Management	★ 0 Star	Internet Explorer 9	Microsoft	0	€180,000.00
Booking Management	★ 0 Star	.NET Framework 3.5 SP1	Microsoft	0	€180,000.00
Booking Management	★ 0 Star	Windows 2012 Server	Microsoft	0	€180,000.00

➡ To configure this filter, see "Adding a filter to the columns and to the column data values (with initial values) in a table-type instant report", page 373

Handling an Instant Report

You can:

- ["Updating an instant report", page 383](#)
- ["Obtaining the list of objects in a data series", page 383](#)
- ["Hiding a data series", page 383](#)
- ["Define and customize the data of a table-type instant report \(Report DataSet\)", page 370](#)

Updating an instant report

A message (at the top of the report) specifies the date of the last generation of the instant report as well the time required for generation. If the data contained in the list of objects changes, you must refresh the instant report to take these changes into account.

When the instant report is updated, the generation date message for the instant report is not displayed.

To update an instant report:

1. Access the instant report.
 See ["Launching an Instant Report", page 364](#).
2. Click the refresh button  beside the generation date information of the instant report.

Obtaining the list of objects in a data series

To get the list of objects making up part of the chart:

1. Access the instant report.
 See ["Launching an Instant Report", page 364](#).
2. Click the chart part concerned.
The list of objects contained in this part appears in a new **List** tab.
In the list, you can click:
 - **Properties** , to view the properties of an element in the series.
 - **PDF**  or **Excel** , to export the elements of the series in .pdf or .xls format.
 - **Instant Report** , to generate an instant report for the series.
 See ["Launching an Instant Report", page 364](#).

Hiding a data series

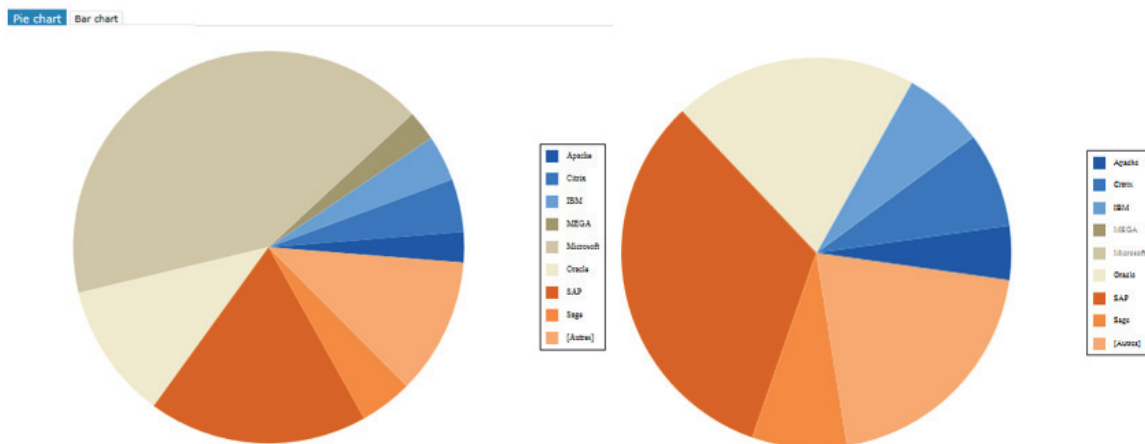
For improved visibility, you can hide data series in the report graphic.

 This feature is available with **HOPEX** (Web Front-End) only.

To show/hide a data series:

1. Access the instant report.
 See ["Launching an Instant Report", page 364](#).

2. In the report key, click the data series in question. In the key, the series name is grayed.
The series is not display anymore in the chart.
 *You can mask several series.*
3. In the key, click the series again to reintegrate it in the report.



Saving an instant report as a report

You can save an instant report as a report to:

- access the report at any time
 See *"Accessing Reports (Web Front-End)"*, page 330.
- customize the report display (e.g.: display of values, caption format, titles).
 See *"Customizing your Reports (Web Front-End)"*, page 387.

When an instant report is generated from:

- a list, you can customize the report information when you save the instant report as a report
- a Report DataSet, you can filter and customize the instant report before saving it as a report.

 See *"Define and customize the data of a table-type instant report (Report DataSet)"*, page 370.

Saving an instant report generated from a list

To save an instant report generated from a list:

1. Launch your instant report.
 See *"Launching an instant report from a List"*, page 365.
2. In the report result page, click **Save as Report** .
The report creation dialog box appears. It indicates the report description.
3. In the **Create Report** page, enter the report **Name**.

4. Click **Next**.
The **Parameters** window contains the sections:
 - **Parameters** which contains parameters already specified, as well as additional formatting parameters.
 - **Presentation** which contains customization parameters for the report display
5. (Optional) In the **Parameters** page, specify the input parameters of the report.
6. Click **Next**.
The **Report chapters** window displays the report chapters that you can modify.
7. (Optional) In the **Report Chapters** window, select **Open Automatically** to expand the chapter automatically when it opens or when the report is refreshed.
 - ☛ By default, the chapters are folded.
8. Click **OK**.
The report is saved in your reports.
 - ☛ See ["Accessing your Reports in a HOPEX \(Web Front-End\) Solution."](#), page 331.
 - ☛ From here you can now open the report and modify its name and properties.

Saving an instant report generated from a Report DataSet

To save an instant report generated from a Report DataSet:

1. Launch your instant report.
 - ☛ See ["Launching an instant report from a Report DataSet"](#), page 367.
2. In the report result page, click **Save as Report** .
The report creation dialog box appears.
3. In the **Create Report** page, enter the report **Name**.
4. Click **OK**.

Sharing an instant report as a Widget

You can share an instant report as a widget to make it available for your dashboard, and for those of other users.

☛ See ["Adding a widget in your dashboard"](#), page 43.

To share an instant report as a Widget:

1. Launch your instant report.
 - ☛ See ["Launching an Instant Report"](#), page 364.
2. In the report result page, click **Share as Widget** .
The report creation dialog box appears. It indicates the report description.
3. In the **Create Report** page, enter the report **Name**.

4. Click **Next**.
The **Parameters** window displays parameters already specified, as well as additional formatting parameters.
5. (Optional) In the **Parameters** page, specify the input parameters of the report.
6. Click **Next**.
The **Report chapters** window displays the report chapters that you can modify.
7. (Optional) In the **Report Chapters** window, select **Open Automatically** to expand the chapter automatically when it opens or when the report is refreshed.
8. Click **OK**.
The report is added to the list of widgets available to populate dashboards.
All users can use your report as a widget.

➡ See *"Customizing your Dashboard"*, page 42.

CUSTOMIZING YOUR REPORTS (WEB FRONT-END)

In **HOPEX (Web Front-End)**, you can customize display of your reports (in HTML and PDF format).

Prerequisites (HOPEX Solutions): before customizing a report, you must first save it in your reports.

➤ See *"Saving an instant report as a report", page 384.*

See:

- "Editing a Report", page 387
- "Exiting Report Edit Mode", page 388
- "Expanding a Report Chapter Automatically on Opening", page 388
- "Adding a comment to a report", page 388
- "Customizing the Display of a Report Graphic", page 389
- "Customizing the Display of a Report Table", page 396
- "Reinitializing the Customization of the Report Settings", page 397
- "Creating a Report Style", page 398
- "Applying a Style to Your Report", page 398
- "Customizing the Page Setup of the Report in PDF Format", page 399
- "Modifying report options", page 400

Editing a Report

You can also customize the reports saved in:

- **(HOPEX Solutions) Other Reports > My Reports** folder.
 ➤ See *"Saving an instant report as a report", page 384.*
 ➤ See *"Accessing your Reports in a HOPEX (Web Front-End) Solution.", page 331.*
- **(EA Desktop) Reports** folder.
 ➤ See *"Accessing reports from the EA Desktop Web Front-End", page 332.*

To edit a report:

1. Open the report.
 ➤ See *"Opening a report (Web Front-End)", page 332.*
2. In the report page, click **Edit Report** .
 The edit pane appears to the right of the report.
 ➤ To exit edit mode, *"Exiting Report Edit Mode", page 388.*

You can customize the report.

➤ See *"Customizing the Display of a Report Graphic", page 389.*

Exiting Report Edit Mode

To exit report edit mode:

1. Open the report.
 See *"Opening a report (Web Front-End)", page 332.*
2. In the report page, click **Edit Report** .
The edit pane to the right of the report disappears. You have exited the report edit mode.

Expanding a Report Chapter Automatically on Opening

You can open a report with one, several, or all its chapters automatically expanded.

This saves you from expanding each chapter after you refresh the report or the chapter.

To expand a report chapter automatically on opening:

1. Access the properties of the report.
 See *"Accessing report properties", page 332.*
2. In the drop-down menu, select **Report chapters**, and on the relevant chapter line, select **Automatic display**.

Adding a comment to a report

You can add a comment at:

- report level
- report chapter level

 To hide the report chapter comments, see *"Modifying report options", page 400.*

To add a comment to a report or to a report chapter:

1. Edit the report.
 See *"Editing a Report", page 387.*
2. Under the chapter title, click **Add a comment / Add a comment to this chapter**.
An edit window opens.
3. Enter your text.
4. (optional) Click  to access the text formatting menus.
 Click **Enlarge** to enlarge the text edit window and display all formatting menus.
5. Click **OK**.
The comment appears under the title of the report / report chapter.

 If the "do not display chapter comments" option is selected after the addition of the comment, it is hidden; the content of the comment reappears if the option is cleared.

Customizing the Display of a Report Graphic

You can customize a graphic in your report at the following levels:

- chapter content
 - ☞ See *"Updating the content of a graphic of a report chapter", page 390.*
- graphic style in the chapter
 - ☞ See: *"Updating the font of a graphic of a report chapter", page 390,*
"Updating the style of a graphic of a report chapter", page 391,
"Modifying the style of labels", page 392,
"Modifying the legend style", page 393.
- style of a series in a chapter
 - ☞ See *"Modifying the style of parameters in a report chapter", page 394.*
- chapter style for export
 - ☞ See *"Modifying the style for export", page 395.*
 - 💡 **The values modified locally override the global values defined for all reports.**

You can reinitialize the values configured by default at:

- the parameter level
- the entire chapter level
 - ☞ See *"Reinitializing the Customization of the Report Settings", page 397.*

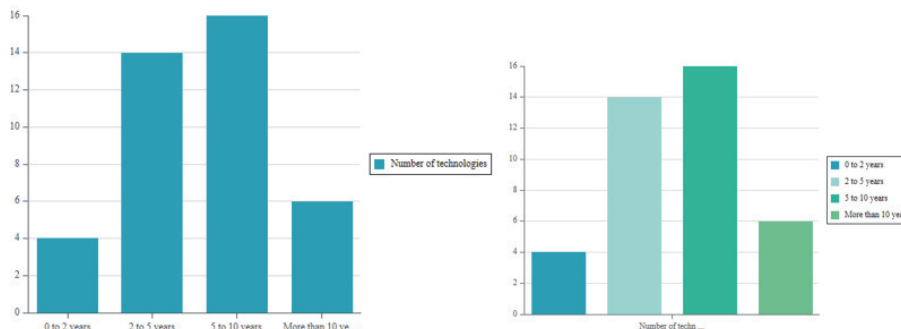
You can add comments at:

- the report level
- the report chapter level
 - ☞ See *"Adding a comment to a report", page 388.*

Updating the content of a graphic of a report chapter

You can, for example:

- reverse the display of the series



- show/hide the percentage values in the bars.
- add a title on the horizontal and/or vertical axis

To modify the report content:

1. Edit the report.

➡ See *"Editing a Report"*, page 387.

2. In the report page, click **Edit style parameter values** and select **All Series**.

The edit pane appears.

3. In the **Content** section, modify the parameters concerned

➡ To reset the values, click **Reset Parameter Values** .

Attention: the style parameter values in the report chapter are also reinitialized.

4. Click **Apply**.

Your modifications are immediately taken into account in the report.

➡ If the modifications do not appear automatically, click or see *"Expanding a Report Chapter Automatically on Opening"*, page 388.

Updating the font of a graphic of a report chapter

You can, for example:

- modify the color and the size of the font
- add a title to the graphic

To update the font of a graphic of a report chapter

1. Edit the report.

➡ See *"Editing a Report"*, page 387.

2. In the report page, click **Edit style parameter values** and select **All Series**.

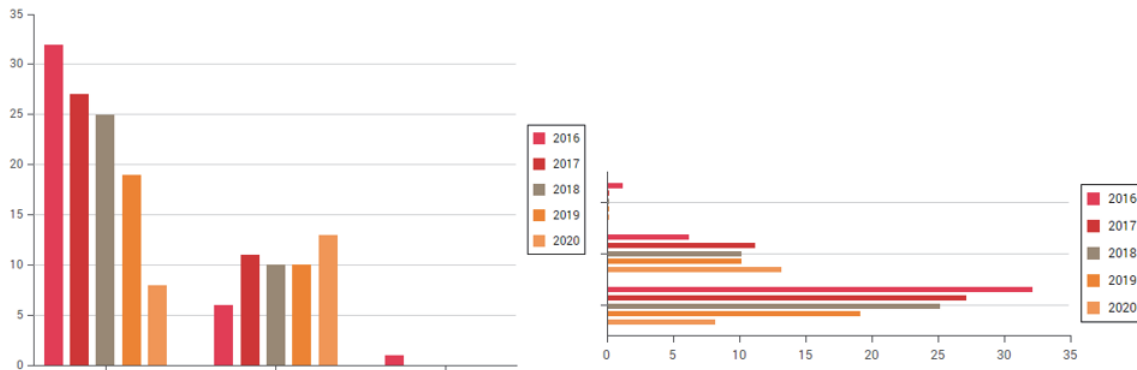
The edit pane appears to the right.

3. In the **Style** section, modify the parameters concerned.
 - ✎ To reinitialize the value of a parameter, delete the value that you entered.
 - ✎ To reset all values, click **Reset Parameters Values** .
 - Attention:** all parameter values in the report are also reinitialized.
4. Click **Apply**.
Your modifications are immediately taken into account in the report.
 - ✎ If the modifications do not appear automatically, click  or see ["Expanding a Report Chapter Automatically on Opening"](#), page 388.

Updating the style of a graphic of a report chapter

You can, for example:

- modify the color palette of the series
- add a horizontal and/or vertical grid
- inverse the direction of the bars (vertical or horizontal)



To modify the style of a report chapter:

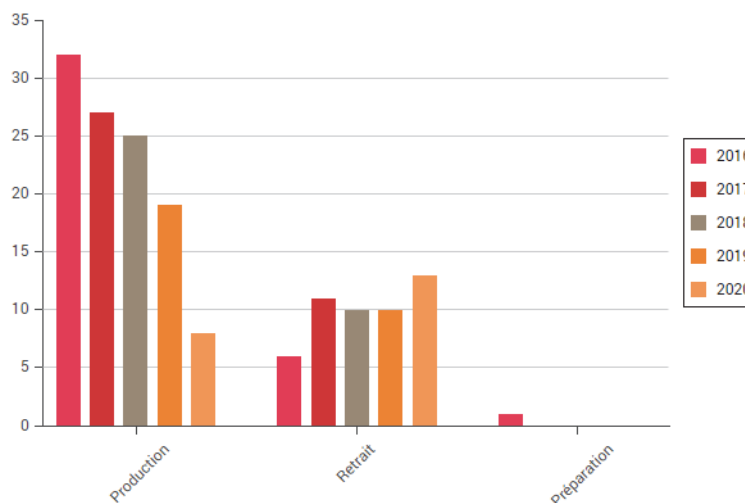
1. Edit the report.
 - ✎ See ["Editing a Report"](#), page 387.
2. In the report page, click **Edit style parameter values**  and select **All Series**.
The edit pane appears to the right.
3. In the **Style** section, modify the parameters concerned.
 - ✎ To reinitialize the value of a parameter, delete the value that you entered.
 - ✎ To reset all values, click **Reset Parameters Values** .
 - Attention:** all parameter values in the report are also reinitialized.
4. Click **Apply**.
Your modifications are immediately taken into account in the report.
 - ✎ If the modifications do not appear automatically, click  or see ["Expanding a Report Chapter Automatically on Opening"](#), page 388.

Modifying the style of labels

You can, for example:

- hide the axes
- define the maximum value of axes
- truncate the labels
- modify the display angle of the lower label text (in degrees)

☛ Default value: 0°, the text is horizontal.



To modify the style of the labels of a report chapter:

1. Edit the report.

☛ See ["Editing a Report", page 387](#).

2. In the report page, click **Edit style parameter values** and select **All Series**.

The edit pane appears to the right.

3. In the **Labels Style** section, modify the parameters concerned.

☛ To reinitialize the value of a parameter, delete the value that you entered.

☛ To reset all values, click **Reset Parameters Values** .

Attention: all parameter values in the report are also reinitialized.

4. Click **Apply**.

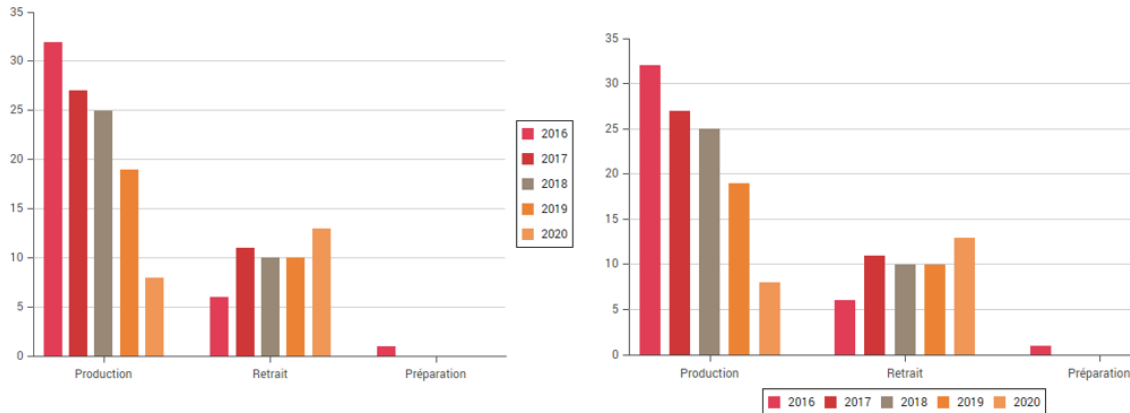
Your modifications are immediately taken into account in the report.

☛ If the modifications do not appear automatically, click or see ["Expanding a Report Chapter Automatically on Opening", page 388](#).

Modifying the legend style

You can, for example:

- hide/show the legend
 *Default value: yes (display)*
- modify the position of the legend (on the bottom or right)
 *Default value: to the right*



To modify the legend style of a report chapter:

1. Edit the report.
 See ["Editing a Report"](#), page 387.
2. In the report page, click **Edit style parameter values**  and select **All Series**.
The edit pane appears to the right.
3. In the **Legend Style** section, modify the parameters concerned
 To reset all values, click **Reset Parameters Values** .
Attention: all parameter values in the report are also reinitialized.
4. Click **Apply**.
Your modifications are immediately taken into account in the report.

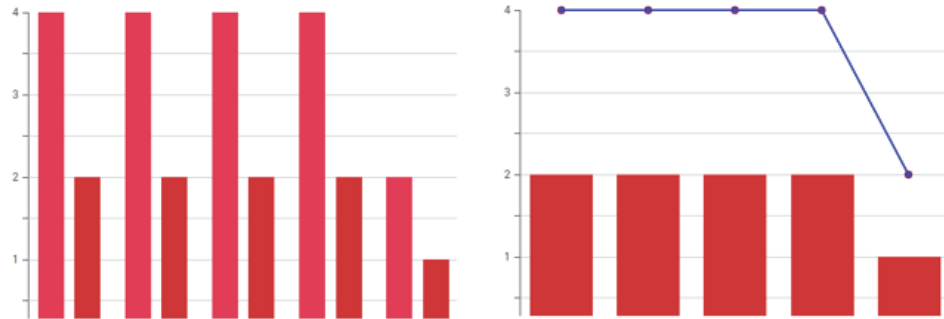
 If the modifications do not appear automatically, click  or see ["Expanding a Report Chapter Automatically on Opening"](#), page 388.

Modifying the style of parameters in a report chapter

You can:

- (for a bar chart) modify the display style (as bars or as lines)

☛ *Default value: no (as bars)*



- modify the series color

To modify the parameter style of a series in a report chapter:

1. Edit the report.

☛ *See "Editing a Report", page 387.*

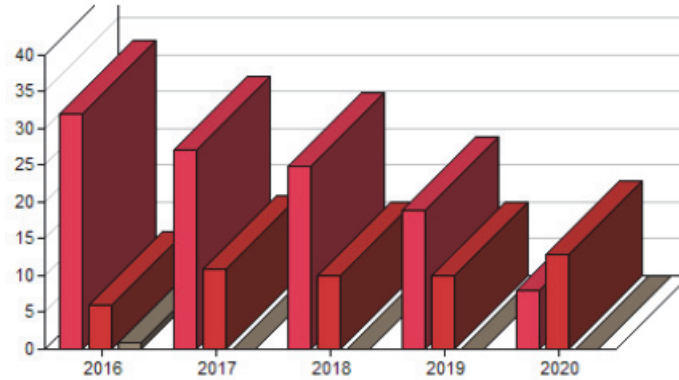
2. In the report page, click **Edit the Style Parameters Values**  and select the series that you want to modify. The edit pane of the selected series appears to the right.
3. In the pane of the selected series, in the **Graphic Style** section, select the parameter values of the series that you want to modify.
4. Click **Apply**.

💡 **Attention: the values defined locally replace the global values defined for all reports.**

Modifying the style for export

You can display your graphic in 3D in its Excel, PDF or RTF format.

☛ This configuration is not visible in html format.



To modify the style of a report chapter for export:

1. Edit the report.

☛ See ["Editing a Report", page 387](#).

2. In the report page, click **Edit style parameter values**  and select **All Series**.

The edit pane appears to the right.

3. In the **Style for export** section, modify the **3D Dimension** parameter.
4. Click **Apply**.

The modifications are visible in the report in Excel, PDF or RTF format.

☛ See ["Exporting a report in PDF, RTF, or Excel format", page 336](#).

Customizing the Display of a Report Table

You can customize the display of a table in your report at the level:

- of the table content of a chapter
 - ☞ See *"Updating the content of a table of a report chapter", page 397.*
- of the style of a chapter
 - ☞ See: *"Updating the font of a graphic of a report chapter", page 390,*
"Updating the style of a graphic of a report chapter", page 391,
"Modifying the style of labels", page 392,
"Modifying the legend style", page 393.
- of the style of a series in the chapter
 - ☞ See *"Modifying the style of parameters in a report chapter", page 394.*
- of the style of the chapter for exporting
 - ☞ See *"Modifying the style for export", page 395.*
 - 💡 **The values modified locally override the global values defined for all reports.**

You can reinitialize the values configured by default at the level of:

- the parameter
- the entire chapter
 - ☞ See *"Reinitializing the Customization of the Report Settings", page 397.*

You can add comments:

- at the report level
- at the report chapter level
 - ☞ See *"Adding a comment to a report", page 388.*

Updating the content of a table of a report chapter

You can, for example:

- reverse the display of the series

Applications Name	Obsolete date	Inventory portfolio	Business lines	Business Capabilities	Connected applications	Obsolete Technology
Global Customer	3/13/2017	Global Applications Portfolio	Sale by partner Sale in Agency Sale on Internet Sale to the professionals			SalesForce
Inventory Management	3/13/2017	Europe Applications Portfolio	Sale by partner Sale in Agency Sale on Internet Sale to the professionals		Booking Management	Redhat Ent Linux 5
Investors management	3/13/2017	Global Applications Portfolio	Sale on Internet Sale to the professionals			ESX 4.1
Law recorder	3/13/2017	USA Applications Portfolio	Sale by partner			Redhat Ent Linux 5

- hide the column titles
- add a title to the table
- add a total to the bottom of each column (sum, average, maximum, minimum)

To modify the content of the table of a report chapter:

1. Edit the report.
 See *"Editing a Report"*, page 387.
2. In the report page, click **Edit style parameter values**  and select **All Series**.
The edit pane appears.
3. In the **Content** section, modify the parameters concerned
 To reset the values, click **Reset Parameter Values** .
Attention: the style parameter values in the report chapter are also reinitialized.
4. Click **Apply**.
Your modifications are immediately taken into account in the report.

 If the modifications do not appear automatically, click  or see *"Expanding a Report Chapter Automatically on Opening"*, page 388.

Reinitializing the Customization of the Report Settings

You can reinitialize:

- the value of content or report style parameter
- all your changes to content and report style parameters

Reinitializing the parameter value of the report chapter

To reinitialize the value of a content or report style parameter:

1. Edit the report.
 See *"Editing a Report"*, page 387.

2. Delete the value that you have entered for the parameter.
3. Click **Apply**.
The default value of the parameter is automatically taken into account.

Reinitializing all changes to the report

To reinitialize all your changes:

1. Edit the report.
 See *"Editing a Report", page 387*.
2. Click **Reset Parameters Values** .
3. Click **Apply**.
Attention: all content and report style parameters return to their default value.

Creating a Report Style

You can customize the style of a report. To apply this style customization to another report, you must create the style.

To create a style:

1. Open a report and customize its display.
 See *"Customizing the Display of a Report Graphic", page 389*.
2. Expand the **Manage Styles** section.
3. Click **Save as style**.
The report style creation dialog box opens.
4. In the **Name** field, enter the name of the report style.
5. Click **OK**.
Your report style is created.
 To apply this style to another report, see *"Applying a Style to Your Report", page 398*.

Applying a Style to Your Report

To apply a style to your report:

1. Edit the report concerned.
 See *"Editing a Report", page 387*.
2. Expand the **Manage Styles** section.
3. In the drop-down list of the **Apply Style** field, select the style that you want to apply to the report.
 You must have created a style, see *"Creating a Report Style", page 398*.
4. Click **Apply**.
The style is applied to your report.

Customizing the Page Setup of the Report in PDF Format

You can customize the page setup of the report in .pdf format:

- do not display the table of contents
 - ☛ *Option selected by default: table of contents displayed*
- modify:
 - the page format and orientation
 - the margins (left, right, upper, lower) in mm
- add information in:
 - the header (to the left, to the center, to the right):
Eg: logo, user name or current profile
 - the footer (to the left, to the center, to the right)
Eg: page number, date, current report title

Configuring the page setup of the report in PDF format

To configure the page setup of the report in .pdf format

1. Edit the report.
 - ☛ See *"Editing a Report"*, page 387.
2. From the report edit page, click **Edit PDF print layout** . The page setup properties window of the report appears.
3. Modify the page setup parameters in the required .pdf format.
4. Click **OK**.

Hide the name of the person who generated the PDF of the report

By default, the name of the person who generated the PDF of the report appears in the footer of the PDF.

To hide the name of the person who generated the PDF of the report:

1. Access the options.
 - ☛ *To access the options, select **Main Menu > Parameters > Options**.*
2. In the options tree, expand the **Documentation** folder and select **Reports**.
3. In the pane to the right, clear the "Display Report Creator Name in PDF" options.
4. Click **OK**.

Modifying report options

You can hide certain information appearing in your report:

- hide the name of the person who generated the PDF of the report
- hide the export buttons on the chapters
- hide the chapter comments

☛ To add a report chapter comment, see ["Adding a comment to a report", page 388](#).

- hide the help buttons

You can define:

- Excel format (XLSX, XLS)

☛ By default: XLS.

- the number of cells displayed in the Checkmark matrices and intersection of reports
- the paper format

☛ By default: A4.

To modify report options:

1. Access the options.

☛ To access the options, select **Main Menu > Parameters > Options**.

2. In the options tree, expand the **Documentation** folder and select **Reports**.

3. In the right frame, modify the options in question.

4. Click **OK**.

CREATING AND GENERATING A WEB SITE

Every **HOPEX** product enables generation of a Web site from objects in the repository. This allows simple distribution of the content of the **HOPEX** repository via an Intranet. Users can consult the objects of a project (e.g.: processes) in the form of HTML pages.

☛ To generate a Web site you must have the **HOPEX Productivity Pack** or **HOPEX Collaboration Manager** technical module.

As standard, you can create and generate a Web site from a Web site template that serves as a model. The pages are generated independently of each other, and the links between the repository objects automatically define the hypertext links (you need only click one of these links to pass from one page to another and navigate within the Web site).

☛ To create and configure your own Web site, you need the **HOPEX Power Studio** technical module, see **HOPEX Power Studio** documentation.

☛ A Web site creation is only available in **HOPEX Windows Front-End**.

See:

- ["Creating a Web site from a Web site template", page 401](#)
- ["Generating a Web Site", page 402](#)

Creating a Web site from a Web site template

☛ To create and configure your own Web site, you need the **HOPEX Power Studio** technical module, see **HOPEX Power Studio** documentation.

☛ A Web site creation is only available in **HOPEX Windows Front-End**.

It is possible to create and generate a Web site without the **HOPEX Power Studio** technical module. To do this you must base it on a Web site template supplied as standard or one that you have created specially.

To create a Web site from a Web site template:

1. Connect to **HOPEX** (Windows Front-End).
☛ See ["Accessing HOPEX Windows Front-End", page 46](#).
2. Access the **Documentation** window:
☛ To access the **Documentation** window from the **HOPEX** menu bar, select **View > Navigation Windows > Documentation**.
3. In the tree, right-click the **Web Sites** folder and select **New > Web Site**.
The **Create Web Site** page appears.
4. Enter the **Name** of the Web site.

Example: "Site 1".

5. (Optional) To modify the default generation folder (<environment path>\Intranet) of the Web site click . It is recommended that you create a sub-folder for each Web site generated

Example: under the "Intranet" folder, create folders with the same name as your Web site.

 The content of the "Intranet" folder is deleted at each generation. This being so, when you have obtained a satisfactory site you want to keep, remember to copy it to an appropriate folder.

6. In the **From Site Web Template** field, use the drop-down menu to select a Web site template.

Example: "Enterprise Portal".

7. Click **Finish**.

The new Web site is listed in the **Web Sites** folder.

 The "Enterprise Portal (Example)" Web site template generates the entire repository, which takes some time. You can restrict the range of objects to be generated by choosing to generate only a project.

8. Right-click the new Web site and select **Properties**.
9. In the Web site properties window, select the **Objects** tab.
10. To restrict the range of objects to be generated, click the object type and then click **Delete**.
11. To add an object to the range of objects to be generated, click **Add** and select **An object**.
12. In the **Add an Object** window, select the object **Type**.

Example: "Project".

13. In the **Name** field, select the object.

Example: "Customer Loyalty Program".

The object appears in the list.

14. Click **OK**.

Web Site Generation Prerequisites (Web Front-End)

 To generate a Web site you must have the **HOPEX Productivity Pack** or **HOPEX Collaboration Manager** technical module.

To be able to generate a Web site with **HOPEX Web Front-End**, you must first:

- Configure email sending at the installation level
- Identify a HOPEX addressee and specify an email
- make sure that there is an existing and ready-to-be generated web site in **HOPEX Windows Front-End**.

See "Generating a Web Site", page 402.

Generating a Web Site

See also "Web Site Generation Prerequisites (Web Front-End)", page 402.

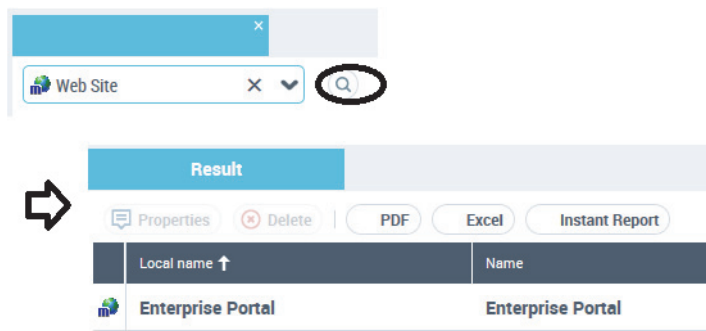
Managing and scheduling web site generation

To generate a Web site with **HOPEX Web Front-End**, you must define its generation date and time.

☛ **HOPEX Windows Front-End** enables also to immediately generate the Web site.

To generate a Web site:

1. Connect to **HOPEX** (with the "Enterprise Architect" profile for example).
☛ See "Accessing HOPEX Windows Front-End", page 46 or "Accessing HOPEX Web Front-End", page 22.
2. Access the Web site you want to generate:
 - (**Web Front-End**) through the query tool (**Main Menu > Advanced Search**).



- (**Windows Front-End**) from the **Documentation** window. Unfold the "Web sites" folder.
☛ To access this window, from the **HOPEX** menu bar, select **View > Navigation Windows > Documentation**.
3. Right-click the Web site and select **Generate in background**.
☛ (**Windows Front-End**) you can also click **Generate** to immediately generate the Web site.
Dialog boxes appear, indicating the progress of site generation.
When the Web site has been generated, a dialog box proposes opening the site.

4. (If needed) In the generation scheduling window, click **Connect**  to add recipients to the email reception regarding the Web site generation information.

Website generation in background - Generation outcome email recip...  

This wizard enables you to generate a static web site in background.
In a first step you will be asked for recipients of the email sent after the generation job.
In a second step you will indicate whether the job is started immediately or at the date and our you will choose.

	Name ↑	E-mail
☐	Adam	adam@mega.com

5. Click **Next**.
The **Scheduling** windows opens.

Website generation in background - Scheduling  

Schedule and execute the process at the time specified

Site Generation Date & Time: 

You will have to Save / Dispatch your session in order for the generation job to be taken into account.  

6. In the **Site generation Date Time**, click the arrow to define the Web site generation date and time.
7. Click **Finish**.

 You must **save** and **dispatch** your work for generation to be taken into account.

At the Web site generation, the recipients specified step 4 receive an email including a link to download the Web site.

Accessing the generated web site

(Web Front-End) To access the generated web site from the informative email received:

1. Click the link and connect to **HOPEX Web Front-End**.
2. Right-click the business document which is displayed and click **Open**.
A zip file is downloaded. It contains the generated pages of the static web site.

 To consult later the generated Web site, right-click the Web site name and select **Open**.

Web Site Folders and Files

Files supplied as standard and those resulting from generation are stored in the <environment path>\Intranet folder.

☛ *Do not mix-up the "Site" folder, in which **HOPEX** is installed, with the "Web site" folder.*

A sub-folder for each Web site is automatically created (if it has not been specified in the **Generation Folder** field at the time of creation of the Web site).

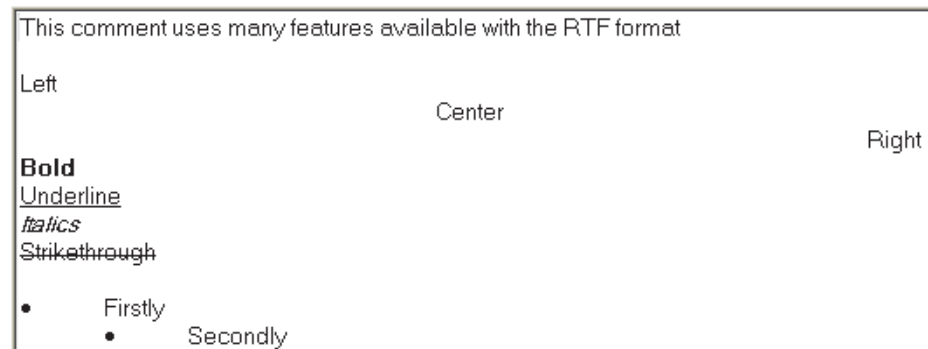
In the "Intranet" folder of the environment or in the sub-folder corresponding to the Web site, you can find:

- the "Standard" folder that contains the standard images provided for use when generating the Web site.
- the "Pages" folder that contains the generated files (".htm" extension).
- the "Images" folder that contains the generated diagrams.
- files corresponding to the Home Page and Site Map.

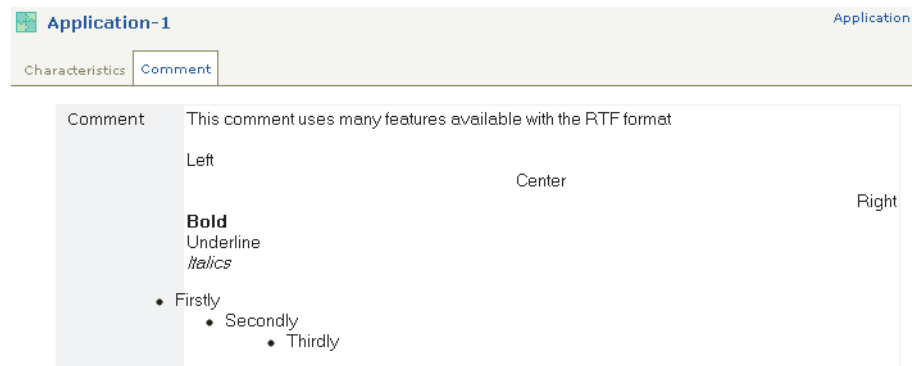
Reproducing Comments in an HTML Page

Formatting of RTF comments is reproduced in the Web site.

☛ For more details on entering comments, see "[Naming Objects](#)", page 155.



Example of comment formatting



Reproduction in a Web site

USING BOOKS



HOPEX books enable easy creation of documents comprising text, diagrams and reports. The result can be inserted in a Web site or used to generate reports (MS Word) in RTF or PDF format.

Structuring in chapters and paragraphs enables flexible organization of presentation. **HOPEX objects** of different types can be dragged into the book, content of which is automatically updated.

The use of books simplifies collaborative working, thanks to the following possibilities:

- addition of notes in paragraphs
- automatic update of inserted components
- management of access to objects in course of modification
- management of several languages

☛ *This function is available with **HOPEX Productivity Pack** only.*

- ✓ ["Books Overview", page 410](#)
- ✓ ["Collaborative Work in Books", page 416](#)

BOOKS OVERVIEW

☛ Operations described here are based on use in **HOPEX Windows Front-End**.

Book Availability

Books are available in:

- **HOPEX Windows Front-End.**
- **HOPEX Web Front-End.**

☛ Books are not available in solutions.

Book Structure

A book comprises chapters, sub-chapters and paragraphs, see:

- ["Creating a Book", page 411](#)
- ["Creating a chapter", page 411](#)
- ["Creating a Sub-Chapter", page 411](#)
- ["Creating a paragraph", page 411](#)

The content of a chapter is defined in paragraphs. This content can be:

- text
- a diagram
See ["Connecting a diagram to a paragraph", page 414.](#)
- object
See ["Connecting objects to a paragraph", page 413.](#)
- an external reference
See ["Creating an External Reference", page 421.](#)

A book can also reference:

- other books
See ["Referencing a book in another book", page 414.](#)
- reports
See ["Connecting a report to a chapter", page 414.](#)

To view a book and its component elements:

1. In the **HOPEX** menu bar, select **View > Navigation Windows > Documentation**.
Adds the **Documentation** tab in the navigation area
2. Expand the **Books** folder.

Creating a Book

A book is organized in chapters, sub-chapters and paragraphs.

To create a book:

1. In the **Documentation** navigation window, right-click the **Books** folder and select **New > Book**.
2. In the **Creation of Book** dialog box, enter the name of the new book and specify the library to which it should be attached.
3. Click **OK**.
The book is created and added to the list of books.

Creating a chapter

To create a chapter:

1. In the **Documentation** navigation window, right-click the book and select **New > Book Chapter**.
2. Enter the name of the new chapter.
 *You can retain the default name of the chapter.*
3. Click **OK**.
The new chapter appears under the book folder.
 *You can reorganize the order of chapters, see "[Organizing content of a chapter](#)", page 415.*

Creating a Sub-Chapter

To create a sub-chapter:

1. In the **Documentation** navigation window, right-click the chapter and select **New > Book Chapter**.
2. Enter the name of the new sub-chapter.
 *You can retain the default name of the sub-chapter.*
3. Click **OK**.
The new sub-chapter appears under the folder of the selected chapter of the book.
 *You can reorganize the order of sub-chapters, see "[Organizing content of a chapter](#)", page 415.*

Creating a paragraph

To create a paragraph:

1. In the **Documentation** navigation window, right-click the book, the chapter or sub-chapter, and select **New > Book Paragraph**.
2. Enter the name of the new paragraph.
 *You can retain the default name of the paragraph.*
3. You can enter a comment for the paragraph if required.
4. Click **OK**.
The new paragraph appears under the selected chapter or sub-chapter.
 *You can reorganize the order of paragraphs, see "[Organizing content of a chapter](#)", page 415.*

Viewing and Updating Book Content

The content of a book or chapter is visible in its properties dialog box.

Viewing the content of a book or chapter

To view the content of a chapter:

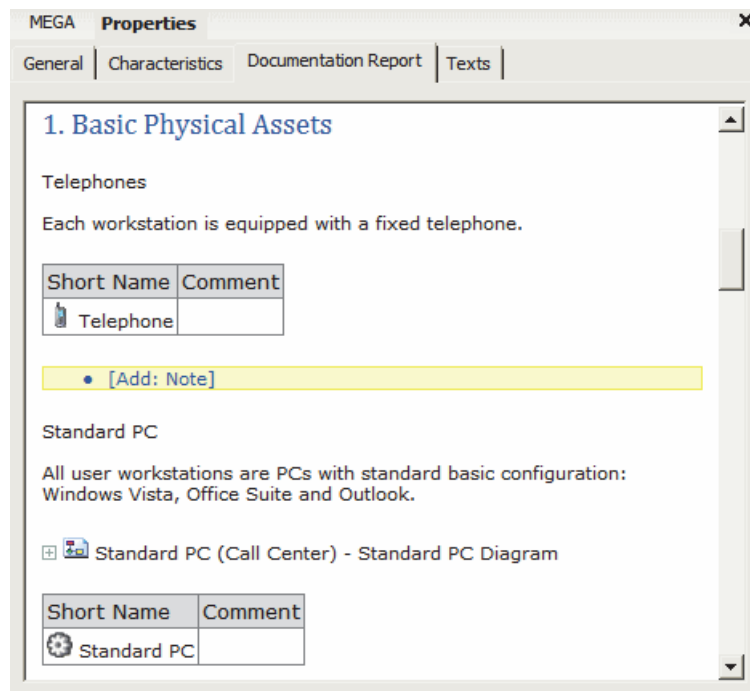
1. Click the chapter in the navigation tree.

2. In the toolbar, click **Properties** . The properties window opens.

 To simplify your work, position the properties dialog box in the central part of the edit window by right-clicking the window title bar and selecting **Integrate in Edit Window**.

3. Select the **Properties** window and select the **Documentation Report** tab to view text of the chapter.

 To avoid long display times, diagrams are replaced by a standard image. You can display the diagram by clicking its image.



 To view a diagram contained in a paragraph, click the  icon next to the diagram icon.

Accessing the content of a paragraph

From the properties window of a book or chapter, it is possible to access objects contained in paragraphs.

To access a diagram or objects it contains:

1. Click the diagram so that its components are displayed.
2. Right-click any component to access its characteristics.

To access text of a paragraph from the **Documentation Report** tab of the properties dialog box of a chapter or book:

1. Position the mouse on the paragraph that interests you and click.
The properties dialog box of the paragraph opens.
2. Select the **Characteristics** tab to access paragraph text.
3. Modify the existing text.

☛ Note that the **Comment** area proposes features similar to those of MS Word, including a spelling checker.

4. Click **OK**.

Connecting objects to a paragraph

Several types of object can be connected to a paragraph:

- a diagram
- an external reference
- an object

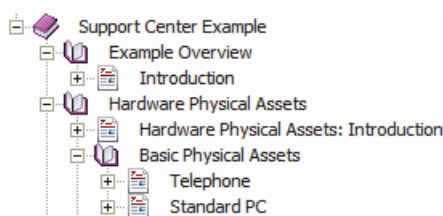
You can use the **Connect** command in the paragraph pop-up menu to connect new objects.

To connect an object to a paragraph, either:

- right-click the paragraph, select **Connect**, then the desired object type.
- or, click the object (from a diagram, or from the **Favorites** or **History** windows for example) and drag-and-drop the object to the target paragraph.

To consult the list of objects referenced in a paragraph:

- expand the navigation tree of the book.



- Open the properties dialog box of the paragraph and select the **Objects linked for documentation** tab.
- Buttons **Connect** or **Reorganize** enable modification of paragraph content.

☛ The sections **Included System Diagram** and **Mentioned Object System** enable referencing of system objects such as descriptions, report templates (MS Word) and queries.

- The **Documentation Report** tab displays the result of your modifications.

Defining Elements Referenced in a Book

Connecting a report to a chapter

A book can directly reference the result of a report at the level of the book or one of its chapters or sub-chapters.

To insert the result of a report in a chapter:

1. In the **Documentation** navigation window, expand the navigation tree of the book to display the chapter in which you wish to insert the report.
2. Click the report you are interested in.

☺ *To easily access the reports that interest you, you can add these to your favorites.*

3. Holding down the mouse button, drag the report to the chapter to which you wish to connect it.

The report appears in the navigation tree of the chapter.

☛ *In the same way you can connect a report to a paragraph, but in this case the report is considered to be a **HOPEX** object and not a text.*

Connecting a diagram to a paragraph

A book can reference an object, a diagram or an external reference at the level of a paragraph.

To insert a diagram in a paragraph:

1. In the **Documentation** navigation window, right-click the paragraph in which you wish to insert the diagram and select **Connect > Diagram..** The query tool appears.
2. Using the query tools, select your diagram and click **OK**. The diagram appears in the navigation tree under the selected paragraph.

☛ *In the same way you can connect an object, an object system or an external reference to a paragraph.*

Referencing a book in another book

HOPEX allows the insertion of a book, book chapter or paragraph into another book. This feature enables, for example, the compilation of several books into a single book.

To reference a book in another book:

1. Click the book to be inserted.
2. Holding down the mouse button, drag the book to the book or chapter in which you wish to insert it.

The inserted book appears in the navigation tree of the target book.

☛ *Inserted chapters of a book appear as sub-chapters of the target chapter.*

☛ *Any modification of an inserted book is taken into account in the book or chapter that references it.*

Organizing content of a chapter

To reorganize content of a book from the tree in the **Documentation** navigation window:

1. Expand the **Books** folder and the chapters and sub-chapters you wish to reorganize.
2. Press the <Shift> key, and holding it down, click the element you want to move.

☛ Alternatively you can open the properties dialog box of a book, chapter or sub-chapter and reorganize the content in the **Characteristics** tab.

Using Books

Generating an RTF or PDF document from a book

To generate an RTF or PDF document from a book:

1. Right-click the book and select **Open As > RTF**.
The RTF document, created in a temporary area, opens as soon as it is generated.

Using a book in a Web site

When a Web site is built from a book, navigation can be carried out from:

- book elements presented in the left frame.
- elements of sub-chapters of the current chapter.
- links, to neighboring sub-chapters, proposed at the bottom of the page.

☛ To obtain this result, the book, book chapter and paragraph *MetaClasses* must be added to pages of the Web site.



COLLABORATIVE WORK IN BOOKS

A book can be used to document a multi-participant project. Each of the participants must have access to elements of the book without impacting the work of others.

Book management offers two collaborative work features:

- annotation
- management of access to paragraphs that reference objects in the course of modification.

Annotating Elements of a Book

The text of a book or chapter is accessible in the **Documentation Report** tab of its properties dialog box.

The field **Add: Note** allows insertion of notes so that these will be visible to all participants in the book.



When it has been published, a note contains:

- Name of the author of the note and note creation date.
- Name of the paragraph containing the note.
- Text associated with the note.

 You must dispatch your private workspace so that other users can see the note.

Managing Access to Book Paragraphs

Book elements can reference several repository objects. If a user is currently modifying an object referenced in a book and has not dispatched his/her work, a

note is automatically displayed in the text of the paragraph that references the object.

1. Basic Physical Assets

Telephones

Each workstation is equipped with a fixed telephone.

Short Name	Comment
 Telephone	

- **[Call Center::Telephone]** Call Center::Telephone (Artifact) is being modified by "Mister Guide" since 23/02/2011 18:56:07.
- [\[Add: Note\]](#)

Standard PC

All user workstations are PCs with standard basic configuration: Windows Vista, Office Suite and Outlook.

  Standard PC (Call Center) - Standard PC Diagram

The automatically generated note provides:

- The name of the object being modified
- The name of the user working on the object
- The last modification date

✎ *Modification access to the paragraph is prohibited.*

USING EXTERNAL REFERENCES



HOPEX allows you to create references to text outside the repository. For example, you can create references to regulations concerning security measures, the environment, legal issues, and so on.

These external references can be associated with all repository objects: In the properties dialog box of the object, you can enter the location of the document or the Internet or Intranet address (URL) where the information can be accessed. You need only click the Open button in the tab to access the document.

☛ *If the document cannot be accessed in electronic format, you can make reference to it in the comment of the object associated with this document.*

- ✓ ["Types of External References", page 420](#)
- ✓ ["Creating an External Reference", page 421](#)
- ✓ ["Predefining an Address", page 423](#)
- ✓ ["Using External References", page 425](#)

TYPES OF EXTERNAL REFERENCES

There are several types of external reference:

- **File**
- **SWF** (Shockwave Flash) animation: Flash animation used in Web navigators
- **URL** (Universal Resource Locator address: protocol used on the Web to specify the location of a file or a resource on the Internet.

☛ *In **HOPEX Web Front-End**, only external references of URL type are created.*

CREATING AN EXTERNAL REFERENCE

Creating an External Reference Connected to an Object

To insert and create an external reference in a diagram, see ["Inserting External References in a Diagram", page 422](#).

To create an external reference connected to an object:

1. Open the properties page of the object.
2. Select **General > References**.
3. In the **References** section, click .

*Alternatively, to create an external reference from the diagram, click the **External Reference** icon in the **Insert** toolbar. In the **Add External Reference** dialog box, enter a **Name** for the external reference and click **Create**.*

The **Creation of External Reference** dialog box appears.

4. In the **Creation of External Reference** dialog box, indicate the **Type** of external reference that you want to create:
 - File
 - SWF
 - URL

For more details on external reference types, see ["Types of External References", page 420](#).

*In **HOPEX Web Front-End**, only external references of URL type are created.*

5. Click **Next**.

The external reference **Characteristics** dialog box appears.

Its content depends on the type of external reference selected.

6. (Optional) Enter the **Name** of the external reference.

*The **Name** of the external reference is the name of the file to be referenced. This box is completed automatically when the **Access Path** of the file is specified.*

7. (Optional) Define the **Owner** of the external reference.

8. (Optional) In the case of an external reference of **File** or **URL**, type, in the **Predefined Address** box, click:

- the drop-down menu arrow  to select a predefined address.

 *If the file that you want to access is in a predefined folder or one of its sub-folders, it is recommended that you select this folder when creating the external reference.*

 *If the URL address of the page that you want to access has been predefined, it is recommended that you select this folder when creating the external reference*

- arrow  to create a predefined address.

To create a predefined address, see ["Predefining an Address", page 423](#).

9. (Optional) In the case of an external reference of **SWF** type, enter the characteristics of the SWF animation (width, height and variable).
10. In the **Access Path** box, to reference an external reference of type:
 - File: click **Browse** and select the file you wish to reference.

 *The file name must not contain special characters (such as ä, ö, ü, é, è, ô, à).*

The name of the file appears in the **Access Path** and **Name** boxes.
 - File: click **Browse** and select the file you wish to reference.

 *In the case of an external reference of **SWF** type, the external reference should be located in the mega_std or mega_usr directory of the site.*
 - indicate complements of the URL address that will obtain the desired page.
11. Click **Finish**.

Inserting External References in a Diagram

To insert an external reference in a diagram:

1. In the diagram, click the **Views and Details** button.
2. In the dialog box that opens, select **External References**.
3. In the Insert toolbar, click **External reference** and then click in the diagram frame.

The **Add External Reference** dialog box appears.
4. In the **Name** box, click the drop-down list arrow and select **Query/List/Propose** to find an existing external reference.

 *If the external reference does not exist, select **Create** and go to "Creating an External Reference Connected to an Object", page 421.*
5. Select the external reference and click **OK**.
6. The name of the external reference appears in the **Add External Reference** dialog box.
7. Click **Create**.

The external reference appears in the diagram.

PREDEFINING AN ADDRESS

To simplify administration of external references, you can predefine addresses:

- "Predefining a File Type Address", page 423.
- "Predefining a URL Type Address", page 423

Predefining a File Type Address

A **Predefined address** of file type avoids having to browse the complete path when you create an external reference in this folder. You need only indicate the name of the file.

You can create predefined folders for the most frequently consulted folders.

To predefine a file type address:

1. In the **Creation of External Reference** of File type (see "Creating an External Reference", page 421), in the **Predefined Address** box, click  and select **Create Predefined Address**.
2. In the **Creation of Predefined Address** window, enter the **Name** of the address to be predefined.
 *The **Type** of address to be predefined is automatically defined according to the type of external references created.*
3. In the **Access Path** box, click  and select the folder that you wish to reference.
 *If you know its name and/or path, you can enter this directly.*
4. Click **OK**.
The folder you have predefined is automatically selected in the **Creation of External Reference** dialog box.

In the **Access Path** field, when you click , you are directly positioned on the folder concerned.

Predefining a URL Type Address

A **Predefined address** of URL type avoids having to browse the complete path when you create an external reference stored at this address. You need only enter the rest of the basic URL address in the **URL** text box to create an external reference:

You can create predefined URL addresses for the most frequently accessed URL addresses.

To predefine a URL type address:

1. In the **Creation of External Reference** of URL type (see "[Creating an External Reference](#)", page 421), in the **Predefined Address** box, click arrow  and select **Create Predefined Address**.
2. In the **Creation of Predefined Address** box, enter the **Name** of the URL address to be predefined.

 The **Type** of address to be predefined is automatically defined according to the type of external references created.
3. In the **URL** box, enter the complete URL of the page you wish to reference.

 A URL address often begins with "http://www."
4. Click **OK**.
In the **Creation of External Reference** dialog box, the URL address you have created is automatically selected in the list of predefined URL addresses.

USING EXTERNAL REFERENCES

You can disconnect, delete and open external references:

Deleting a Predefined Address

To delete a predefined address:

1. In the **HOPEX Windows Front-End** toolbar, open the query tool.
2. In the query wizard, select **Predefined Address**.
The list of predefined addresses appears.
3. Right-click the predefined address you wish to delete and select **Delete**.
 *You cannot delete a predefined address when it is used to create an external reference.*
4. In the delete objects dialog box, click **Delete**.
The predefined address is deleted from the repository.

Accessing External References

You can access an external reference from:

- a diagram
- object
- the properties dialog box of an object
- the navigator
- query tool

Opening an external reference from a diagram

To open an external reference inserted in a diagram, you can:

- Right-click the external reference and select **Open**.
- Double-click the external reference.

Opening an external reference from an object

An object can be connected to several external references.

To open an external reference from an object:

1. Right-click the object and select **External Reference**.
 - When only one external reference is connected to the object, this will open directly.
 - When several external references are available, an intermediate dialog box listing the various external references available appears.

2. Select the external reference you want to open and click **OK**.

 This feature is available in **HOPEX Windows Front-End** only.

Accessing an external reference from an object property dialog box

To open an external reference from the properties dialog box of an object:

1. In the properties dialog box of the object, select **General > References**.
2. Select an external reference and click button **Open** 
The external reference opens.

Accessing an external reference from the navigation window

To open an external reference from the **navigation** window:

1. In the **HOPEX** menu bar, select **View > Navigation Windows > Documentation**.
2. Expand the **External reference** folder.
3. Double-click the desired external reference to open it.

 This function is available with **HOPEX Windows Front-End** only.

Accessing external references from the query tool

To open an external reference from the query tool:

1. In the **HOPEX** toolbar, open the query tool.
2. In the query wizard, select **External Reference** and click **Find**.
The list of external references appears.
3. Double-click the desired external reference to open it.

External references relative to the environment or site

You can locate your external references in a sub-folder of the environment or site.

This folder relates to the environment or site. This allows you to move the environment or site without having to worry about path validity.

Path example:

C:\MyEnvironment\ExternalRef.doc.

If the environment is moved to another network resource, the path (relative and not absolute) remains valid.

USING BUSINESS DOCUMENTS



The purpose of business documents is to manage in **HOPEX** documents that evolve independently of the repository.

These can be, for example, legal or financial documents updated by org-units outside the enterprise, but attached to objects in the repository. A report (MS Word) generated by **HOPEX** can become a business document.

 *Solutions have this function as standard. For other products, **HOPEX Productivity Pack** is required.*

- ✓ ["Business Documents Overview", page 428](#)
- ✓ ["Accessing Business Documents", page 430](#)
- ✓ ["Creating Business Documents", page 431](#)
- ✓ ["Managing Business Documents", page 433](#)

BUSINESS DOCUMENTS OVERVIEW

Storage

To determine the storage directory defined by default by the administrator:

1. Click:
 - (Windows Front-End) **Tools > Options.**
 - (HOPEX Web Front-End) **Main Menu > Settings > Options**
2. In the tree on the left, expand the **Installation** folder and select **Advanced.**

In the right pane, the **External files storage path** field indicates the address of the business document storage directory.

☺ *Confirm with your administrator that you have rights to access this directory.*

Business Document Patterns

To simplify management of business documents, **HOPEX** allows the end user to select from among the document patterns that can be accessed by his/her profile.

The document pattern predefines:

- the category, see "[Classification](#)", page 428.
- the confidentiality area, see "[Confidentiality and reading access](#)", page 429.
- encryption associated with a document: encryption renders unreadable the content of files physically stored on the disk (.dat files).

🔖 *For more details on business document patterns, see technical article **HOPEX Power Studio - Publisher**, chapter "Customizing Business Documents".*

Classification

The document repository can be extensive, it is therefore important to classify business documents in categories.

A category enables classification of documents according to standard subjects such as Audit, Diagram, Control Documentation. Categories are organized hierarchically from these main types.

🔖 *For more details on creation of categories, see technical article **HOPEX Power Studio - Publisher**, chapter "Customizing Business Documents".*

Confidentiality and reading access

Certain documents may be confidential and their access, even in read-only, is restricted to certain profiles. To do this, you must define reading access area to confidential documents.

The reading access area assembles a group of **HOPEX** objects. It can be associated with persons or person groups.

This means that users can see **HOPEX** objects defined at the reading access area level, but also objects associated with child reading access areas. The user cannot access objects defined in a parent reading access area.

☛ *Use of reading access areas is only proposed with a **HOPEX Power Supervisor** license.*

For more details on reading access areas, see HOPEX Administration - Supervisor guide.

ACCESSING BUSINESS DOCUMENTS

Accessing Business Documents in Windows Front-End

To access all repository business documents:

1. Open the **HOPEX Windows Front-End**, open **Documentation** navigation window.

 To open this window, with **HOPEX Windows Front-End**, select **View > Navigation Windows > Documentation**.

2. Expand the **Business Documents** folder.

You can access:

- all documents classified by alphabetical order (**All documents**)
- documents classified by **categories**
- documents classified by **document patterns**

To access business documents referenced from an object:

1. Open the properties page of the object.
 2. Select the **General** tab and then the **Documents** subtab.
-

Accessing Business Documents in Web Front-End

 Access to business documents can vary depending on the solution used. In this case, refer to the corresponding user guides.

To access all repository business documents:

1. In the **HOPEX Web Front-End** Enterprise Architect desktop, click **Repository > Documentation > Business Documents**.

You can access:

- business documents classified by category
- business documents classified by pattern
- the business documents list.

 To define other object types that can be documented, see technical article **HOPEX Power Studio - Publisher**, chapters "Customizing Business Documents", "Defining Business Document Objects".

To access business documents referenced from an object:

1. Open the properties dialog box of the object concerned.
2. Click **Characteristics**.
3. Expand the **Attachments** section.

CREATING BUSINESS DOCUMENTS

A business document is a **HOPEX** object created from a file downloaded in **HOPEX**. The business document is independent of the initial file.

The business document is attached to an object, it is based on a model and category.

Creating Business Documents in Windows Front-End

You can create a business document:

- from the navigation window **Documentation Business Documents Documents by Category**.
- from an object that can be documented.

You can create a business document:

- From a file external to **HOPEX**.
- from a document generated in **HOPEX**.

From a file external to HOPEX

To create a new business document from an org-unit for example:

1. Open the properties page of the org-unit.
2. Select the **General** tab and then the Documents subtab.
3. In the **Business Document** frame, click **New**.
4. Enter the **Name** of the business document.
5. Click **Browse** and select the file to be downloaded.
6. Specify the **Document Pattern**.



*The **document pattern** predefines the category, confidentiality area and encryption associated with a new document.*

7. Click **OK**.

The business document is connected to the object and stored by the **HOPEX** application.

From a document generated with HOPEX

HOPEX reports enable automatic generation in written form of knowledge extracted from design data managed by the software. These reports can be:

- analysis reports
- reports (MS Word)

HOPEX books can also be generated and saved in doc, rtf or pdf format.

When you obtain a version of a document generated with HOPEX that you find satisfactory and wish to keep or distribute, you can save it as a business document.

To transform a document generated with **HOPEX** to a business document:

1. Right-click the document generated with **HOPEX** and select **Save as business document**.

The **Creation of Document** dialog box opens.

2. Indicate the **Owner** of the document.
3. In the **Document Pattern** field, select a pattern.
4. Click **OK**.

The business document created appears in the list of documents attached to the owner object.

Creating a Business Document in Web Front-End

 *Creation of business documents can vary depending on the solution used. Refer to the corresponding user guides.*

To create a business document from the **HOPEX Web Front-End** Enterprise Architecture desktop:

1. Open the properties dialog box of the object concerned.
2. Click **General > Documents**.
3. In the **Owned Business Documents** section, click **New**.
The business document creation window opens.
4. Indicate the business document **Name**.
5. In the File Location field, click  then select the file.
6. Specify the **Document Pattern**.

 *For more details, see ["Business Document Patterns"](#), page 428.*

7. Click **Finish**.
The business document is connected to the object and stored by **HOPEX**.

MANAGING BUSINESS DOCUMENTS

Managing Business Document Content

On creation of a business document, a business document version is created automatically. A business document therefore comprises at least two objects:

- a business document
- a business document version

 The business document version name is calculated from the business document name.

If document content evolves, following a new regulation for example, you must create a new version of your business document and download the new updated file in **HOPEX**.

To modify the business document, **HOPEX** offers two possibilities that involve file download:

- **Update business document:** replaces the old version
 -  This functionality should be used when:
 - you want to carry out minor corrections.
 - you are debugging the business document.
- **Create now business document version:** keeps the old version and creates a new version
 -  This functionality should be used when business document content evolves and you want to keep the different versions.

Updating business documents

 See ["Accessing Business Documents", page 430.](#)

To update a business document:

1. Open the business document and save it locally.
2. Make your modifications in the local copy.

 **You can open a business document to consult its content, but you cannot modify it directly from the editor proposed by HOPEX.**

3. In **HOPEX**, right-click the business document and select **Update**.
4. In the dialog box that appears, select the modified document and click **OK**.

The current version of the business document is updated in the repository.

 Updating a business document does not create a new version.

Managing business document versions

 The version of a document enables access and referencing of the different valid versions of the same document. For example, legal

regulations evolve from one year to another. a business document version is a business document.

☛ See ["Accessing Business Documents"](#), page 430.

Creating a new business document version

To create a new business document version:

1. Right-click the business document and select **New Version**.
 2. Select the file in the desired location and click **OK**.
- A new business document version is created. The modified document is downloaded in this new version.
- The document version number is incremented.

☛ *The old business document version is kept.*

Accessing business document history

To access business document history:

1. Open the properties dialog box of the business document.
2. Click:
 - **(HOPEX Windows Front-End) Characteristics > Versions History**.
 - **(HOPEX Web Front-End) Versions History**

☛ *This tab is available only if your profile authorizes you to create document versions.*

☛ *In **HOPEX Windows Front-End**, content of the **Versions History** tab has no connection with the **History** tab available in the pop-up menu of an object, which tracks actions executed on the object.*

Referencing Business Documents

A business document is attached to an object but can be referenced by another object. For example, a business document created for an org-unit can be connected to organizational processes for which the org-unit is responsible.

Referencing business documents (HOPEX Windows Front-End)

☛ See ["Accessing Business Documents in Windows Front-End"](#), page 430.

The reference link is displayed in the **General > References** tab (the document can be referenced by several objects).

☛ *The ownership link of a business document by an object is displayed in the **General > Documents** tab of the object (the document can be owned by only one object).*

So that an object can reference an existing business document:

1. Open the properties dialog box of the object concerned, in our example the organizational process.
 2. Select the **General** tab and then the **Reference** subtab.
 3. In the **Business Document** frame, click **New**.
- The query dialog box appears.

4. Click **Find** .
You obtain a list of all business documents accessible with your profile.
5. Select the business document to be referenced and click **Connect**.
The document appears in the list of documents of the organizational process.

Referencing business documents (Web Front-End)

To reference a document relating to an object:

1. Open the properties of the object that interests you.
2. Click **General > References**.
3. In the **External Reference** section, click **New**.
The query dialog box appears.
4. Click **Find** .
You obtain a list of all business documents accessible with your business role.
5. Select the org-unit that interests you and click **Connect**.
The document appears in the list of business documents.

Deleting Business Documents

You can however delete:

- a business document
- a business document version

 *Note that a business document must have at least one version to function, and that a version cannot exist independently of a business document.*

To delete a business document:

1. Right-click the business document and select **Delete**.

 See ["Accessing Business Documents", page 430](#).

A window appears listing the document versions you are authorized to delete.

2. Select the business documents and/or business document versions you wish to delete and click **Delete**.
The business documents disappear from the object lists to which they were connected. The file managed by **HOPEX** remains however in the business documents storage directory.

 For more information on the storage directory, see ["Storage", page 428](#).



PROJECTS IN HOPEX



HOPEX is used to define a project and create its scheduling diagram. A methodological framework for project management is proposed.

 *A project consists of a set of tasks entrusted to a team, which transforms a system or part of a system with the aim of achieving a given objective.*

The following points are covered here:

- ✓ "The Project Scheduling Diagram", page 440
- ✓ "Projects", page 444
- ✓ "Project Type and Methods", page 450
- ✓ "Project Creation Wizard", page 456

THE PROJECT SCHEDULING DIAGRAM

A project scheduling diagram shows sequencing of the different phases of a project, or of the sequential linking of projects between themselves.

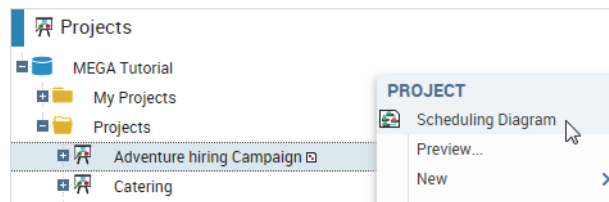
The scheduling diagram is available with all the products in the **HOPEX** suite. It allows you to describe the sequencing of your organization, architecture, integration or development projects in conjunction with a formalized framework with a method.

Opening a Project Scheduling Diagram

Open a diagram in the workspace

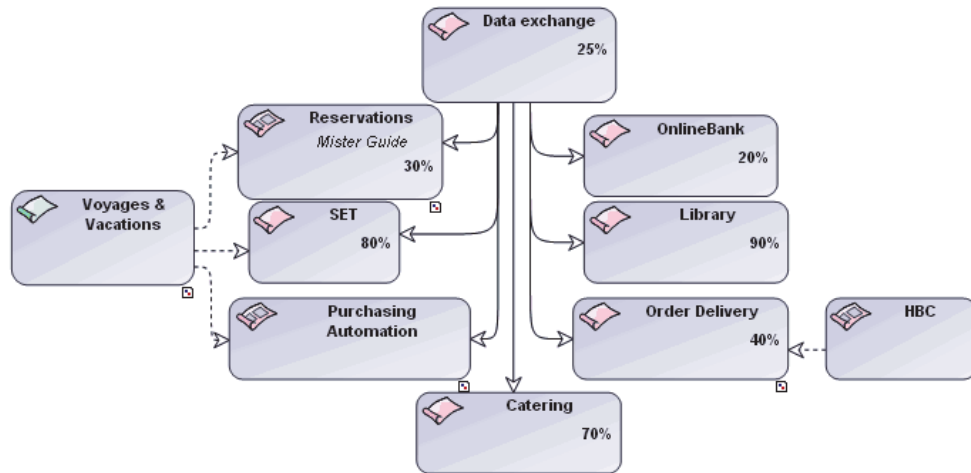
To access the diagram that describes a project:

- 1 In the **Projects** navigation window, right-click the repository name and select **Scheduling Diagram**.



The project scheduling diagram appears.

Display an example



"Voyages and Vacations" project scheduling diagram

The sequencing order of projects is represented by solid lines.

In the example above, the "Data exchange" project is a prerequisite for the other projects.

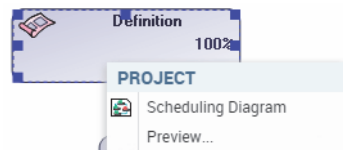
Splitting of a project into sub-projects is represented by dotted lines.

The "Voyages and Vacations" project comprises three sub-projects: "Reservations", "SET" and "Purchasing Automation".

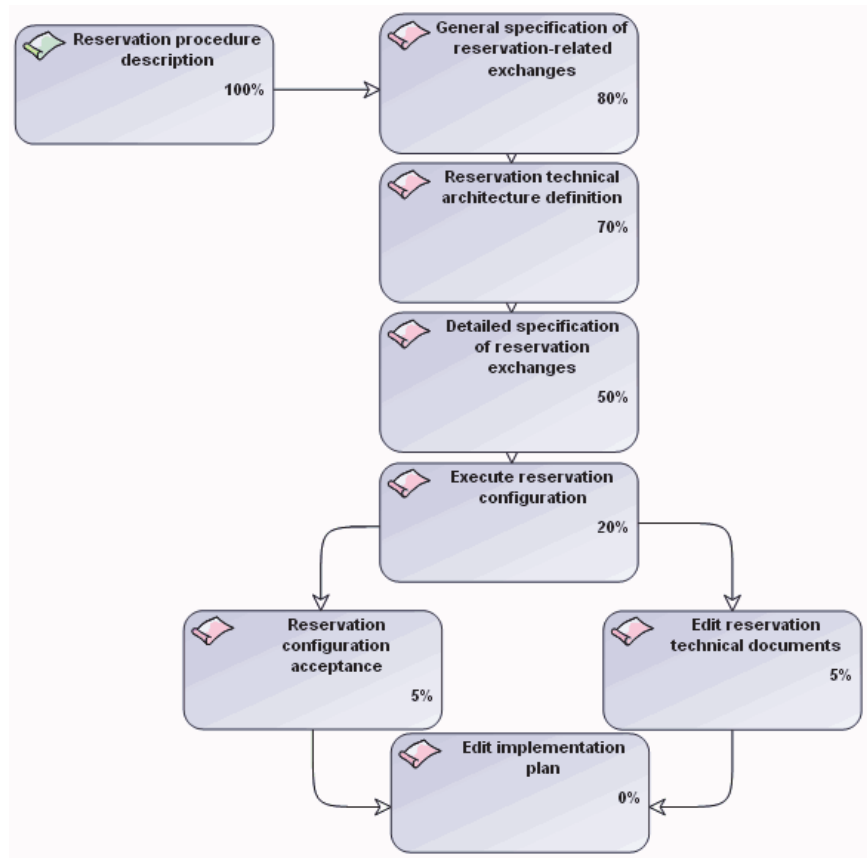
Opening a diagram from another diagram

The "Reservations" project is itself described by a diagram.

You can open the diagram from the pop-up menu of the project.



The "Reservations" project scheduling diagram appears.



"Reservations" project scheduling diagram

This diagram presents the various phases of the "Reservations" project with their progress percentage.

This diagram specifies that:

- description of reservation procedures is completed
- essentials of definition of technical architecture and general and detailed specifications have been carried out
- configuration has begun

Still to be carried out are acceptance and the editing of technical documents and deployment plan.

Creating a New Project Diagram

To create a new project diagram with **HOPEX Web Front-End**:

- 1 Right-click the project icon and select **New > Project Scheduling Diagram**.
An empty diagram opens.

PROJECTS

Creating Projects

Creating a project from the navigator

To create an object from a library:

1. Select the **Projects** navigation window.

 The "Projects" folder presents all the projects contained in the repository. The "My Projects" folder presents projects linked to the user. You can drag-and-drop a project from the "Projects" folder to the user folder. A project created directly in the user folder will also automatically be found in the "Projects" folder.

2. Select **New > Project**.

The **Create Project** dialog box appears.

3. Enter the **Name** of the project.

4. Click **OK**.

The project is created and added to the list of projects in the menu tree.

 In the project creation wizard, you can choose to base your project on a project type and on a *method*. To do this, select **Next** instead of **OK**. For more details on the project creation wizard, see "[Project Creation Wizard](#)", page 456.

 A method represents a series of actions carried out to achieve a goal. A method is described by a series of phases.

Creating a project in a diagram

To create a project in a diagram:

1. In the insert toolbar, click **Project** .
2. Then click in the diagram work area.
The **Create Project** dialog box appears.
3. Enter the name of the project.
4. Click **OK**.

Links Between Projects

Interconnecting projects

In a project scheduling diagram, you can easily interconnect different projects.

To connect projects:

1. In the insert toolbar, click the reel.

2. Click on the first project and, keeping the mouse button pressed down, draw a line to the second.



☛ If the "Composition" view is activated, an intermediate dialog box appears in which you must select a link type. For more details, see ["Splitting a project", page 445](#).

The direction of the link is important. In the case above, the link indicates that "Project 1" precedes "Project 2".

If you draw the arrow in the wrong direction, you must delete the link.

To delete the link:

1. Right-click the link.
2. Click **Delete**.

Creating a project by linking with other projects

To create a project linking it with two other projects:

1. Click **Project**.
2. Click on the first project and, keeping the mouse button pressed down, draw a line to the second.



The new project is created and connected to the two others.

Splitting a project

To split a project:

1. Select **Views > Views and Details**.
2. In the dialog box that opens, select the **Splitting** check box then click **OK**.

☛ See also ["Restricting and Extending Managed Object Types", page 75](#), for more details on display of views.

3. Draw a link between two sub-projects.
The **Create Link** page appears.

It offers a choice between a "Next Project" link which indicates a sequence between two projects, and a "Project Step" link which indicates splitting.

4. Select the "Project Step" link. A dotted arrow line is displayed between the two projects.



😊 An alternative approach to project splitting is via **New > Sub-Project**.

Describing a project

Project Characteristics

To specify characteristics of a project:

1. Open the project properties dialog box.

2. Select the **Characteristics** tab.

Properties of Adventure hiring Campaign (Characteristics)

General Characteristics Sub-Projects Deliverables Content Configuration Depl

Local name: Adventure hiring Campaign

Owner: Library Human Resources

Current State:

Life Cycle Definition:

Project type:

Chosen method:

PARTICIPANTS

Work load:

Progress Percentage:

Begin Date:

End date:

OK Cancel Apply

3. In the **Characteristics** tab you can modify the **Name** of the project and define:

- the *project type* to which the project corresponds.

A project type defines project typology such as description of a business process, mapping or development of applications, etc. A project type can be implemented using one or several methods.

For more details on project types and methods, see "[Project Creation Wizard](#)", page 456.

- The **Workload** necessary for execution of the project and its **Progress Percentage**.
- Project start and end dates.

Project Content

In the project properties dialog box, from the **Content** tab, you must declare all objects that will be impacted by the project. These are objects that will be presented to the different project participants as the project progresses.

Identifying project participants

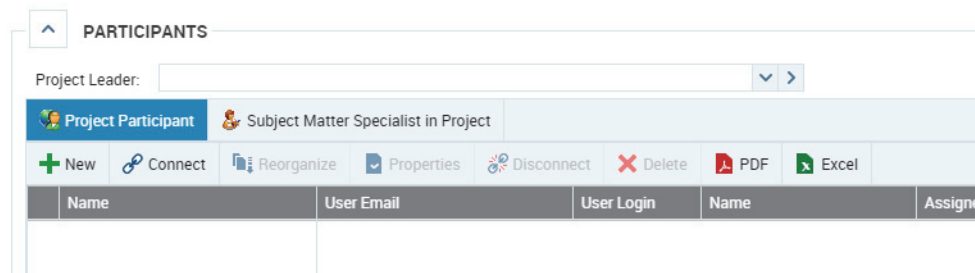
In the project properties dialog box, you can specify information concerning project participants.

Participants are the project head, modeling participants and business specialists, who will validate modeled objects (such as capabilities or processes).

To specify main participants of a project:

1. Open the project properties dialog box.

2. Select the **Characteristics** tab and expand the **Participants** frame. There are three types of participant:
 - The **Project Head**, who is responsible for the project and executes the following tasks:
 - Identifies the different project org-units: **project participants, owners, business specialists.**
 - Assignment of participants in project steps.
 - The project head is responsible.
 - Project status management.
 - Evolution project creation.
 - The **Project Participant** is a generic role enabling assignment of a user to a project.
 - The **Business Specialist** assigned to the project is the main user of the solution. Intervenes on the process architecture at each project phase.



☛ If the **Business Person** option is enabled, the **Participants** tab is available. For more details, see ["How to manage options concerning business persons and \(system\) persons?"](#), page 505.

Project Objectives and Indicators

In the project properties dialog box you can also specify objectives and indicators.

Project Objectives and Requirements

Project objectives are specific to a project, for example: "Project duration must not exceed six months" or "Project must implement an Agile method".

An objective is a goal that a company or organization wants to achieve, or is the target set by a process or an operation. An objective allows you to highlight the features in a process or operation that require improvement.

☛ For more details on the use of project objectives and requirements, see report ["Objectives and Requirements"](#), page 461.

Project requirements are the constraints imposed, for example: "Project must be executed using new version of Visual Studio" or "Project must be executed without intervention of external company".

A requirement is a need or expectation explicitly expressed, imposed as a constraint to be met within the context of a project. This project can be a certification project or an organizational project or an information system project.

The objectives and requirements assigned to a project should be distinguished from objectives and requirements assigned to capabilities, processes and applications handled by the project (which appear in the project **Content** tab).

To specify objectives and requirements assigned to a project:

1. In the project properties dialog box, select **Objectives and Requirements > Objectives and Requirements**.
2. Specify the links **Assigned Objective** and **Imposed Requirement**.

Project Indicators

In the project properties dialog box, from the **Supervision > Supervision** tab, you can specify information concerning project indicators.



An indicator is a measure of achievement of an objective, impact of a risk factor, frequency and impact of a risk, effectiveness of a control, etc.



For more details on the use of project indicators, see report ["Objectives and Indicators"](#), page 462.

PROJECT TYPE AND METHODS

HOPEX proposes functions simplifying the management of enterprise process and architecture modeling projects.

A project can be built based on a Project Type. Each project type is connected to at least one method, which describes the phases of project implementation.



A project type defines project typology such as description of a business process, mapping or development of applications, etc. A project type can be implemented using one or several methods.



A method represents a series of actions carried out to achieve a goal. A method is described by a series of phases.



A phase is an operational activity that participates in production of the deliverables of the approach. It can be an activity related to production, verification, delivery, etc.



For more details on the creation of projects from a project type and method, see ["Project Creation Wizard"](#), page 456.

The Phase Scheduling Diagram

A phase scheduling diagram describes sequencing of the different phases of a method.



A method represents a series of actions carried out to achieve a goal. A method is described by a series of phases.



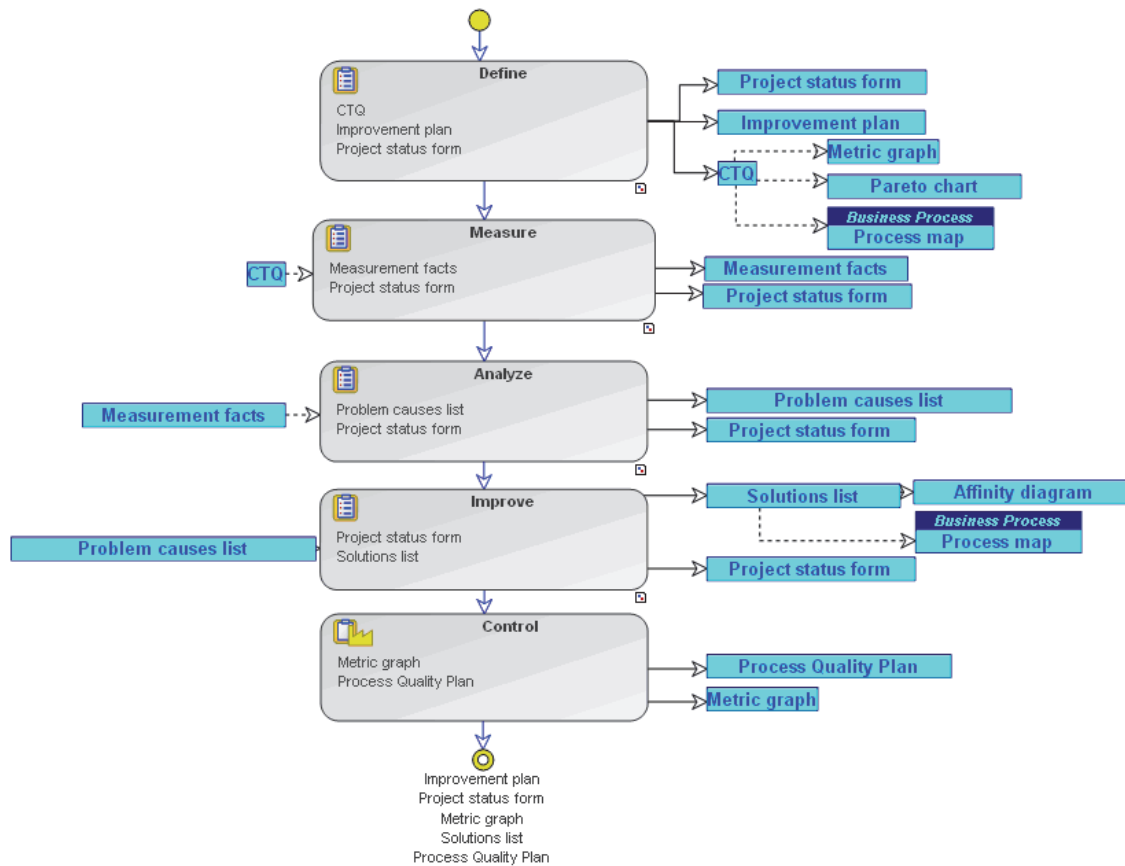
A phase is an operational activity that participates in production of the deliverables of the approach. It can be an activity related to production, verification, delivery, etc.

Accessing diagrams

To access the diagram that describes a method:

1. In the **Methodology** navigation window, expand the "Methods" folder.

- Right-click the "Six Sigma" method for example, and in its pop-up menu, select **Phase Scheduling Diagram**.
The phase scheduling diagram opens.



"Six Sigma" Method Phase Scheduling Diagram

It presents the sequencing order of phases and the deliverables expected at input and output of each of these phases.

In the example above, the first phase of the method is "Define" and the output deliverables of this phase are "Project Status Form", "Improvement Plan" and "CTQ".

☛ A phase sequencing diagram can be represented in standard notation or in BPMN notation, depending on the **Method Graphical Notation** defined in the **Characteristics** tab of a method.

Phase Properties

📖 A phase is an operational activity that participates in production of the deliverables of the approach. It can be an activity related to production, verification, delivery, etc.

To access phase properties:

1. Open its properties dialog box and select the **Characteristics** tab.
The following appears:
 - the **Phase Type** (for example, "Production"),
 - the optional character of the phase,
 - the **Implementing Method** list, used to provide the project manager, at project creation, with a list of implementation methods for this phase.

 You can for example consult the list of methods implemented in the "Business Process Mapping" phase. For more details on phase splitting, see ["Splitting a phase in a scheduling diagram"](#), page 454.
2. Select the **Details** tab to determine the list of sub-phases making up the phase.

 For more details on phase splitting, see ["Splitting a phase in a scheduling diagram"](#), page 454.
3. Select the **Resources** tab to determine the list of resources required to execute the phase.

 For more details, see ["Phase Resource"](#), page 452.
4. Select the **Deliverables** tab to determine the list of deliverables used and produced by the phase.

 For more details, see ["Phase Deliverable"](#), page 452.

Phase Resource

In **HOPEX**, phase resources can be of different types: "Skill", "Software", "Documentation" or "Training", for example.

To specify phase resource type:

1. Open the properties dialog box of the phase and select the **Resources** tab.
The list of resources required for execution of the phase is displayed.
2. Right-click a resource and open its properties dialog box.
3. Select the **Characteristics** tab and select the **Resource Type**.
4. Click **Finish**.

Phase Deliverable



A deliverable is an element produced, modified or used by a phase or method (example:

A **deliverable** enables specification of the list of elements expected at input or output of a phase. In **HOPEX**, these deliverables can be represented by objects of different types:

- a **Report Template**
- a **Report Template (MS Word)**
- a **Book**
- a **Diagram**
- an **External Reference**
- a **Business Document**

 The list of deliverables expected at phase input or output is accessed from the **Deliverables** tab of the phase properties dialog box. For more details on phase properties, see ["Phase Properties"](#), page 451.

Methods

A *method* is described by a phase scheduling diagram, but also by links between these *phases*, by *deliverables* and resources.

 A method represents a series of actions carried out to achieve a goal. A method is described by a series of phases.

 A phase is an operational activity that participates in production of the deliverables of the approach. It can be an activity related to production, verification, delivery, etc.

 A deliverable is an element produced, modified or used by a phase or method (example:

Creating a method from the navigator

To create a method from the navigator:

1. In the **Methodology** navigation window, right-click the "Methods" folder and select **New > Method**.

 The "Methods" folder contains all methods included in the repository.

The **Creation of Method** dialog box appears.

2. Enter the **Name** of the method.
3. Click **OK**.
The method is created and added to the list of methods.

Creating a phase in a method

You can create a phase in a method from the navigator:

1. In the **Methodology** navigation window, right-click the method and select **New > Phase**.

To create a phase in a method from the phase scheduling diagram:

1. Depending on the type of phase you want to create, click one of the following buttons in the objects toolbar: **Begin** , **Production** , **End** , **Verification**, **Delivery** or **Milestone**.
2. Then click in the diagram work area.
The **Creation of Phase** dialog box appears.
3. Enter the name of the phase.
4. Click **Finish**.

Links between phases

In a phase scheduling diagram, you can easily interconnect different phases.

To connect projects:

1. In the insert toolbar, click the reel.
2. Click the first phase and, keeping the mouse button pressed down, draw a line to the second.

 If the "Sub-Phases" view is activated, an intermediate dialog box appears in which you are asked to select a link type. For more details,

see ["Splitting a phase in a scheduling diagram"](#), page 454.

Splitting a phase in a scheduling diagram

To split a phase:

1. Select **Views > Views and Details**.
2. In the dialog box that opens, select the **Sub-phase** check box, then click **OK**.
3. Draw a link between two phases.
The **Create Link** page appears.
It offers a choice between a "Next Phase" link which indicates a sequence between two phases, and a "Sub-Phase" link which indicates splitting.
4. Select the "Sub-Phase" link. A dotted arrow line is displayed between the two phases.

☛ The list of sub-phases of a phase is accessed from the **Details** tab of the phase properties dialog box.

☛ For more details on creating projects from a method, see ["Project Creation Wizard"](#), page 456.

Adding a participant to a method

To graphically specify the participants in phase implementation, you can insert participants in the diagram.

To create a participant:

1. Click the System **Participant**  button in the objects toolbar.
The participant appears in the diagram.
2. Click the name "Participant", press key <F2> and change the name of the participant.

To assign a phase to a participant:

1. Position a phase within the frame of the participant.
The frame of the participant is highlighted.

☛ When positioned, the phase is connected to the participant, which indicates that this participant executes this phase.

Project Types

A *method* can be implemented in a project by using a *project type*.

 A project type defines project typology such as description of a business process, mapping or development of applications, etc. A project type can be implemented using one or several methods.

☛ For more details on creation of projects from a project type and a method, see ["Project Creation Wizard"](#), page 456.

Accessing a project type

To access properties of a project type:

1. In the **Methodology** navigation window, expand the "Project Type" folder.

2. Right-click the "Business Process Modeling" project type for example and select **Properties**.
3. In its properties dialog box, select the **Methods** tab.
The list of methods proposed to implement this project is displayed.
4. Select the **Complements** tab to view the list of project contexts.



A **project context** can be a project type, a method or a deliverable.

Creating a project type

To create a project type from the navigation window:

1. In the **Methodology** navigation window, right-click the "Project Type" folder and select **New > Project type**.
The **Creation of a Project Type** dialog box appears.
2. Enter the name of the project type.
3. Click **OK**.
The project type appears in the list.

PROJECT CREATION WIZARD

HOPEX proposes a project creation wizard, making the best working method available to project teams.

Creating a Project with the Wizard

Use the project creation wizard to:

- select the *method* adapted to your needs.



A method represents a series of actions carried out to achieve a goal. A method is described by a series of phases.

- automatically initialize the structure of your project from *phases* specified in the method, associated resources and deliverables to be produced.



A phase is an operational activity that participates in production of the deliverables of the approach. It can be an activity related to production, verification, delivery, etc.

This wizard can be of particular value for deployment of projects in your enterprise.

To benefit from assistance in creation of your project:

1. Create a project.

A wizard starts. This lets you create the project menu tree and a project sequence diagram. It links the project and its sub-projects to the corresponding *methods* and *phases*.

2. Indicate a **Name** for the project and click **Next**.

☛ If you do not wish to take advantage of assistance in creation of your project, click directly on **OK**.

The next dialog box allows you to select a **project type**.

Creation of Project - Choose a project Type

Local name:

List of project types:

Name ▲	Frame
Application Modeling	
Business Architecture	Busin
Business process modeling	
Enterprise Architecture Management	
Enterprise Risk Management	
Process improvement	
Strategy Analysis	

Previous Next OK

3. For example, select "Business Process Modeling".

☛ You need not necessarily select a project type.

4. Click **Next**.

The next dialog box proposes a list of methods. This list is restricted depending on the previously selected project type.

☛ For more details on the list of methods implemented in a dictionary graph diagram, see "[Accessing a project type](#)", page 454.

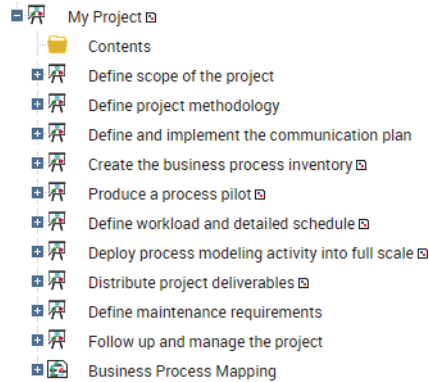
5. For example, select "MEGA::Business Process Mapping".

6. Click **OK**.

The wizard creates as many sub-projects as there are phases in the selected method. If a phase is supported by just one method, the sub-project structure is also created.

For each phase supported by several methods, the wizard automatically proposes the selection of possible methods.

When the project has been created, it contains as many sub-projects as there are phases in the method.



Using the Wizard on a Sub-Project

If a sub-project is associated with a phase that can be implemented by several methods, you can use the wizard to initialize the sub-project.

To run the wizard on a sub-project:

1. Select **New > Create sub-projects from a method**.
The wizard proposes methods available at this stage.
2. Select a method and click **Finish**.

Modifying Projects

To modify a project:

1. Open the project properties dialog box and select the **Sub-project** tab.
The list of sub-projects appears.
2. You can delete or add sub-projects.

Accessing Help at Each Project Stage

In the project editor or in the project properties dialog box, you can obtain help at any time when this is linked to a phase and/or method.

Explanations are provided as a function of the method and/or phase indicated in the project properties dialog box. These explanations appear in the **Method** tab. Example of information given: what deliverables should be produced, what skills are required?

When you modify methodological type information concerning the project (its method or phase for example), this tab is automatically updated.

Phase 'Define '

The project step Définir matches the Define phase of the Six Sigma method.

It is extremely important to start a Six Sigma project by clearly defining the problem. Understanding of the project scope and precise definition of the steps involved provide the project rules: the duration, elements to goals and the tools and personnel provided to achieve them.

Deliverables

Produced Deliverables

This table lists the deliverables that should be produced as the results of the project step.

Deliverables(5)		
Name	Comment	Template
 CTQ	CTQ is an acronym for Critical To Quality . It is sometimes called CTC (Critical To Customer). CTQ is an important customer criterion that must be used to evaluate business process quality or improvement.	
 Gantt chart	(*) A Gantt chart is a horizontal bar chart developed as a production control tool in 1917 by Henry L. Gantt, an American engineer and social scientist. Frequently used in project management, a Gantt chart provides a graphical illustration of a schedule that helps to plan, coordinate, and track specific tasks in a project. Gantt charts may be simple versions created on graph paper or more complex automated versions created using project management applications such as Microsoft Project or Excel.	
 Improvement plan	Defines the next steps necessary to achieve success in the expected improvements.	

OBJECTIVES AND REQUIREMENTS



HOPEX enables definition of objectives for each project. Indicators grouped in a dashboard enable evaluation of the extent to which these objectives are achieved. Project requirements can also be specified.

☛ To access the features offered for objectives and requirements, you must ensure that the **Objectives and requirements modeling** option is checked (**Options > Business process and architecture modeling**).

- ✓ "Objectives and Indicators", page 462
- ✓ "Managing Requirements", page 464
- ✓ "Objective and Requirement Diagram", page 467
- ✓ "Cause-and-Effect Diagram", page 470

OBJECTIVES AND INDICATORS

Objectives of a Project



An objective is a goal that a company or organization wants to achieve, or is the target set by a process or an operation. An objective allows you to highlight the features in a process or operation that require improvement.

An objective can be quantitative (directly measurable), or it can be qualitative.

- Reduce order delivery time (quantitative objective)
- Improve product quality (qualitative objective)
- Improve customer satisfaction (qualitative objective)

To specify the objective(s) of the project:

- 1 In the properties dialog box of the project, select the **Objectives and Requirements** tab and select the **Objectives and Requirements** sub-tab.

You can define:

- **Achieved Objective:** objective(s) achieved by the project, without necessarily having been initially assigned. Can be owned by another object, for example a process improvement objective.
- **Assigned Objective:** objective to which the project must respond, specific to the project.

Indicators



An indicator is a measure of achievement of an objective, impact of a risk factor, frequency and impact of a risk, effectiveness of a control, etc.

For the quantitative objectives, the indicator(s) are generally easy to find.

To assess to what extent qualitative objectives are achieved, specific indicators may need to be created.

Indicators are used to ensure that the solution proposed meets set objectives and is viable in the long term.

Examples of indicators

Objective	Type	Indicators
Reduce order delivery time	Quantitative	Order delivery time
Improve quality of the product	Qualitative	Number of anomalies indicated by customers
Improve customer satisfaction	Qualitative	Percentage renewal of maintenance associated with products Return rate of products on loan

Accessing indicators

Indicators are not visible by default.

To display indicators in the properties of an objective:

1. Open the **HOPEX** options dialog box.
 - ☛ To, access the options dialog box, see:
 - ["Managing User Options \(Windows Front-End\)", page 60](#)
 - ["Managing User Options \(Web Front-End\)", page 44](#)
2. Select the **Business Process and Architecture Modeling** folder.
3. In the right pane, select option **Supervision**.

To specify indicators associated with an objective:

1. In the properties dialog box of the objective, select the **Supervision** tab.

Dashboard

To ensure control of the enterprise, it is necessary to group the relevant indicators in a dashboard.

A dashboard enables preparation of a list of objectives and indicators required for control of an enterprise business process, application or org-unit such as a service.

The dashboard concept can be accessed in the properties dialog box of the main objects used in project control:

- Business Processes and Organizational Processes
- Org Unit
- Applications

MANAGING REQUIREMENTS

Requirement management is the set of activities enabling confirmation that the specifications and therefore the requirements of the client are satisfied.

Requirements are constraints that significantly influence the project. Any solution proposed to achieve the objective must satisfy the imposed requirements.

Accessing Requirements

To access requirements:

1. Open the **HOPEX** options dialog box.
 - ☛ *To, access the options dialog box, see:*
 - ["Managing User Options \(Windows Front-End\)", page 60](#)
 - ["Managing User Options \(Web Front-End\)", page 44](#)
2. Click **Business Process and Architecture Modeling**.
3. In the right pane of the window, select the **Objectives and requirements modeling** check box.

Requirements: Concepts Reminder



An objective is a goal that a company or organization wants to achieve, or is the target set by a process or an operation. An objective allows you to highlight the features in a process or operation that require improvement.



An indicator is a measure of achievement of an objective, impact of a risk factor, frequency and impact of a risk, effectiveness of a control, etc.



A requirement is a need or expectation explicitly expressed, imposed as a constraint to be met within the context of a project. This project can be a certification project or an organizational project or an information system project.

Creating Requirements

To create a requirement:

1. Right-click the project concerned and select **New > Requirement**.
 - ☛ *You can also create requirements from the explorer.*
2. In the creation of requirement dialog box, enter the name of the requirement and click **OK**.

Defining properties of the requirement

Requirement type

There are several types of requirement:

- Organizational
- Client expectation
- System
- Technical
- Business
- Legal or regulatory

☛ According to standard ISO 9000: 2015, "a requirement is a stated need or expectation, normally implicit, or imposed". Standard ISO 9000 highlights "client expectations" but in the context of a project, other requirements should be considered.

In a diagram, the type is indicated in the form of requirement.

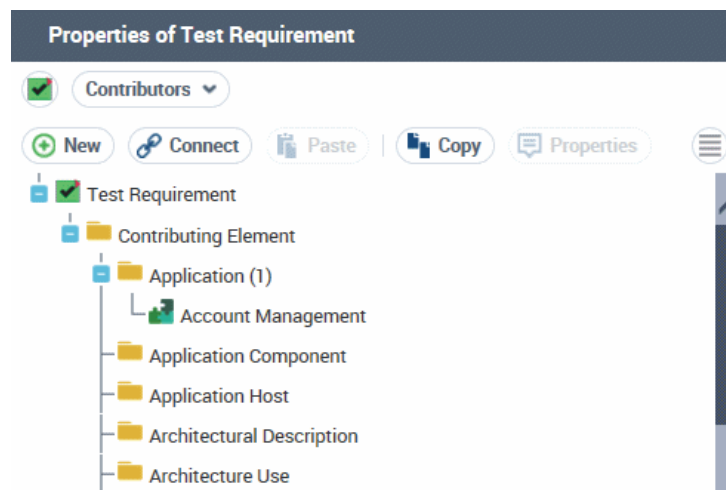
Requirement priority

Priority can be:

- Low
- Medium
- High

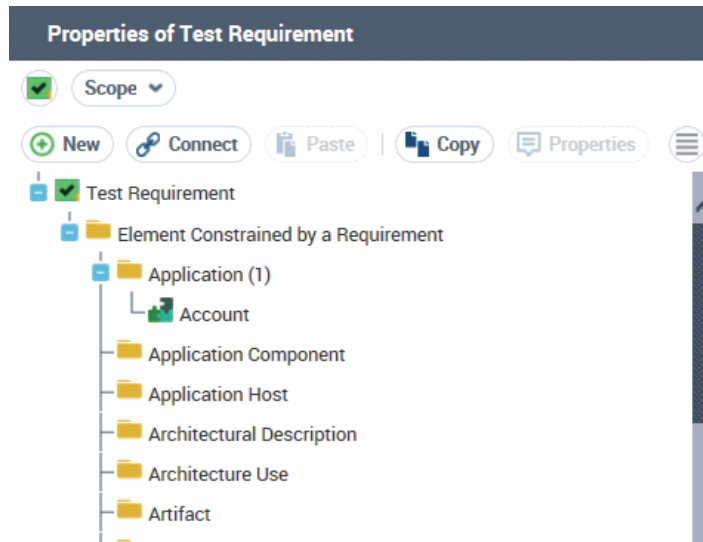
Satisfaction of the requirement

A process, operation, application, service, etc., can **contribute** to satisfaction of a requirement.



Requirement scope

It is possible to specify which elements are **constraints** of the requirement.



OBJECTIVE AND REQUIREMENT DIAGRAM

The objective and requirement diagram explains the connection between:

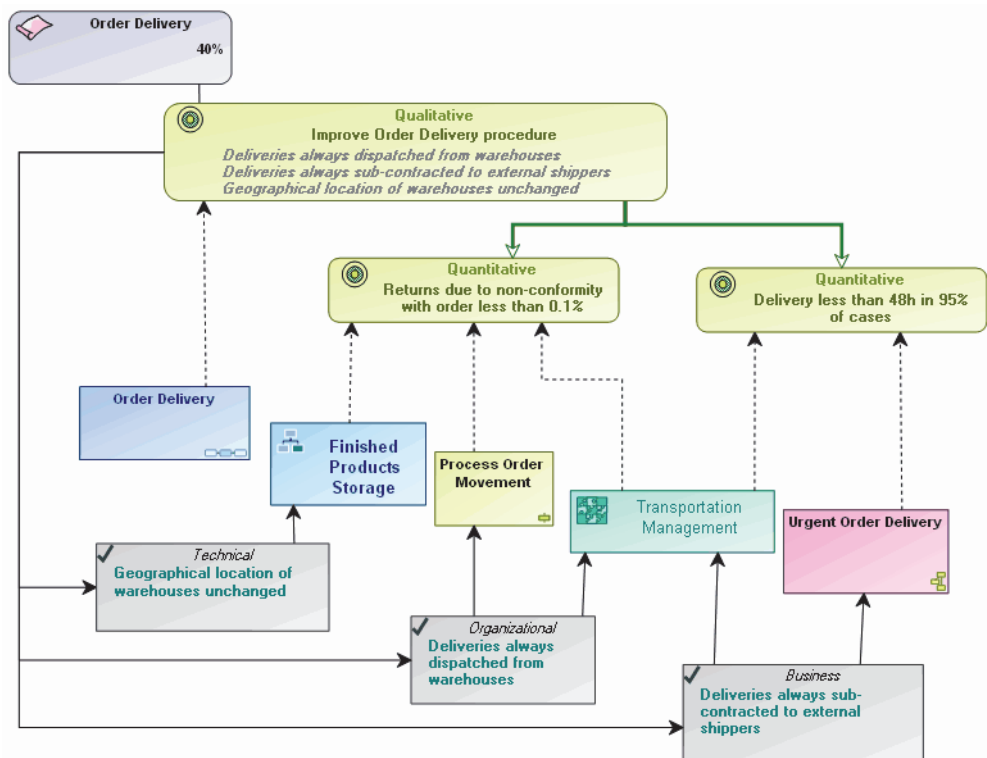
- elements concerned by an objective or constrained by a requirement.
- elements that contribute to achievement of an objective or satisfaction of a requirement.

Creating a project objective and requirement diagram

To create a project objective and requirement diagram:

1. In the pop-up menu of the project, select **New > Diagram**.
2. Select "Project Objective and Requirement Diagram" and click **Create**.

Here is an example of a diagram:



The objective of the Order Delivery project is to improve the order delivery procedure. This qualitative objective is

too vague to be operational. So it is split into two sub-objectives that have the advantage of being quantifiable. The first objective is to ensure delivery in less than 48 hours in 95% of cases.

The "Urgent Order Delivery" organizational process and the "Transportation Management" application are the main potential contributors to achievement of this first objective.

The second objective is concerned with preserving the operational quality of the order-delivery procedure. Finished Products Storage must assure conformity of the delivery with respect to the order, particularly when processing movement orders. The indicator used to verify efficient operation is the rate of returns due to non-conformity with the order. The aim is to contain the return rate at below 0.1%.

The Project Manager's room for maneuver is restricted by a certain number of requirements that were assigned at the start of the project.

geographical distribution of warehouses cannot be modified for this project. This requirement applies to finished products stores located in the warehouses.

The second requirement is an organizational choice: deliveries always leave from depots. This should be taken into account when processing movement orders using the Transportation Management application.

The third is an enterprise choice: delivery is always sub-contracted to outside shippers since the company wishes to concentrate on its core business and does not want to disperse its energies in related activities. This requirement should be respected in reorganization of the "Urgent Order Delivery" organizational process and in modifications to the Transportation Management application.

Creating the requirement diagram of an objective

To create the requirement diagram of an objective:

- 1 In an objective and requirement diagram, right-click an objective and select **New > Objective Requirement Diagram**.

Issues

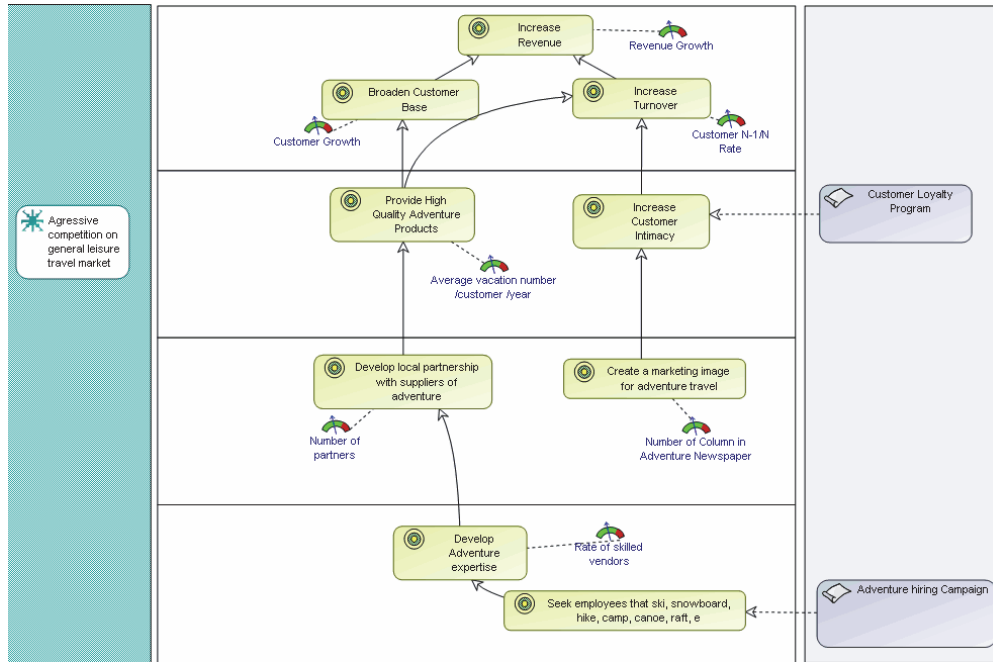
The *objectives* can be connected to issues to indicate the reason for which they are implemented in the organization strategy.



An issue is an event or a difficulty encountered within the context of a process, an application or an enterprise strategy. Issues are dealt with in the framework of projects according to objectives aimed at resolving them.

Perspectives

Perspectives enable classification of objectives by type, and representation of the sequencing of these objectives.



Example of diagram with Balanced ScoreCard perspectives

HOPEX provides a library (in file BSC.mol) that includes the four strategic perspectives proposed by the balanced scorecard. New perspectives can be created, for example "Regulatory" or "Environmental", according to requirements of the enterprise.

A perspective is one of the dimensions on which an enterprise bases its vision and strategy. The Balanced Scorecard includes four perspectives that should be balanced: Financial, Customer, Internal Business Process and Learning and Growth.

To view perspectives:

- 1 In the properties dialog box of the project, select **Objectives and Requirements**.

A perspective can be placed in a swimlane to improve diagram graphical presentation.

For more details on swimlanes, see ["Using Swimlanes"](#), page 80.

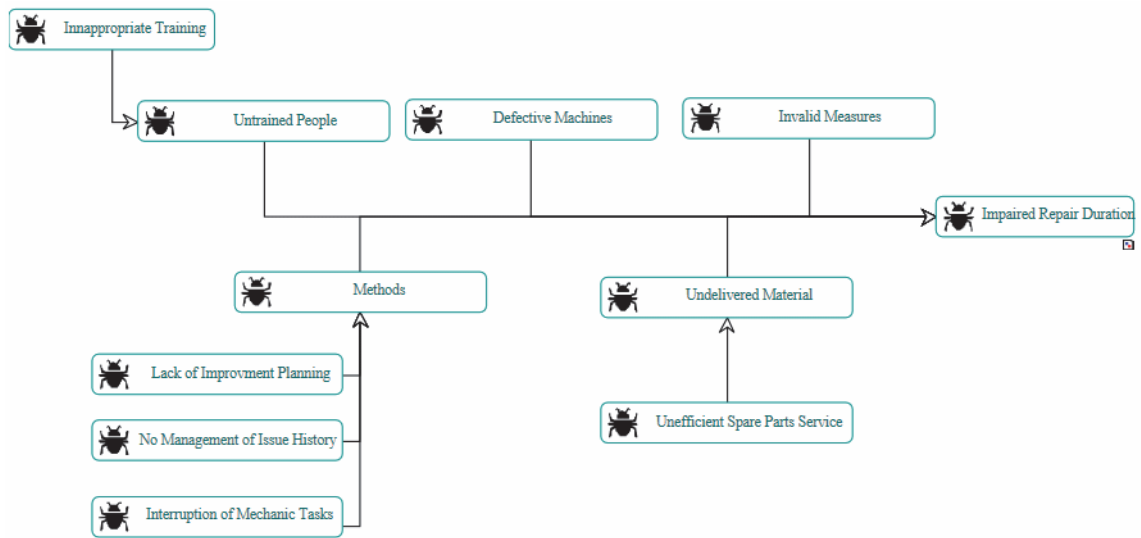
CAUSE-AND-EFFECT DIAGRAM

To facilitate decisions in a strategic analysis context or in the case of business process improvement, it is necessary to go back to the source of the issues we are seeking to solve.

The cause-and-effect diagram (also called Ishikawa diagram or fishbone diagram) is a tool that enables identification of the possible causes of an observed effect and therefore determination of a means of solving the issues.

The cause-and-effect diagram is particularly useful for displaying the results of brainstorming sessions.

Having drawn a cause-and-effect diagram, it is possible to determine objectives and to carry out projects to solve the identified issues.



Example of cause-and-effect diagram

Creating a Problem from a Project

To create a problem from a project:

1. In the **Projects** navigation pane, right-click the repository name and select **New > Problem**.
The problem creation page appears.
2. Enter the **Name** of the problem.
3. Click **OK**.

Properties of an Issue

- 1. Open an issue properties dialog box.

You can best define the problem using its characteristics.

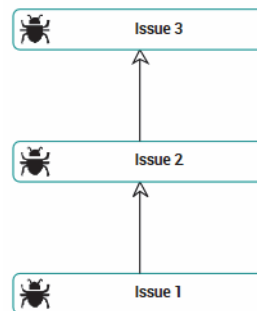
Issue type

Issue can be classified by **Issue type**:

- Machine
- Material
- Measurement
- Method
- Person

Issue causes and effects

Consider the sequencing of the following issue:



"Issue 2" has "Issue 1" as its cause and "Issue 3" as its effect.

Issue repercussions and solutions

The **Repercussion** tab of the issue properties dialog box allows you to view which objects are affected by the issue.

The **Solution** tab of the issue properties dialog box allows you to specify objectives to be set as well as the projects that will enable solution of identified issues.

Creating a Cause-Effect Diagram from a Problem

To create a cause-and-effect diagram:

1. In the **Projects** navigation pane, right-click the repository name and select **New > Problem**.
The problem creation page appears.

2. Enter the **Name** of the problem.
3. Click **OK**.
4. In the workspace, select **View > Navigation Windows > Diagrams**.
5. In the **Diagrams** navigation window, right-click the "Cause-and-Effect Diagram" folder and select **New > Diagram**.
The **Create Cause-and-Effect Diagram** dialog box opens.
6. In the "Described object" text box, select or create an **Issue** using the arrow.
7. Click **OK**.
To open the diagram, you can double-click the newly created diagram icon.

Three object types are available by default in a cause-and-effect diagram: Issue, Objective and Requirement.

 *Issues can be attached to most objects: processes, activities, operations, applications, services, etc.*

In this type of diagram, the issues are sequenced by cause to effect links.

DEFINING THE ENVIRONMENT FOR SOLUTIONS



This chapter describes how to define the environment used in the following solutions: **HOPEX Enterprise Risk Management**, **HOPEX LDC**, **HOPEX Internal Audit**, **HOPEX Internal Control**, **HOPEX Compliance**.

☛ Certain types of environment objects or characteristics presented cannot be used in all solutions.

The **environment** structures how risks are viewed and addressed by organization collaborators, more particularly risk management philosophy and risk appetite, and the environment in which the organization operates. At this stage it is possible to determine:

- ✓ an inventory of what exists in the enterprise (processes, entities, control systems, responsibilities, applications)
- ✓ the list of strategic objectives of the organization and the associated requirements
- ✓ internal environment data assuring risk management.

Elements associated with the **Environment** desktop offer all users a global view of the organization. However, only certain profiles have the right to create or modify elements presented.

- ✓ "Libraries", page 474
- ✓ "Organization", page 475
- ✓ "Risks and Controls", page 481
- ✓ "Regulatory Environment", page 487
- ✓ "Financial Data", page 491
- ✓ "Enterprise Assets", page 493
- ✓ "RACI", page 496

LIBRARIES

Libraries are collections of objects used to split MEGA repository content into several independent parts. Two objects owned by different libraries can have the same name.

To manage libraries:

- 1 Depending on the HOPEX solution, select the desktop or the **Environment** navigation tab then **Libraries**.
➡ For more details on libraries, see ["Libraries", page 175](#).

ORGANIZATION

Organization of the enterprise is based on its major components, which are:

- processes

 A business process represents a system that offers products or services to an internal or external client of the company or organization. At the higher levels, a business process represents a structure and a categorization of the business. It can be broken down into other processes. The link with organizational processes will describe the real implementation of the business process in the organization. A business process can also be detailed by a functional view.

 An organizational process describes how to implement all or part of the process required to make a product or handle a flow.

- entities

 An entity can be internal or external to the enterprise: an entity represents an organizational element of enterprise structure such as a management, department, or job function. It is defined at a level depending on the degree of detail to be provided on the organization (see org-unit type). Example: financial management, sales management, marketing department, account manager. An external entity represents an organization that exchanges flows with the enterprise, Example: customer, supplier, government office.

- business lines

 A business line is a skill or grouping of skills of interest for the enterprise. It corresponds for example to major product segments, to distribution channels or to business activities.

- sites

 A site is a geographical location of an enterprise. Examples: Boston subsidiary, Seattle plant, and more generally the headquarters, subsidiaries, plants, warehouses, etc.

 the sites are described in **HOPEX IT Risk Management** for information purposes only. They are used in **HOPEX IT Portfolio Management**.

These components are presented in trees.

To access these components:

1. Select **Environment > Organization > Hierarchical View**.
Trees enable access to:
 - process
 - entities
 - organization business lines
2. Select an object in the tree that interests you.
The properties dialog box of the object appears on the right.
3. Specify properties or connect context objects.

Processes

To access the business processes tree:

- 1 In the **Environment** desktop, select **Organization > Hierarchical View > All processes**.

If you expand the folder of a process, you can display the sub-processes owned by the current process.

 The list of processes owned by a process is accessible in the properties page of the process, in the **Characteristics** tab, section **Sub-Processes**.

Process types

Available process types are:

- Business processes
- organizational process

The type is requested at creation of the process. The two types are distinguished by different icons in the trees and lists.

Business process

A business process enables description of what an enterprise does, ie. its business. It answers the question, "What?". It is essentially described by flow exchanges between the various activities of the enterprise.

Organizational process

An organizational process describes how to implement all or part of the process required to make a product or handle a flow.

Process characteristics

To access characteristics of a process:

- 1 Expand the **Characteristics** section of the properties pane of the of the process that interests you.

Business process control is the responsibility of persons with different functions.

- the **Owner** is responsible for global operation of the process in terms of effectiveness, profitability and security,
- the **Responsible** person takes decisions concerning evolution of the process, and informs on progress,
- the **Risk Assessor** is consulted when an action relating to risks is planned or executed on the process.

 The **Risk Assessor** field is available only with the solutions **HOPEX Enterprise Risk Management** and **HOPEX Internal Control**.

To specify business process control responsibilities:

1. In the properties dialog box of a business process, select the **Characteristics** tab.
2. Position the mouse on the **Owner** field for example and enter the first letters of the name.

3. Click the arrow at the right of the field and select **List Persons**.
The name of the selected person appears in the field.



*A person is defined by his/her name and electronic mail address.
The person can access an application after assignment of a connection
identifier. One or several business roles can also be assigned.*

4. When completed, click **Save** or select another tab in the properties dialog box to carry out further modifications.

Scope section of a process

A process can be linked to different component types.

- **Entities** that intervene in the process framework. For more details, see ["Entities", page 477](#).
- **Business Lines** that use the process services. For more details, see ["Organization Business Lines", page 479](#).
- **Risks** that relate to the process. For more details, see ["Risks", page 481](#).
- **Controls** that relate to the process. For more details, see ["Controls", page 484](#).
- **Incidents**
- **Action Plans**
- **Regulations** For more details, see ["Regulations", page 487](#).
- **Control Systems**

Other sections of a process

The properties page of a process presents the following sections:

- **RACI**: to present the persons responsible for the process. For more details, see ["RACI", page 496](#).
- **Objectives and Requirements**: for more details, see ["Objectives and Requirements", page 488](#).
- **IT**: IT resources are made available to processes to execute the operations necessary for their implementation. For more details, see ["Enterprise Assets", page 493](#).

Entities

An entity can be internal or external to the enterprise: an entity represents an organizational element of enterprise structure such as a management, department, or job function. It is defined at a level depending on the degree of detail to be provided on the organization (see org-unit type). Example: financial management, sales management, marketing department, account manager. An external entity represents an organization that exchanges flows with the enterprise, Example: customer, supplier, government office.

Accessing organization entities

To define the list of entities of your organization, **HOPEX** allows you to create the enterprise organizational chart.

To access the different organization entities:

1. In the **Environment** desktop, select **Organization > Hierarchical Views > Entities**.
2. Expand the root entity.
The list of entities making up the organization is displayed.

☛ The list of entities owned by an entity is accessible in the properties page of the entity, in the **Characteristics** tab, section-**Sub-Entities**.

Creating an entity

To create a new entity:

1. In the **Environment** desktop, select **Organization > Hierarchical Views > Entities**.
2. Open the properties page of the entity that owns the entity to be created.
3. In the **Sub-Entities** section, click **New**.
The entity creation page appears.
4. Enter the entity **Name** and click **OK**.
The new entity appears in the list.
5. Open the properties page of the entity created.
6. If necessary, modify the **Parent Entity**, which corresponds to the level in the tree at which you wish to create your entity.

☛ The **Parent Entity** field is automatically calculated according to the position of the entity in the tree.

7. Specify the **Level** of the entity in the organization:
 - "Division"
 - "Department"
 - "Service".
8. Specify the **Status**, "Active" or "Inactive" of the entity.
9. When completed, click **Save** or select another tab in the properties dialog box to carry out further modifications.

Risk assessor

To indicate the person responsible for risk assessment on the entity:

1. In the **Risk Assessor** field of the entity property page, select the person concerned.

☛ You must specify this field in the context of risk assessment by campaigns with **HOPEX Enterprise Risk Management**.

☛ This field is available only with the solutions **HOPEX Enterprise Risk Management** and **HOPEX Internal Control**.

Scope section

An entity can intervene in the framework of a process. It can be broken down hierarchically.

An entity can be connected to different component types.

- **Entities**: you can specify the entity responsible for a service or management, as well as functional dependency between two entities.
- **Business Processes** and **Organizational Processes** for which the entity intervenes. For more details, see "[Processes](#)", page 476.
- **Risks**, whose management is assigned to the entity. For more details, see "[Risks](#)", page 481.
- **Controls**, whose management is assigned to the entity. For more details, see "[Controls](#)", page 484.
- **Objectives and Requirements** assigned to the entity. For more details, see "[Objectives and Requirements](#)", page 488.

 Certain key documents, such as strategic plans, the business plan, annual reports, economic analyses and other relevant documentation related to the organization and its aims may be consulted to define its **objectives** and **requirements**.

- **Business Lines** for which the entity intervenes. For more details, see "[Organization Business Lines](#)", page 479.

 Depending on your rights, you may also see the **Action Plan** or incidents owned by the entity.

Organization Business Lines

The business lines overview presents the different businesses carried out by the enterprise.

 A business line is a skill or grouping of skills of interest for the enterprise. It corresponds for example to major product segments, to distribution channels or to business activities.

Accessing Business Lines

To access the different organization business lines:

- In the **Environment** desktop, select **Organization > Hierarchical Views > Business Lines**.

From this page you can view trees of business lines of the organization, consult their properties and create new objects.

 The list of business lines owned by a business line is accessible in the properties page of the business line, section **Sub-Business Lines**.

To access characteristics of a business line:

- Expand the **Characteristics** section of the properties pane of the business line that interests you.

Scope of Business Lines

A business line can be implemented by:

- **Org-Units**: for more details, see "[Entities](#)", page 477.
- **Applications**: for more details, see "[Applications](#)", page 493.
 Applications are not available in the **HOPEX Compliance** solution.
- **Risks**

A business line can be connected to different component types by, for example, **Business Processes** and **Organizational Processes**, which use services of the business line. For more details, see ["Processes", page 476](#).

☛ In **HOPEX IT Risk Management**, the **Scope** section is provided for reference terms only.

RISKS AND CONTROLS

To access risks of the organization:

- 1 In the **Environment** desktop, select **Risk Universe**.

 In **HOPEX** solutions, you can also access risk universe by selecting the **(Risk) Library** tab.

Risks

Accessing risks

To access risks:

- 1 In the **Environment** desktop, click **Risk Universe > Risks > All Risks**.

 The risks covered by a control system can be viewed in the **Scope** section of the control system page. For more details, see ["Controls", page 484](#).

To access the most important risks:

- 1 In the **Environment** desktop, click **Risk Universe > Risks > Key Risks**.

Risk characteristics

To access characteristics of a risk:

- 1 Select a risk from a list of risks or key risks and click the **Properties** button.

The properties page of the risk appears in the right pane.

On this page you can specify for the control:

- the risk identification **Code**
- the risk **Name**
- the fact that the risk is high level by selecting the **Key Risk** check box
- the risk **Owner**
- the risk **Identification Mode**

The risk could have been identified from:

- an "incident database"
- a "workshop"
- a "survey"
- an "audit"
- the risk **Description**

 the **Risk Status** appears grayed and cannot be modified since it is managed by the workflow associated with the risk. For more information, see **HOPEX Enterprise Risk Management**.

Risk scope

Risk scope enables definition of risk location. It relates to several component types:

- **Entities** concerned by the risk. For more details, see ["Entities"](#), page 477.



An entity can be internal or external to the enterprise: an entity represents an organizational element of enterprise structure such as a management, department, or job function. It is defined at a level depending on the degree of detail to be provided on the organization (see org-unit type). Example: financial management, sales management, marketing department, account manager. An external entity represents an organization that exchanges flows with the enterprise, Example: customer, supplier, government office.

- **Business Processes** and **Organizational Processes** exposed to the risk. For more details, see ["Processes"](#), page 476.



A business process represents a system that offers products or services to an internal or external client of the company or organization. At the higher levels, a business process represents a structure and a categorization of the business. It can be broken down into other processes. The link with organizational processes will describe the real implementation of the business process in the organization. A business process can also be detailed by a functional view.



An organizational process describes how to implement all or part of the process required to make a product or handle a flow.

- **Objectives and Requirements** expected related to risk management. For more details, see ["Objectives and Requirements"](#), page 488.



An objective is a goal that a company or organization wants to achieve, or is the target set by a process or an operation. An objective allows you to highlight the features in a process or operation that require improvement.



A requirement is a need or expectation explicitly expressed, imposed as a constraint to be met within the context of a project. This project can be a certification project or an organizational project or an information system project.

- **Applications**: for more details, see ["Applications"](#), page 493.



An application is a set of software tools coherent from a software development viewpoint.

- **Business Lines**: for more details, see ["Organization Business Lines"](#), page 479.



A business line is a skill or grouping of skills of interest for the enterprise. It corresponds for example to major product segments, to distribution channels or to business activities.

Risk analysis

The aim of risk analysis is to obtain a good understanding of risks.

Analysis of the risk should take into account:

- risk causes
- positive or negative risk consequences

The risk analysis phase associates a risk with:

- risk types
- risk factors
- consequences
- other risks

To analyze a risk:

1. Select a risk and open its properties.
2. In the **Characteristics** tab, expand the **Analysis** section.

A risk is characterized by:

- **Risk Types:** for more details, see ["Risk types", page 483](#).



A risk type defines a risk typology standardized within the context of an organization.

- **Risk Factors:** for more details, see ["Risk factors", page 484](#).



A risk factor is an element which contributes to the occurrence of a risk or which triggers a risk. Several risks can originate from the same risk factor. Examples: the use of a hazardous chemical product, the complexity of an application, the size of a project, the number of involved parties, the use of a new technology, the lack of quality assurance, the lack of rigor in requirement definition, etc.

- **Risk Consequences:** for more details, see ["Risk consequences", page 484](#).



A risk consequence can be positive or negative. It is associated with a type, which enables its characterization, for example: image, environment, employees.

- **Related Risks**
- **Incidents**



An incident is an event occurrence, internal or external, that has an impact on the organization. It is the basic element for collection of data concerning operational risk.

Risk types



A risk type defines a risk typology standardized within the context of an organization.

A risk type enables risk characterization. For example, a risk type can be regulatory, legal, technical, etc.

Breakdown of risk types will be specific to activities and will depend on the particular business line or activity. Generic risk types can be broken down to a greater or lesser extent into specific risk type levels.

It is important to have a risk type definition framework that is identifiable, measurable and manageable, and to limit the number of levels to assure usable nomenclature.

Validation of nomenclature should ensure that a risk defined in two different entities or activities will have the same definition and the same sense, therefore ensuring system consistency.

In that the system installed should also meet regulatory requirements, it will also be necessary to define a second nomenclature to meet declaration aspects and to enable exchanges with control authorities.

To create your own risk types:

1. In the **Environment** desktop, click **Risk Universe > Risks > Risk Types**.
2. In the pop-up menu of the "Risk Type" folder, select **New**.
3. Enter the name of the risk type and click **OK**.

The new risk type appears in the navigator menu tree.

 Similarly, you can create a sub-risk type from a risk type.

Risk factors

Many risk factors are defined within the framework of international, national or inter-professional regulations, or within the enterprise itself.

 A risk factor is an element which contributes to the occurrence of a risk or which triggers a risk. Several risks can originate from the same risk factor. Examples: the use of a hazardous chemical product, the complexity of an application, the size of a project, the number of involved parties, the use of a new technology, the lack of quality assurance, the lack of rigor in requirement definition, etc.

With each risk, you can associate one or more risk factors, sources of risks that have intrinsic potential to endanger organization operation. For example, dangerous chemical products, competitors, governments, etc.

Risk consequences

To define consequences associated with a risk:

1. In the risk page, **Analysis** section, **Risk Consequences** tab, click **New**. The consequence creation page appears.

 Since a risk consequence can relate only to a single risk, the **Risk** field is already entered with the current risk.

In the **Risk Consequences** section, you can specify the consequence identification Code

The consequence created appears in the list of consequences associated with the risk.

RACI on a risk

A risk properties page includes an **RACI** section to define the different persons responsible for risk management. For more details, see ["RACI", page 496](#).

Controls

To access controls:

1. In the **Environment** desktop, select **Risk Universe > Controls**.

Control characteristics

To access characteristics of a control:

- 1 Select the control that interests you and click the **Properties** button. The properties page appears in the right pane.

 The fields present can vary according to the solution used.

On this page you can specify for the control:

- its **Code** enabling unique identification of the control
- **Name**
- **Objective**
- **Owner**
- control importance if required, by selecting the **Key Control** check box.
- the **Control Nature**: you can choose from among the following:
 - Corrective
 - Detective
 - Preventive
- **Operational Cost** of control implementation.
- **Execution Mode** enabling specification of how the control is executed:
 - "Automatic": the control is executed automatically by an IT application.
 - "Manual": the control is executed manually by an organization entity.
 - "Semi-automatic": the control is executed by an organization entity using an IT application.
- **Status**
 - "Draft"
 - "Validated"

 You can fill in this field manually for information purposes. In **HOPEX Enterprise Risk Management**, there is no workflow on controls.

RACI on a control

A control properties page includes an **RACI** section to define the different persons responsible for control management. For more details, see ["RACI", page 496](#).

Control scope

Control scope enables definition of control location. It relates to several component types:

- **Business Processes** and **Organizational Processes** exposed to risks covered by the control. For more details, see "[Processes](#)", page 476.
- **Entities** concerned by controls. For more details, see "[Entities](#)", page 477.
- **Risks** covered by controls. For more details, see "[Risks](#)", page 481.
- **Requirements** expected related to risk management. For more details, see "[Objectives and Requirements](#)", page 488.
- **Control Types**: For more details, see "[Control Types](#)", page 486.
- **Operations**



An operation is an elementary step in an organizational process executed by an org-unit.

- **Accounts** : see "[Financial Accounts](#)", page 491.
- **Incidents**: depending on the solution, you can also view incidents (without being able to modify these).



An incident is an event occurrence, internal or external, that has an impact on the organization. It is the basic element for collection of data concerning operational risk.

Control Types

Control types enable specification of regulations that apply to a given control. Controls can be defined by referencing the control types defined in the risk and control system concerned.

A control nomenclature frequently used is that defined by the COBIT.

COBITS stands for "Control Objectives for Information and related Technologies".

COBIT is a framework of best practices that now integrates numerous other frameworks and has the support of a large number of world experts. Of the 34 processes defined in COBIT there are 318 corresponding control objectives for which detailed control practices have been identified. The proposed verification guide describes elements necessary for correct understanding of each process, specifies controls to be carried out, provides elements for assessment of conformity to best practices and assessment of risk of non-achievement of objectives.

To access control types:

- 1 In the **Environment** desktop, click **Risk Universe > Controls > Control Types**.

A list of control types appears.



A control type allows the classification of controls implemented in a company in accordance with regulatory or domain specific standards (Cobit, etc.).

REGULATORY ENVIRONMENT

The regulatory environment of the enterprise can comprise:

- regulations
- objectives
- requirements

To access components of the regulation environment:

- 】 In the Environment desktop, select **Regulatory Environment > Regulations**.

Regulations

Regulations to be considered can be:

- financial (SOX, LSF)
- sectorial (Basel II, Solvency II, Seveso II)
- linked to protection of persons for example.

 A regulation or policy is a set of directives, compulsory or not, defined by a government in a law, by standard bodies as "best practices" or as an internal policy in an organization.

☛ There can also be organization internal policies serving as a guide to governance.

☛ In this documentation, the term "Regulation" is used, whether it relates to an internal or an external regulation.

Accessing organization regulations

To access the list of regulations:

- 】 In the Environment desktop, select **Regulatory Environment > Regulations**.

The list of organization regulations is displayed.

Regulation Characteristics

To access general characteristics of a regulation:

- 】 In the page listing regulations, select that which interests you and click **Properties**.

You can consult or modify the characteristics of the regulation:

- **Regulation Code**
- **Application Begin Date** of the regulation
- **Application End Date** of the regulation

You can also:

- specify RACI elements: see ["RACI", page 496](#).
- define regulation scope:
 - Requirement

 A requirement is a need or expectation explicitly expressed, imposed as a constraint to be met within the context of a project. This project can be a certification project or an organizational project or an information system project.
 - Risk types

 A risk type defines a risk typology standardized within the context of an organization.
 - Risk factors

 A risk factor is an element which contributes to the occurrence of a risk or which triggers a risk. Several risks can originate from the same risk factor. Examples: the use of a hazardous chemical product, the complexity of an application, the size of a project, the number of involved parties, the use of a new technology, the lack of quality assurance, the lack of rigor in requirement definition, etc.
 - Risk consequences

 A risk consequence can be positive or negative. It is associated with a type, which enables its characterization, for example: image, environment, employees.
 - Control systems

 A control system is a set of controls that ensure risk prevention and management, application of internal operating rules, respect a law or regulation, or work towards achievement of an objective as defined by company strategy. Examples: quality control system, management control system, internal audit system.
 - Business lines

 A business line is a skill or grouping of skills of interest for the enterprise. It corresponds for example to major product segments, to distribution channels or to business activities.
 - Business and organizational processes

 A business process represents a system that offers products or services to an internal or external client of the company or organization. At the higher levels, a business process represents a structure and a categorization of the business. It can be broken down into other processes. The link with organizational processes will describe the real implementation of the business process in the organization. A business process can also be detailed by a functional view.

 An organizational process describes how to implement all or part of the process required to make a product or handle a flow.
 - Sub-regulations: within the **HOPEX IT Risk Management** framework.

Objectives and Requirements

To assure that evolutions of your organization meet strategic expectations of the enterprise, the main **HOPEX** concepts can be connected to requirements.

 A requirement is a need or expectation explicitly expressed, imposed as a constraint to be met within the context of a project. This

project can be a certification project or an organizational project or an information system project.

The first task is to inventory objectives involved and requirements imposed, and to connect these to the main organizational and technical components.

 *An objective is a goal that a company or organization wants to achieve, or is the target set by a process or an operation. An objective allows you to highlight the features in a process or operation that require improvement.*

Accessing objectives and requirements

To access the objectives tree:

- 1 In the **Environment** desktop, select **Regulatory Environment > Objectives**.
The hierarchy of organization objectives is displayed.
If you expand the folder of an objective, you can display the sub-objectives owned by the current objective.

 *The list of objectives owned by an objective is accessible in the properties page of the objective, in the **Characteristics** tab, section-**Sub-Objectives**.*

To access the requirements tree:

- 1 In the **Environment** desktop, select **Regulatory Environment > Requirements**.
The hierarchy of organization requirements is displayed.
If you expand the folder of a requirement, you can display the sub-requirements owned by the current requirement.

 *The list of requirements owned by a requirement is accessible in the properties page of the requirement, in the **Characteristics** tab, section **Sub-Requirements**.*

Objective Characteristics

An objective can be quantitative (directly measurable), or it can be qualitative.

- Reduce order delivery time (quantitative objective)
- Improve product quality (qualitative objective)
- Improve customer satisfaction (qualitative objective)

You can associate an objective with different component types.

- **Entities**: for more details, see "Entities", page 477.
- **Business Processes** and **Organizational Processes**: for more details, see "Processes", page 476.
- **Risks**: For more details, see "Risks", page 481.
- **Controls**: for more details, see "Controls", page 484.
- **Business Lines**: for more details, see "Organization Business Lines", page 479.

Requirement Characteristics

To access characteristics of a requirement:

1. See "Accessing objectives and requirements", page 489.

2. In the page listing requirements, select that which interests you and click **Properties**.

You can consult or modify the characteristics of the requirement:

☛ According to the 9000 standard, "a requirement is a stated need or expectation, normally implicit, or imposed". Standard ISO 9000 highlights "client expectations" but in the context of a project, other requirements should be considered.

Priority can be:

- Low
- Medium
- High

Requirement scope

You can associate a requirement with different object types.

☛ The Object types that can be connected depend on the solution used.

To access the objects of a requirement scope:

- 1 In the requirement properties dialog box, select the **Scope** tab. Business and organizational processes, entities and applications appear in the **Scope** tab in two different sections depending on the role played:

- **Constrained Elements:** objects that must meet the requirement

The "Segregation of duties" requirement must be met by the "Call for bids management" process.

- **Contributing Elements:** objects that help meet the requirement.

The "Call for bids" application can automate a control to check the process meets the requirement.

- **Incidents:** incidents that occurred and for which the requirement has not been met.
- **Sub-requirements**

☛ Sub-requirements are not used in **HOPEX IT Risk Management**.

Risks and controls

To access risks and controls associated with the requirement:

- 1 In the properties of the requirement, expand the **Risks and Controls** section.

☛ For more details, see ["Risks", page 481](#) and ["Controls", page 484](#).

FINANCIAL DATA

To access organization products and accounts:

- 1. In the **Environment** desktop, select **Financial Data**.
- ✓ "Products", page 491
- ✓ "Financial Accounts", page 491

☛ This navigation tab is not available in the **HOPEX IT Risk Management** solution.

Products

A business line is associated with products proposed by the enterprise to each of its markets. These products constitute a link between a business line and the processes that assure production.

📖 A product represents commodities offered for sale, either goods or merchandise produced as the result of manufacturing, or a service, ie. work done by one person or group that benefits another.

☛ A product can be split into component products from its properties page.

To create a new product from an existing product:

1. In the **Environment** desktop, select **Financial Data**.
2. Display the products tree.
3. Click the product that interests you.
The properties dialog box of the object appears on the right.
4. In the **Sub Product** section, click the **New** button.
The name of the new product appears in the list of products in the described product.
5. Select the product you have created, press <F2> and modify its name.

To specify the product type:

1. Open the properties of the product that interests you.
2. In the **Product Type** field, select a value:
 - Goods
 - Complex
 - Services

In a dedicated section you can also create and view the incidents that have happened and are related to the product.

☛ This object type is not available in the **HOPEX IT Risk Management** solution.

Financial Accounts

HOPEX enables definition of accounts connected to an entity.

To access accounts:

1. In the **Environment** desktop, select **Financial Data**.
2. Display the tree of accounts.

 *This object type is not available in the **HOPEX IT Risk Management** solution.*

Characteristics available on the account are:

- **Account type**
The profits and losses account presents a description of profits and losses of the enterprise during the fiscal period. You can specify if the account is:
 - "Profits"
 - "Losses"
- **Total Value:** you can enter a total for this account.
 *An order of magnitude is sufficient.*
- **Status**
 - "Open": the account is active
 - "Closed": the account is inactive *The account can comprise sub-accounts.*
 *You can connect an entity to an account in the **Scope** section of the account.*

ENTERPRISE ASSETS

Global description of an enterprise information system can be limited to presenting servers used and applications and databases sending and receiving information exchanges.

 This navigation tab is not available in **HOPEX IT Risk Management**. In this solution, for defining applications, see the **Library** navigation tab..

Description of the context in which a risk management project is carried out can be supplemented by description of:

- IT applications

 An application is a set of software tools coherent from a software development viewpoint.

- databases

 A database enables specification of data logical or physical storage structure.

- servers that host them

 A computer which provides a service to the users connected to it via a network. This computer can have a database or run applications.

Accessing IT assets

To access IT assets:

- In the **Environment** desktop, select **Assets**.

To view for example characteristics of an application:

1. Click **Application** in the assets tree on the left in the edit area.
The applications tree appears in the Edit Area.
2. Expand the **Applications** folder.
The list of applications appears.
3. Select an application.
Its properties appear on the right of the edit area.

 Similarly, you can view characteristics of **Server** and **Database** type.

Applications

See ["Accessing IT assets", page 493](#).

You can attach numerous objects in the **Scope** section of the application properties:

- Business line



A business line is a skill or grouping of skills of interest for the enterprise. It corresponds for example to major product segments, to distribution channels or to business activities.

- Business process



A business process represents a system that offers products or services to an internal or external client of the company or organization. At the higher levels, a business process represents a structure and a categorization of the business. It can be broken down into other processes. The link with organizational processes will describe the real implementation of the business process in the organization. A business process can also be detailed by a functional view.

- Risk



A risk is a hazard of greater or lesser probability to which an organization is exposed.

- Control



A control is a set of rules and means enabling the assurance that a legal, regulatory, internal or strategic requirement is respected.

- Control system



A control system is a set of controls that ensure risk prevention and management, application of internal operating rules, respect a law or regulation, or work towards achievement of an objective as defined by company strategy. Examples: quality control system, management control system, internal audit system.

☛ This is not available in **HOPEX IT Risk Management**.

- Action plan



An action plan comprises a series of actions, its objective being to reduce risks and events that have a negative impact on company activities.

- Incidents



An incident is an event occurrence, internal or external, that has an impact on the organization. It is the basic element for collection of data concerning operational risk.

Objects of the following type are accessible in read-only:

- Issue
- Business capability
- Implemented functionality

You can indicate which IT application is available for an entity or used in execution of a process.

Databases and Servers

See ["Accessing IT assets", page 493](#).

You can specify:

- on which servers the databases are installed
- the entities that use them
- which processes consult or update them

When entering an order, an account manager queries the customer database at headquarters, and updates the sales database at the LA office.

☛ *These object types are not available in the **HOPEX IT Risk Management** solution.*

RACI

HOPEX Solutions enable definition of those responsible for some of the objects via the RACI matrix.

☛ *RACI is the acronym of Responsible, Accountable, Consulted, Informed.*

Responsibility levels

The proposed responsibility levels are as follows:

Scope of responsibility	Meaning
Responsible	Persons responsible for execution of required actions.
Accountable	Persons reporting on progress of planned actions and making decisions. There is only one "Accountable" for each action.
Consulted	Persons consulted as first priority before an action or decision.
Informed	Must be informed after an action or decision.

HOPEX enables specification of the responsibility level of the various persons:

- on a business or organizational process,
- on a risk,
- on a control.

Specifying Responsibilities

One or various persons can take responsibility for a specific object.

To specify the persons concerned by a specific object:

1. In the object properties page, expand the **RACI** section.

2. Connect the persons or person assignments in each of the following tabs:

- **Responsible**
- **Accountable**
- **Consulted**
- **Informed.**

 *In some solutions, RACI information can be redundant with roles defined in the object property dialog box or can supplement them.*

For example, in HOPEX Enterprise Risk Management, the process responsible user can be specified directly in the **Responsible** field of the process property dialog box and not in the RACI section. In this case, it is important to specify one responsible user only.

FREQUENTLY ASKED QUESTIONS (FAQ)



Here you will find common questions that you may ask concerning the use of **HOPEX**.

- ✓ ["Customizing Reports \(MS Word\)", page 501](#)
- ✓ ["Drawing Objects", page 502](#)
- ✓ ["Other Questions", page 505](#)
- ✓ ["Useful Keyboard Shortcuts", page 507](#)

THE WINDOWS FRONT-END DESKTOP

How can I easily move objects in the various navigation windows?

To move objects between navigation windows:

1. Select an object in a window.
2. Holding the mouse button down, drag-and-drop the object onto the tab of the window to which you wish to copy the object. This target window then becomes active.
3. Drop the object into the appropriate folder in the window. The selected object is copied in this folder and is connected to the selected object type.

☛ *You can also connect an object to another object by cut and paste from the object pop-up menu.*

CUSTOMIZING REPORTS (MS WORD)

How do I customize the logo in generated reports (MS Word)?

To customize the logo in generated reports (MS Word):

1. Double-click the icon of the report (MS Word) of which you want to change the logo.
2. In the opened report (MS Word), select **ViewHeader and footer**.
3. Use the Word header and footer toolbar to select the header containing the logo.
4. Click the default logo and then select **Insert > Picture**.
5. A dialog box appears. Select the image you want and then click **OK**.

The initial logo is replaced by the one you selected.

☺ *If you customize the logo in a report template (MS Word), the reports (MS Word) that you generate from this template will automatically present your logo. This means you avoid having to insert your logo in every report (MS Word) you create.*

🔒 *Note that standard report templates (MS Word) are read-only. To make changes to them, you must first make copies of them. To do this, create a report template (MS Word) based on the desired standard template.*

How do I replace the company name with the name of my own organization in the report (MS Word) cover page?

The name that appears in the report (MS Word) is the one indicated when the product was installed.

To modify the company name:

1. Run the **Administration** application by double-clicking the corresponding icon.
2. In the pop-up menu of the site (navigation tree root, named "HOPEX"), select **Options > Modify**.
3. In the Options window, expand the **Installation** folder and double-click the **Company information** icon.
4. Type the name of your organization in the **Company Name** text box. This name will now appear in your reports (MS Word).
5. Click **OK** and close the **Administration** application.

Why is the order of objects specified in my diagram not reproduced in the generated report (MS Word)?

So that the order of objects will be reproduced in the generated report (MS Word), the descriptors used as a basis for the document template must respect certain rules.

For more details, see **HOPEX Power Studio - Publisher**, chapter "Advanced Features of RTF Descriptors".

DRAWING OBJECTS

How do I insert text into a diagram?

To insert text in a diagram:

1. In the insert toolbar, click  then **Text**.
2. Click in the diagram.
3. Type your text in the rectangle that appears. When you have entered your text, click outside the rectangle.

To change fonts:

- 1. by means of the dialog box opened by command **Format > Font**.

How do I insert a title in a diagram?

You can insert a field containing the diagram title. It is updated automatically.

To insert a title:

1. In the insert toolbar, click  then click **Field**.
2. In the dialog box that opens, select the **Title** field.
 - "Short title" displays only the diagram name.
 - "Title" displays the diagram name preceded by that of the described object.
3. Select the desired format (case) at the right in the dialog box and click **OK**.

To change fonts:

- 1. Right-click the title and select **Font**.

 The **Insert field** dialog box also enables you to insert the **Date/time** or the **Page number**.

How do I insert a background in a diagram?

In **HOPEX Windows Front-End**, an image can be used as a background for your diagram:

To do this:

1. Select **View > Background**.
2. Indicate the **Image** to be displayed as background. You can use the **Browse** button  to browse folders and find the file (MGS, MGD, BMP, DIB and WMF extensions or **HOPEX** shape) containing the image to be used as the background for your drawing.

 You can also select a background color.

3. Select the type of background display: **On screen, In printed document, In reports (MS Word) and Web sites**.

 You can remove the background without deleting it by clearing all three options.

4. Select the **Position** of the background: coordinates of the upper left corner (**X**, **Y**), and dimensions (**Width** and **Height**) in the drawing, by selecting values or by manually positioning the background in the view.

How do I move around quickly in a diagram?

For more details, see ["Zooming and Moving Around in Diagrams"](#), page 115.

Is there a quick way to find an object in a diagram?

An object in a diagram can be located graphically. This function in **HOPEX Windows Front-End** is useful when your entire diagram cannot be displayed on the screen.

To do this:

1. In a diagram, select **Edit > Search in diagram**.
2. In the dialog box that appears, double-click the object type to which the object you are searching for belongs.
3. A list of objects is displayed. Select the one you want and click **Next**.

The desired object is selected and appears in the center of the window.

How to change the appearance of a line?

To modify the appearance of a line:

1. Select **Colors and Borders** from the pop-up menu of the line.
2. The dialog box that opens allows you to define the appearance of the line (simple, orthogonal, arc, etc.) and of its ends.

Is there a quick way to divide a link into segments or create a broken line?

To create a joint in a line in order to segment the line, for example:

1. Select the line by clicking it, making sure not to click on a handle.
2. Position the pointer on the line and press the Ctrl key until the pointer changes to form .
3. Holding the <Ctrl> key down, left-click and move the pointer to where you wish to segment the line.

A joint represented by a handle is added to the line.

To delete a joint (except at the two ends):

1. Point on the joint and hold down the <Ctrl> key (the pointer shape changes to ) and click to delete the joint in the line.

The joint is deleted.

I can't draw a link or I can't see a link in my diagram

This may be because you have not selected the view you need to draw or see this link. Carry out the following check:

1. In the flowchart, click .
2. In the dialog box that appears, check that all link types are correctly selected.

 If you have the same problem with other object types, check that the view corresponding to the object type is selected.

Objects that I insert into my diagram are covering other objects

For more details, see ["Bringing Objects to Front/Sending Them to Back"](#), page 99.

I would like to modify the default shape of messages in my diagrams.

This is possible in **HOPEX Windows Front-End**. To do this, you must duplicate the standard shape and copy it in the "Mega_Usr" folder before modifying it.

To change the shape of a message:

1. In a diagram, create a message.
2. In the pop-up menu of the message, select **Shapes and Details** to view the name of the shape file and its location.
3. Start the shapes editor by selecting **Tools > Shapes Editor** from the desktop and open the default shape of the message.
4. In the **File** menu, select **Save as** and save the shape in the user folder of the environment (/Mega_Usr) keeping the same name.
5. Modify the file (for example its color).
6. Open a diagram that contains messages.
7. In the diagram **Drawing** menu, select **Reinitialize shapes**.

 *It is necessary to activate this command when you have changed elements of the shape that are stored in the diagram, as is the case for color of the text.*

Messages that have the default shape are automatically modified.

 *You can select another shape as required by selecting **Shapes and Details** in the pop-up menu of the object.*

OTHER QUESTIONS

Is there a quick way to rename an object in a diagram?

To rename an object in a diagram without opening its properties dialog box:

1. Click on the name of the object inside the object shape.
A box with a dotted border appears, defining the text area to be modified.
2. Press the <F2> key.
3. Enter the new object name in the box that appears.
4. Click outside the box to validate your modification.

How to change diagram type?

The diagram type can be changed after creation. To do this:

1. In the diagram pop-up menu, select **Change Diagram Type**.
 *This command only appears in the menu if the diagram can change type. It appears for example in a flowchart. It is available only in HOPEX Windows Front-End.*
2. In the **Diagram Type Change** dialog box, select the **New type**.
The diagram types proposed depend on current diagram and described object types.
3. Click **OK**.

How to create a report (MS Word)?

For more details, see ["Managing Reports \(MS Word\) in HOPEX \(Windows Front-End\)", page 310](#).

How to manage options concerning business persons and (system) persons?

HOPEX proposes two types of persons:

- **Business persons**: designates persons in the organizational charts, the properties pages of certain objects such as projects or for document reviewing.

 *A business person holds a position in an organization. It is designated by its name. Example: Mr. Smith.*

 *For more details on a use example of business persons, see the section "Distributing a Report (MS Word) for Review or Validation" in HOPEX Common Features.*

- **Persons (System)**: used for example in **HOPEX** solutions to enable users connected to **HOPEX** to be declared owners or managers of objects used in the solutions.

 *A person (System) represents a person in the enterprise. This person can be assigned a login and a role (or a profile depending on the connection mode). The login provides access to the MEGA application. The role (or the profile) defines the access rights to the product repositories and functionalities. A system person, if assigned a login,*

has a specific desktop in each database, and can connect to this desktop from any workstation in a given environment.

☛ *For more details on a use example of business persons (system), see the section "Threads of Posts and Alerts on Objects" in **HOPEX Common Features**.*

An option is available for using **HOPEX persons (System)** as **business persons** in the properties pages of objects in the same way as for business persons.

To activate this option:

1. In the workspace, select **Tools > Options**.
2. Double-click the **Business Process and Architecture Modeling** icon.
3. Select the check box in the **System Person Management** field.

In addition, a second option is used to continue to use the business persons in **HOPEX** applications:

1. In the workspace, select **Tools > Options**.
2. Double-click the **Business Process and Architecture Modeling** icon.
3. Select the check box in the **Business Person Management** field.

😊 *To more easily replace your business persons with persons (system), you can select the following two options: **Business Person Management** and **System Person Management**.*

USEFUL KEYBOARD SHORTCUTS

Keys or key combinations constitute shortcuts, allowing access to functions without using menus.

These shortcuts can also be grouped by function type.

Desktop/diagrams/shape editor

Undo	Ctrl + Z
Redo	Ctrl + Y
Select ALL	Ctrl + A
Cut	Ctrl + X
Copy	Ctrl + C
Duplicating	Ctrl + D
Print	Ctrl + P
Save	Ctrl + S
Refresh	F5
Exiting	Alt + F4
Find objects in a diagram	Ctrl + F
Bring to front	Ctrl + "+" (numeric keypad)
Open pop-up menu	Shift + F10
Bold	Ctrl + G
Italics	Ctrl + I
Underline	Ctrl + U
Align right	Ctrl + Shift + R
Align left	Ctrl + Shift + L
Justify	Ctrl + J
Center	Ctrl + Shift + M
Reduce font size	Ctrl + <
Increase font size	Ctrl + Shift + >

Shape editor

New	Ctrl + N
Open	Ctrl + O

Query tool

Position the cursor in the target object types list of the query bar.	<Ctrl> + <Q>
Open the query tool	<Ctrl> + <Cap> + <Q>
Open the candidate words list (Registered Queries mode)	<Ctrl> + <Space>
Select the query code (Registered Queries mode)	<Ctrl> + <A>
Select all result objects (in results dialog box)	<Ctrl> + <A>

Add a component

Query	Ctrl + Q
List	Ctrl + L
New	Ctrl + N

Comment of object

Line break	<Ctrl + Enter>

Import and Export (EN)



BPMN Export

BPMN EXPORT OVERVIEW

The Business Process Modeling and Notation (BPMN) is a graphical representation for specifying processes. This design can be serialized into an xml file that supports the BPMN objects and diagrams. Each process is serialized into a bpmn file.

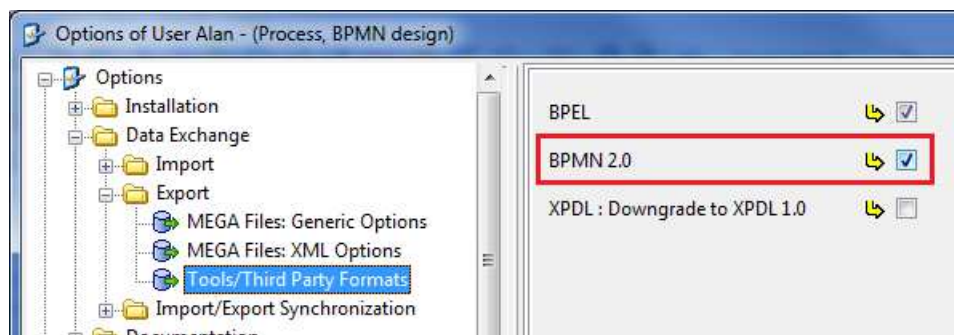
The MEGA BPMN export project aims at exporting workflow definitions as BPMN files so that workflows modeled in MEGA can be used by other BPMN modeling tools or workflow engines.

Prerequisites

The BPMN export feature is available with **MEGA Process BPMN** and **MEGA System BluePrint**, and supports BPMN version 2.0.

Activate/Deactivate BPMN export

The BPMN export feature can be activated or deactivated for a user, a profile, an environment, or a site. This can be done using the corresponding option:



Scope of BPMN export

The purpose of BPMN export is to export a MEGA Process into a BPMN file.

The tool handles translation of the following processes:

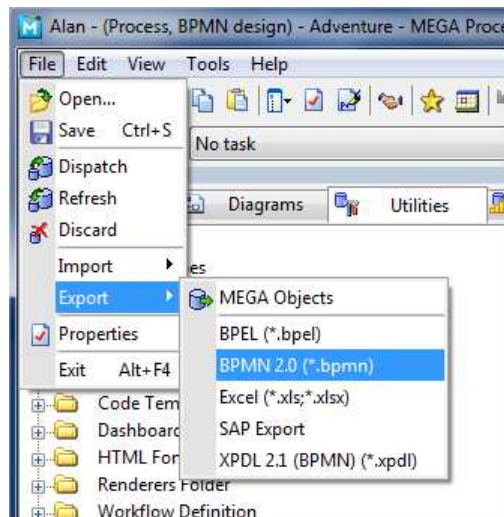
- System Processes
- Organizational Processes
- Business Processes
- Functional Processes

The list of supported mappings is detailed below. See [Object correspondences](#).

Exporting BPMN Files

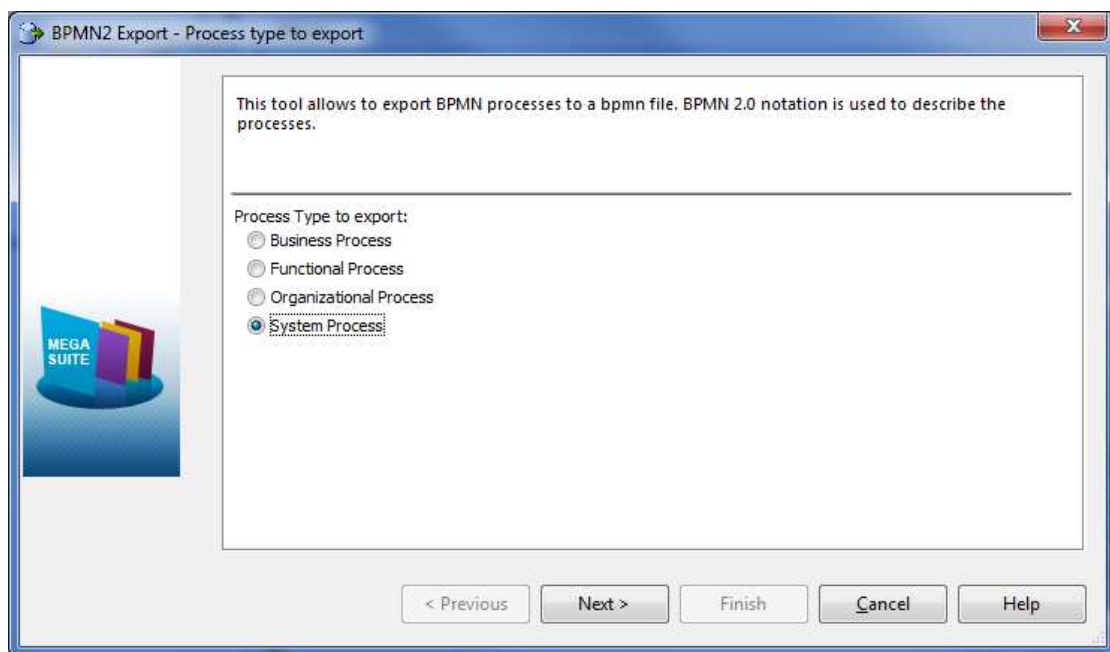
To export a BPMN file from MEGA:

1. In MEGA, select **File > Export > BPMN 2.0 (*.bpmn)**.

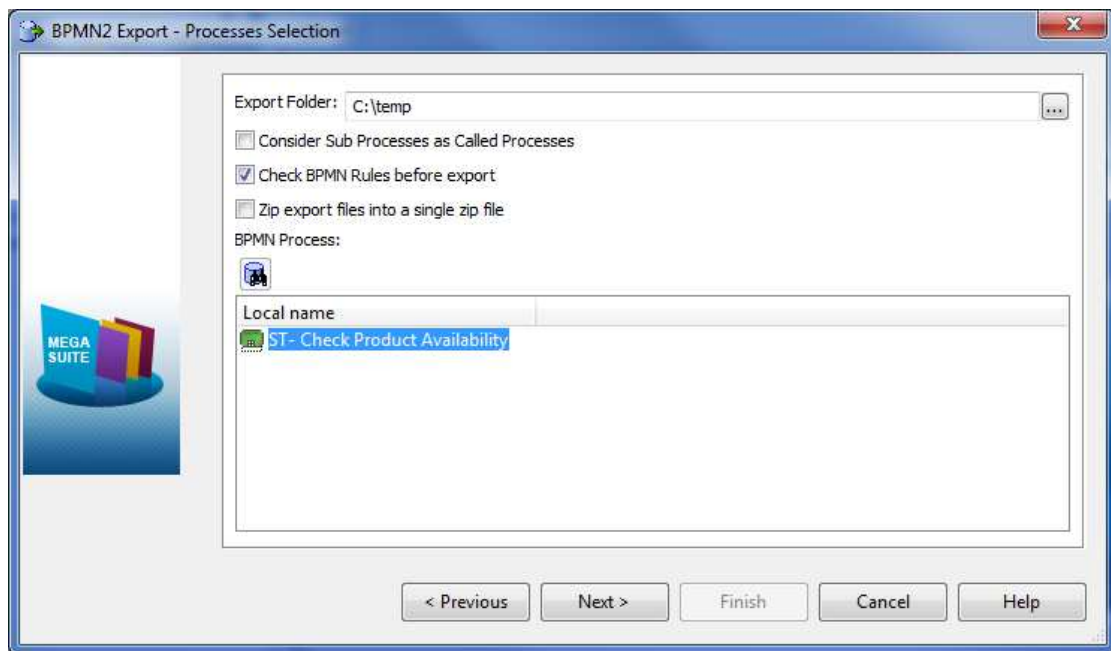


The export dialog box appears.

2. Select the type of object you want to export, for example System Process, and click **Next**.



3. Specify the path of the files to be created.

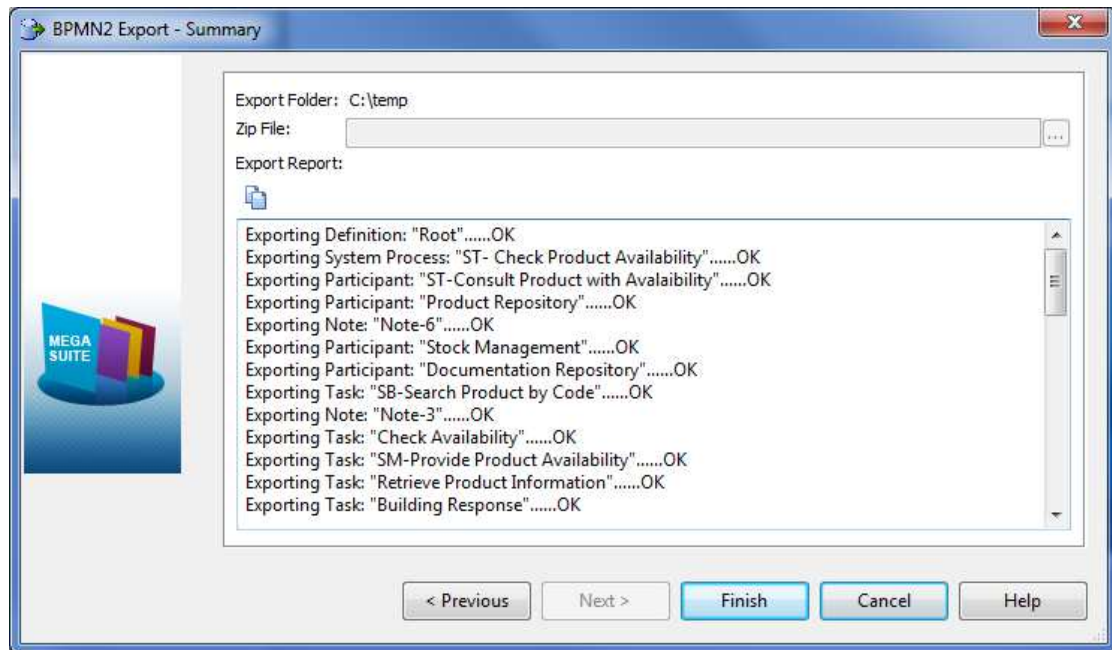


Three options are available:

- **Consider Sub Processes as Called Processes:** In BPMN a sub process is embedded into the parent process, so when exporting the parent process the sub processes will be exported in the same file as embedded processes. This option allows to consider these sub processes as call process tasks.
- **Check BPMN Rules before export:** this option checks whether processes you want to export conform to BPMN modeling rules. If not, a message asks if you want to continue with the export. Click **Yes** to continue or **No** to stop the export.
- **Zip export files into a single zip file:** this option enables to add all exported bpmn files into a single archive file (zip file). Some BPMN modeling tools accept only zip files as import BPMN file.

4. Select one or several processes to be exported.
5. Click **Next**.

A window shows progression and report of the export.



6. Click **Finish**.

MEGA/BPMN OBJECT CORRESPONDENCE

The BPMN export feature translates a BPMN element specification in MEGA into a BPMN-compliant output file. It is based on a set of mappings between the MEGA BPMN Process metamodel (including diagrams) and BPMN version 2.0.

Conventions

MEGA concept names start with uppercase. Example: Task.

BPMN elements are delimited by <..>.

BPMN attributes are prefixed by ::.

BPMN concepts relate to the following OMG Specification document: “Business Process Model and Notation (BPMN), formal/2011-01-03”.

Object correspondences

The following table indicates concepts managed by the export tool:

MEGA Concepts	BPMN Concepts
 Organizational Process	 <process>
 Short Name	name
 _Hexaidabs	id
 Comment	<documentation>
 Owned Operation	<task>
 Owned Element	
 Gateway	<gateway>
 Event	<event>
 Sequence Flow	<sequenceFlow>
 Data Object	<dataObject> and <dataObjectReference>
 Message Flow	<messageFlow>
 Participant	<participant> or <lane>
 Internal Participant	<laneSet> and <lane>
 Owned Organizational Process	<callActivity> or <subProcess>
 Note	<textAnnotation> and <text>
 Description	<BPMNDiagram>
 Operation	 <task> (See Table 1)

MEGA Concepts	BPMN Concepts
 Short Name  _Hexaidabs  Comment  Compensation  Loop  Loop Condition  Multiple  Called Organizational Process  Data Object Used  Produced Data Object  Note	name id <documentation> isForCompensation <standardLoopCharacteristics> <loopCondition> <multiInstanceLoopCharacteristics> calledElement <dataInput> and <dataInputAssociation> <dataOutput> and <dataOutputAssociation> <textAnnotation> and <text>
 Gateway  Short Name  _Hexaidabs  Comment  Note	 <gateway> (See Table 2) name id <documentation> <textAnnotation> and <text>
 Event  Short Name  _Hexaidabs  Comment  Interrupting  Bounded Activity  Note	 <event> (See Table 3) name id <documentation> isInterrupting or cancelActivity attachedToRef <textAnnotation> and <text>
 Sequence Flow  _Hexaidabs  Comment  Predicate  Predecessor  Successor	 <SequenceFlow> id <documentation> <conditionExpression> sourceRef targetRef
 Data Object  Short Name	 <dataObject> and <dataObjectReference> name

MEGA Concepts	BPMN Concepts
_Hexaidabs - Collection - Comment - Data Object Status	- id - isCollection <dataObjectReference> and <documentation> <dataObjectReference::name>
 Data Store - Short Name _Hexaidabs	 <dataStore> and <dataStoreReference> - name - id
 Message Flow _Hexaidabs - Comment - Source Element - Target Element	 <messageFlow> - id <documentation> - sourceRef - targetRef
 Internal Participant - Short Name _Hexaidabs - Assignment - BPMN Element	 <lane> - name - id - name <flowNodeRef>
 External Participant - Short Name _Hexaidabs - Assignment - Note	 <participant> - name - id - name <textAnnotation> and <text>
 Note _Hexaidabs - Comment	 <textAnnotation> and <association> - id <text>
 System Process - Short Name _Hexaidabs - Comment - Owned Task	 <process> - name - id <documentation> <task>

MEGA Concepts	BPMN Concepts
🔗 Owned Element ▣ Gateway ▣ Event ▣ Sequence Flow ▣ Data Object ▣ Message Flow ▣ Participant 🔗 Internal Participant 🔗 Owned System Process 🔗 Note 🔗 Description	<gateway> <event> <sequenceFlow> <dataObject> and <dataObjectReference> <messageFlow> <participant> or <lane> <laneSet> and <lane> <callActivity> or <subProcess> <textAnnotation> and <text> <BPMNDiagram>
▣ Task ▣ Short Name ▣ _Hexaidabs ▣ Comment ▣ Compensation ▣ Loop ▣ Loop Condition ▣ Multiple 🔗 Called Organizational Process 🔗 Data Object Used 🔗 Produced Data Object 🔗 Note	🔗 <task> (See Table 1) - name - id <documentation> - isForCompensation <standardLoopCharacteristics> <loopCondition> <multiInstanceLoopCharacteristics> - calledElement <dataInput> and <dataInputAssociation> <dataOutput> and <dataOutputAssociation> <textAnnotation> and <text>
▣ Functional Process ▣ Short Name ▣ _Hexaidabs ▣ Comment 🔗 Owned Functional Activity 🔗 Owned Element ▣ Gateway ▣ Event ▣ Sequence Flow	🔗 <process> - name - id <documentation> <task> <gateway> <event> <sequenceFlow>

MEGA Concepts	BPMN Concepts
▣ Data Object ▣ Message Flow ▣ Participant 🔗 Internal Participant 🔗 Owned Functional Process 🔗 Note 🔗 Description	<dataObject> and <dataObjectReference> <messageFlow> <participant> or <lane> <laneSet> and <lane> <callActivity> or <subProcess> <textAnnotation> and <text> <BPMNDiagram>
▣ Functional Activity ▣ Short Name ▣ _Hexaidabs ▣ Comment ▣ Compensation ▣ Loop ▣ Loop Condition ▣ Multiple 🔗 Called Organizational Process 🔗 Data Object Used 🔗 Produced Data Object 🔗 Note	↔ <task> (See Table 1) name id <documentation> isForCompensation <standardLoopCharacteristics> <loopCondition> <multiInstanceLoopCharacteristics> calledElement <dataInput> and <dataInputAssociation> <dataOutput> and <dataOutputAssociation> <textAnnotation> and <text>
▣ Business Process ▣ Short Name ▣ _Hexaidabs ▣ Comment 🔗 Owned Functional Activity 🔗 Owned Element ▣ Gateway ▣ Event ▣ Sequence Flow ▣ Data Object ▣ Message Flow ▣ Participant 🔗 Internal Participant	↔ <process> name id <documentation> <task> <gateway> <event> <sequenceFlow> <dataObject> and <dataObjectReference> <messageFlow> <participant> or <lane> <laneSet> and <lane>

MEGA Concepts	BPMN Concepts
- Owned Functional Process - Note - Description	<callActivity> or <subProcess> <textAnnotation> and <text> <BPMNDiagram>

Table 1:

Task Type	BPMN
Task Type - User - IT-Service Call - System Process Call - Script - Send - Receive - Manual - Business Rule	<task> <userTask> <serviceTask> <callActivity> <scriptTask> <sendTask> <receiveTask> <manualTask> <businessRuleTask>

Table 2:

Gateway Type	BPMN
 Gateway Type  Inclusive  Complex  Parallel  Exclusive (Data)  Exclusive (Event)  Exclusive (Instantiate)  Parallel (Instantiate)	 <gateway> <inclusiveGateway> <complexGateway> <parallelGateway> <exclusiveGateway> <eventBasedGateway> and ::eventGatewayType=Exclusive and ::instantiate=false <eventBasedGateway> and ::eventGatewayType=Exclusive and ::instantiate=true <eventBasedGateway> and ::eventGatewayType=Parallel and ::instantiate=true

Table 3:

		Event Nature				Bounded Activity
		 Start	 End	 Throw	 Catch	
		<i><startEvent></i>	<i><endEvent></i>	<i><intermediateThrowEvent></i>	<i><intermediateCatchEvent></i>	<i><boundaryEvent></i>
Event Type	 Generic					
	 Message	<i><messageEventDefinition></i>	<i><messageEventDefinition></i>	<i><messageEventDefinition></i>	<i><messageEventDefinition></i>	<i><messageEventDefinition></i>
	 Timer	<i><timerEventDefinition></i>	*	*	<i><timerEventDefinition></i>	<i><timerEventDefinition></i>
	 Error	<i><errorEventDefinition></i>	<i><errorEventDefinition></i>	*	*	<i><errorEventDefinition></i>
	 Cancel	*	<i><cancelEventDefinition></i>	*	*	<i><cancelEventDefinition></i>
	 Compensation	<i><compensateEventDefinition></i>	<i><compensateEventDefinition></i> and <i>::waitForCompletion=true</i>	<i><compensateEventDefinition></i> and <i>::waitForCompletion=true</i>	*	<i><compensateEventDefinition></i> and <i>::waitForCompletion=true</i>
	 Conditional	<i><conditionalEventDefinition></i> and <i><condition></i>	*	*	<i><conditionalEventDefinition></i> and <i><condition></i>	<i><conditionalEventDefinition></i> and <i><condition></i>
	 Link	*	*	<i><linkEventDefinition></i>	<i><linkEventDefinition></i>	*
	 Signal	<i><signalEventDefinition></i>	<i><signalEventDefinition></i>	<i><signalEventDefinition></i>	<i><signalEventDefinition></i>	<i><signalEventDefinition></i>
	 Terminate	*	<i><terminateEventDefinition></i>	*	*	*
	 Escalation	<i><escalationEventDefinition></i>	<i><escalationEventDefinition></i>	<i><escalationEventDefinition></i>	*	<i><escalationEventDefinition></i>
	 Parallel Multiple	<i>::parallelMultiple=true</i>	*	*	<i>::parallelMultiple=true</i>	<i>::parallelMultiple=true</i>

		Event Nature				Bounded Activity
		 Start	 End	 Throw	 Catch	
		<i><startEvent></i>	<i><endEvent></i>	<i><intermediateThrowEvent></i>	<i><intermediateCatchEvent></i>	<i><boundaryEvent></i>
	Multiple					

* = Combinaison not possible

BPMN Import Specification

BPMN IMPORT OVERVIEW

The Business Process Modeling and Notation (BPMN) is a graphical representation for specifying processes. This design can be serialized into an xml file that supports the BPMN objects and diagrams. Each process is serialized into a bpmn file.

The MEGA BPMN import aims at importing workflow definitions from BPMN files so that workflows modeled in other BPMN modeling tools or workflow engines can be used by MEGA.

Prerequisites

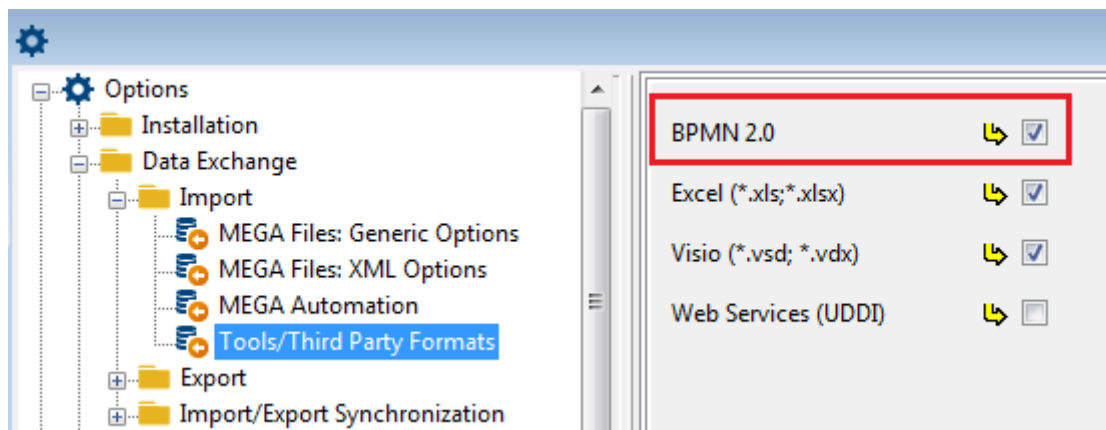
The BPMN import feature is available with **MEGA Process BPMN** and **MEGA System BluePrint**, and supports BPMN version 2.0.

Source BPMN Tools

It should be possible to import BPMN data and diagrams from Tibco, Bonita, Yaoqiang BPMN, Joinwork Process and IBM BlueWorks.

Activate/Deactivate BPMN Import

The BPMN import feature can be activated or deactivated for a user, a profile, an environment, or a site. This can be done using the corresponding option:



Scope of BPMN Import

The purpose of BPMN import is to import a MEGA Process into a BPMN file.

The tool handles translation of BPMN processes into the one of the following process types in MEGA:

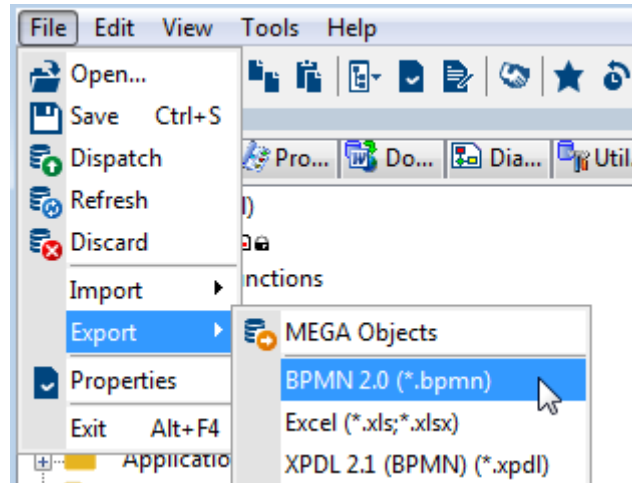
- System Processes
- Organizational Processes
- Functional Processes

The list of supported mappings is detailed below. See [Object Correspondences](#).

Importing BPMN Files

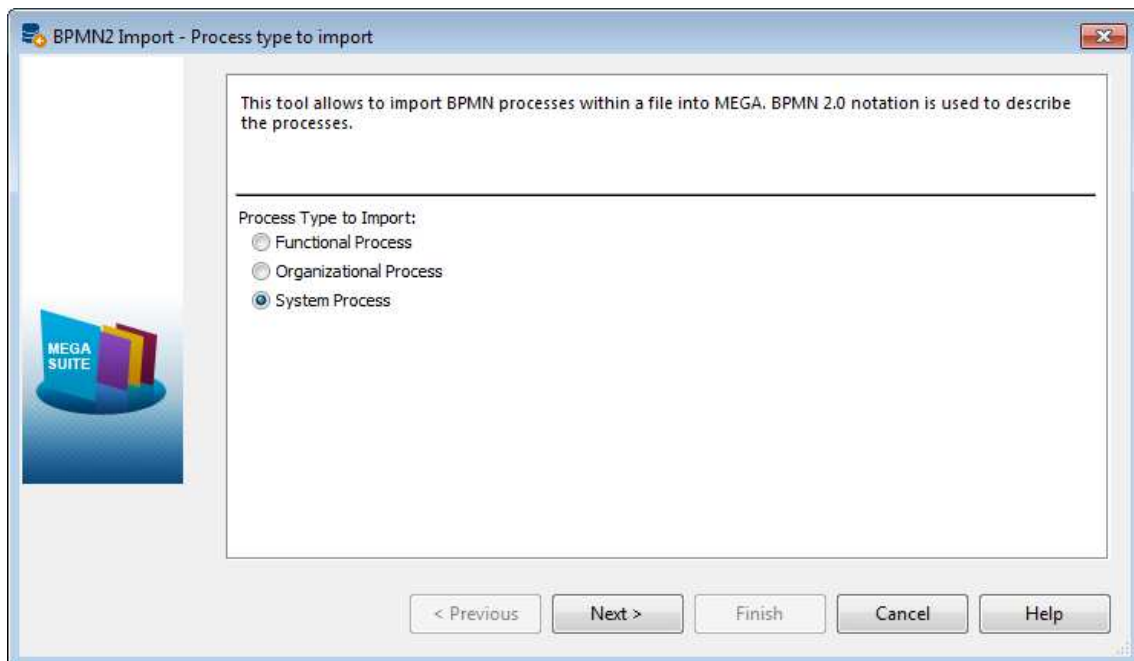
To import a BPMN file from MEGA:

1. In MEGA, select **File > Import > BPMN 2.0 (*.bpmn)**.



The import dialog box appears.

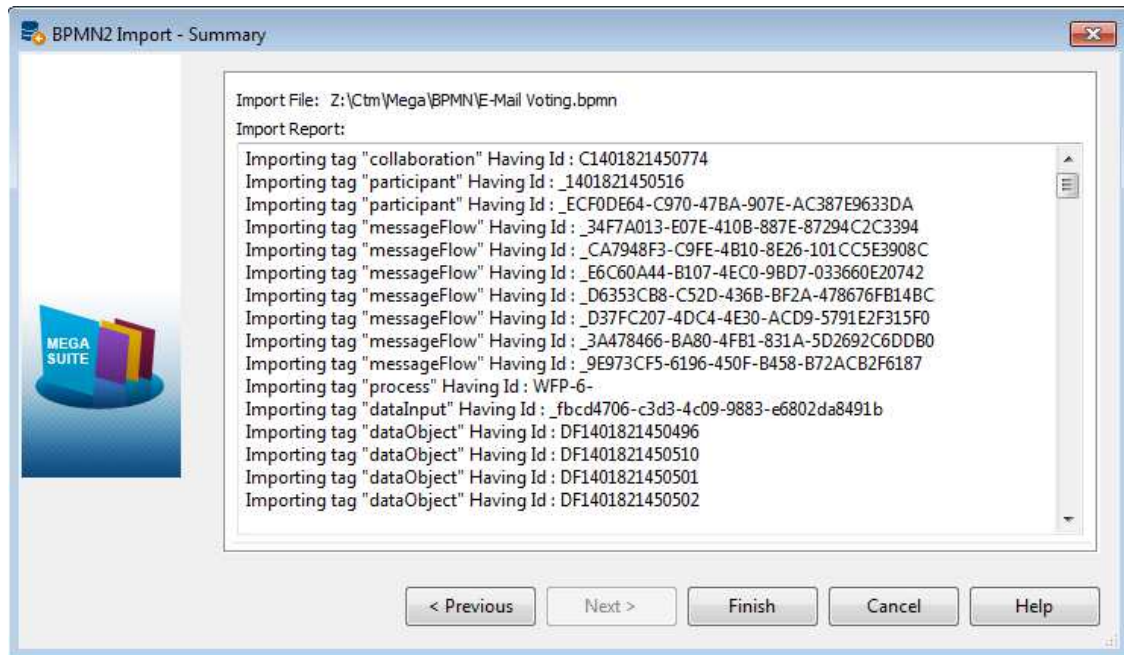
2. Select the type of object you want to import, for example System Process, and click **Next**.



Nb : System Process is the default value.

3. Specify the path of the file to be imported.
4. Click **Next**.

A window shows progression and report of the import.



5. Click **Finish**.

The diagram containing the description of the BPMN concepts opens.

BPMN/MEGA OBJECT CORRESPONDENCE

The BPMN import feature translates a BPMN-compliant output file into a BPMN element specification in MEGA. It is based on a set of mappings between BPMN version 2.0 and the MEGA BPMN Process metamodel (including diagrams).

Conventions

BPMN concepts relate to the following OMG Specification document: “Business Process Model and Notation (BPMN), formal/2011-01-03”.

BPMN elements are delimited by <..>.

BPMN attributes are prefixed by ::.

MEGA concept names start with uppercase. Example: Task.

Object Correspondences

The following table indicates concepts managed by the import tool:

The mapping of BPMN Processes and Tasks depends on the type of process selected in BPMN import wizard (Functional Process, Organizational Process or System Process).

Nb: Business processes are not proposed as a target.

BPMN Concepts	MEGA Concepts
 <process> (if Organizational Process) name id <documentation> <task> <gateway> <event> <sequenceFlow> <dataObject> and <dataObjectReference> <messageFlow> <participant> or <lane> <laneSet> and <lane> <callActivity> or <subProcess>	 Organizational Process  Short Name  _Hexaidabs  Comment  Owned Operation  Owned Element  Gateway  Event  Sequence Flow  Data Object  Message Flow  Participant  Internal Participant  Owned Organizational Process

BPMN Concepts	MEGA Concepts
<textAnnotation> and <text> <BPMNDiagram>	 Note  Description
 <task> (See Table 1) (if Organizational Process) name id <documentation> isForCompensation <standardLoopCharacteristics> <loopCondition> <multiInstanceLoopCharacteristics> calledElement <dataInput> and <dataInputAssociation> <dataOutput> and <dataOutputAssociation> <textAnnotation> and <text>	 Operation  Short Name  _Hexaidabs  Comment  Compensation  Loop  Loop Condition  Multiple  Called Organizational Process  Data Object Used  Produced Data Object  Note
 <gateway> (See Table 2) name id <documentation> <textAnnotation> and <text>	 Gateway  Short Name  _Hexaidabs  Comment  Note
 <event> (See Table 3) name id <documentation> isInterrupting or cancelActivity attachedToRef <textAnnotation> and <text>	 Event  Short Name  _Hexaidabs  Comment  Interrupting  Bounded Activity  Note
 <SequenceFlow> id <documentation> <conditionExpression> sourceRef	 Sequence Flow  _Hexaidabs  Comment  Predicate  Predecessor

BPMN Concepts	MEGA Concepts
targetRef	🔗 Successor
↔ <dataObject> and <dataObjectReference> name id isCollection <dataObjectReference> and <documentation> <dataObjectReference::name>	📁 Data Object Short Name _Hexaidabs Collection Comment Data Object Status
↔ <dataStore> and <dataStoreReference> name id Link Input and Output to DataStore	📁 Data Store Short Name _Hexaidabs Message Flow into the Data Store or out of the data store
↔ <messageFlow> id <documentation> sourceRef targetRef	📁 Message Flow _Hexaidabs Comment 🔗 Source Element 🔗 Target Element
↔ <lane> name id name <flowNodeRef>	📁 Internal Participant Short Name _Hexaidabs 🔗 Assignment 🔗 BPMN Element
↔ <participant> name id name <textAnnotation> and <text>	📁 External Participant Short Name _Hexaidabs 🔗 Assignment 🔗 Note
↔ <textAnnotation> and <association> id <text>	📁 Note _Hexaidabs Comment

BPMN Concepts	MEGA Concepts
↔ <process> (if System Process) name id <documentation> <task> <gateway> <event> <sequenceFlow> <dataObject> and <dataObjectReference> <messageFlow> <participant> or <lane> <laneSet> and <lane> <callActivity> or <subProcess> <textAnnotation> and <text> <BPMNDiagram>	📁 System Process 📄 Short Name 📄 _Hexaidabs 📄 Comment 🔗 Owned Task 🔗 Owned Element 📁 Gateway 📁 Event 📁 Sequence Flow 📁 Data Object 📁 Message Flow 📁 Participant 🔗 Internal Participant 🔗 Owned System Process 🔗 Note 🔗 Description
↔ <task> (See Table 1) (if System Process) name id <documentation> isForCompensation <standardLoopCharacteristics> <loopCondition> <multiInstanceLoopCharacteristics> calledElement <dataInput> and <dataInputAssociation> <dataOutput> and <dataOutputAssociation> <textAnnotation> and <text>	📁 Task 📄 Short Name 📄 _Hexaidabs 📄 Comment 📄 Compensation 📄 Loop 📄 Loop Condition 📄 Multiple 🔗 Called Organizational Process 🔗 Data Object Used 🔗 Produced Data Object 🔗 Note
↔ <process> (if Functional Process) name id	📁 Functional Process 📄 Short Name 📄 _Hexaidabs

BPMN Concepts	MEGA Concepts
<documentation> <task> <gateway> <event> <sequenceFlow> <dataObject> and <dataObjectReference> <messageFlow> <participant> or <lane> <laneSet> and <lane> <callActivity> or <subProcess> <textAnnotation> and <text> <BPMNDiagram>	Comment Owned Functional Activity Owned Element Gateway Event Sequence Flow Data Object Message Flow Participant Internal Participant Owned Functional Process Note Description
<task> (See Table 1) (if Functional Process) name id <documentation> isForCompensation <standardLoopCharacteristics> <loopCondition> <multiInstanceLoopCharacteristics> calledElement <dataInput> and <dataInputAssociation> <dataOutput> and <dataOutputAssociation> <textAnnotation> and <text>	Functional Activity Short Name _Hexaidabs Comment Compensation Loop Loop Condition Multiple Called Organizational Process Data Object Used Produced Data Object Note

Table 1:

BPMN	Task Type
<task> <userTask>	Task Type User

BPMN	Task Type
<serviceTask>	 IT-Service Call
<callActivity>	 System Process Call
<scriptTask>	 Script
<sendTask>	 Send
<receiveTask>	 Receive
<manualTask>	 Manual
<businessRuleTask>	 Business Rule

Table 2:

BPMN	Gateway Type
 <gateway> <inclusiveGateway> <complexGateway> <parallelGateway> <exclusiveGateway> <eventBasedGateway> and ::eventGatewayType=Exclusive and ::instantiate=false <eventBasedGateway> and ::eventGatewayType=Exclusive and ::instantiate=true <eventBasedGateway> and ::eventGatewayType=Parallel and ::instantiate=true	 Gateway Type  Inclusive  Complex  Parallel  Exclusive (Data)  Exclusive (Event)  Exclusive (Instantiate)  Parallel (Instantiate)

Table 3:

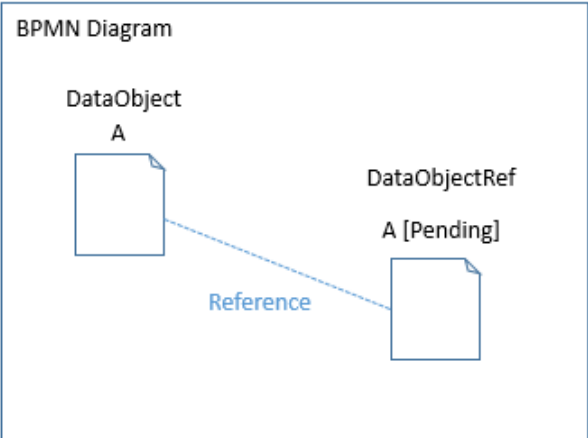
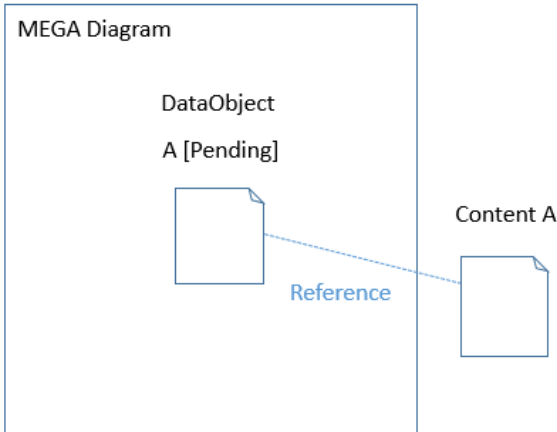
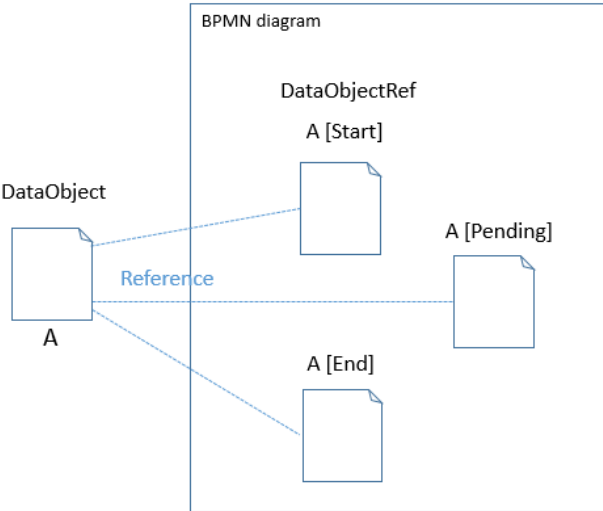
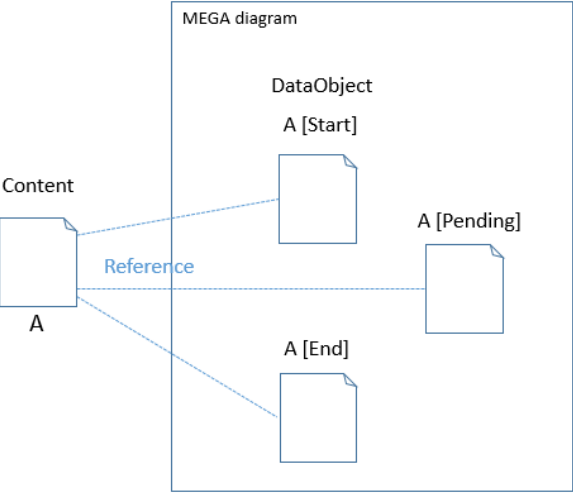
		Event Nature				Bounded Activity
		 Start	 End	 Throw	 Catch	
		<startEvent>	<endEvent>	<intermediateThrowEvent>	<intermediateCatchEvent>	<boundaryEvent>
Event Type	 Generic					
	 Message	<messageEventDefinition>	<messageEventDefinition>	<messageEventDefinition>	<messageEventDefinition>	<messageEventDefinition>
	 Timer	<timerEventDefinition>	*	*	<timerEventDefinition>	<timerEventDefinition>
	 Error	<errorEventDefinition>	<errorEventDefinition>	*	*	<errorEventDefinition>
	 Cancel	*	<cancelEventDefinition>	*	*	<cancelEventDefinition>
	 Compensation	<compensateEventDefinition>	<compensateEventDefinition> and ::waitForCompletion=true	<compensateEventDefinition> and ::waitForCompletion=true	*	<compensateEventDefinition> and ::waitForCompletion=true
	 Conditional	<conditionalEventDefinition> and <condition>	*	*	<conditionalEventDefinition> and <condition>	<conditionalEventDefinition> and <condition>
	 Link	*	*	<linkEventDefinition>	<linkEventDefinition>	*
	 Signal	<signalEventDefinition>	<signalEventDefinition>	<signalEventDefinition>	<signalEventDefinition>	<signalEventDefinition>
	 Terminate	*	<terminateEventDefinition>	*	*	*
	 Escalation	<escalationEventDefinition>	<escalationEventDefinition>	<escalationEventDefinition>	*	<escalationEventDefinition>
	 Parallel Multiple	::parallelMultiple=true	*	*	::parallelMultiple=true	::parallelMultiple=true

		Event Nature				Bounded Activity
		 Start	 End	 Throw	 Catch	
		<startEvent>	<endEvent>	<intermediateThrowEvent>	<intermediateCatchEvent>	<boundaryEvent>
	Multiple					

* = Combinaison not possible

Specific Mapping Cases

BPMN Concepts imported	Result in MEGA
Process	
One process per file	The process is described in the resulting diagram.
One process with external participants (that do not refer processes)	The process is described in the resulting diagram.
Several processes per file	A new “container” process is created in MEGA. It is the object of the resulting diagram and it contains the different processes imported.
Dataobject/Dataobjectreference (Datainput/Dataoutput)	
<i>(Reminder)</i> DataObject DataObjectReference	Content DataObject
DataObject without Reference	As a content can not be represented graphically on its own in MEGA, a DataObject is created with a content.
DataObjectReference + DataObject in the diagram	References resulting in DataObjects are represented in the diagram. The content is also

BPMN Diagram 	created but not represented in the diagram. MEGA Diagram 
DataObjectReferences in the diagram + DataObject outside the diagram 	References resulting in DataObjects are represented in the diagram, with their status. A content is also created, not represented in the diagram. MEGA diagram 
Cases of DataInput/DataOutput	Links between DataInput/DataOutput and Events are not handled. Indeed, in MEGA you can not create links between DataObject and Event.

Comments on TextAnnotations

If the “textAnnotation” tag contains a “text” tag, and if the latter contains a chain, this chain is included in the comment of the Note object. If the chain contained in the “text” tag is empty or if the “text” tag does not exist, the chain contained in the “documentation” tag, under the “textAnnotation” tag, is taken.

XPDL Export

XPDL EXPORT OVERVIEW

The XML Process Definition Language (XPDL) is a standard format to interchange Business Process definitions between different workflow products such as modeling tools and workflow engines.

The MEGA XPDL export project aims at exporting workflow definitions as XPDL files so that workflows modeled in MEGA can be executed by workflow engines such as FileNet and TIBCO.

Prerequisites

The XPDL export feature is available with **MEGA Designer, MEGA Process BPMN and MEGA System Blueprint**, and supports XPDL version 2.1.

Scope of XPDL export

The purpose of XPDL export is to translate MEGA Processes into XPDL.

The tool handles translation of the following processes:

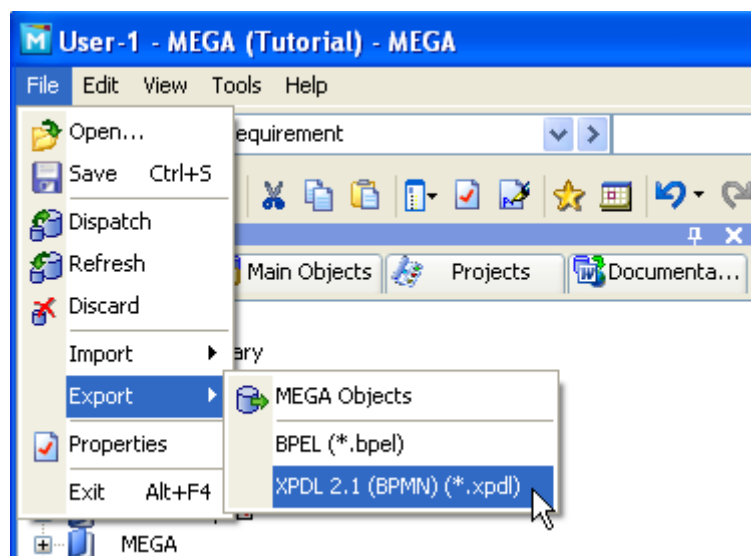
- System Processes
- Organizational Processes
- Business Processes
- Functional Processes

The list of supported mappings is detailed below. See [Object correspondences](#).

Exporting XPDL Files

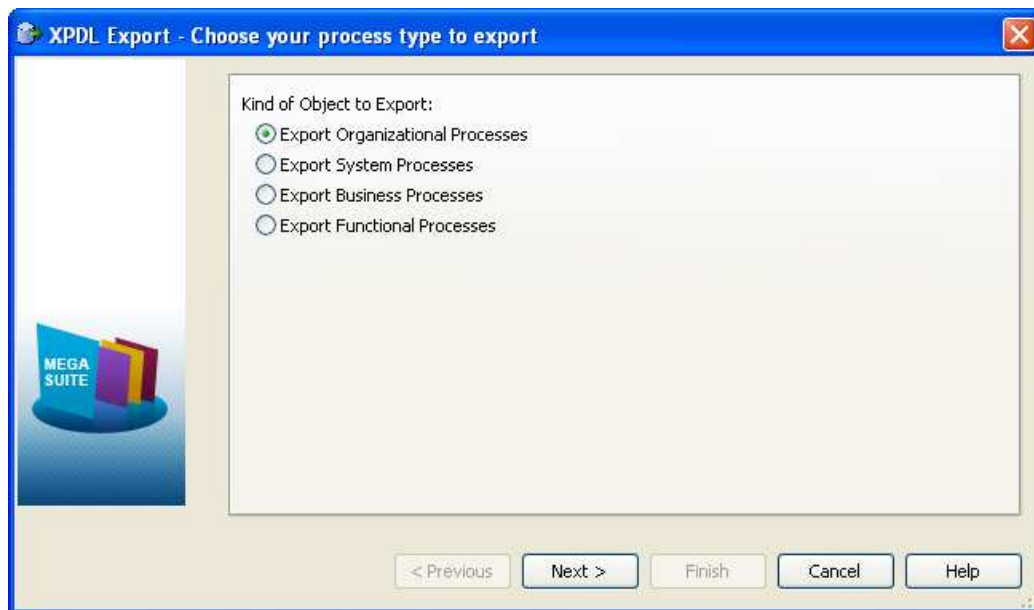
To export an XPDL file from MEGA:

1. In MEGA, select **File > Export > XPDL 2.1 (*.xpd)**.

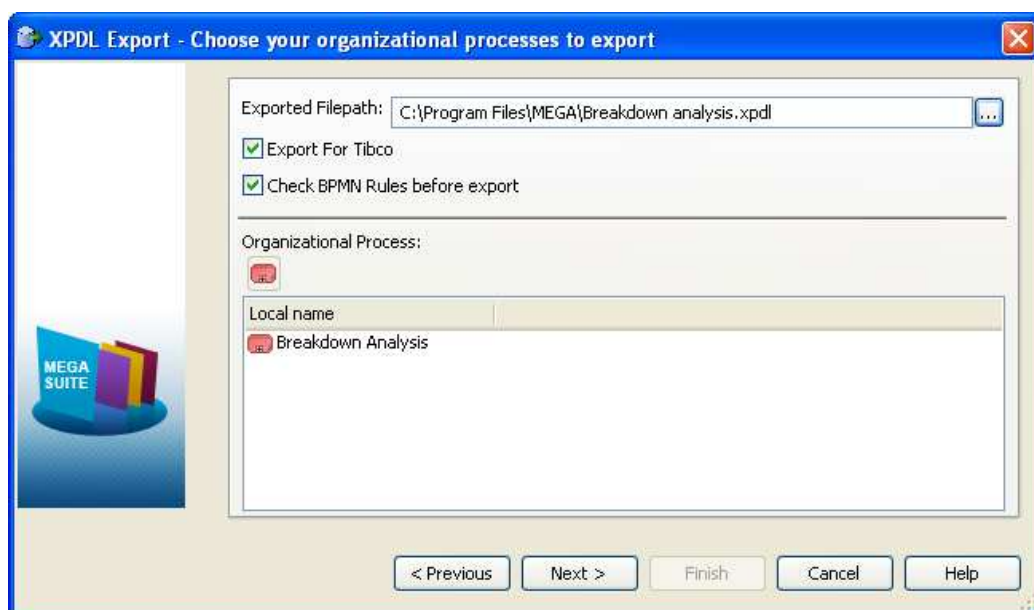


The export dialog box appears.

2. Select the type of object you want to export, for example Organizational Process, and click **Next**.



3. Specify the name and path of the file to create, and select the Object to export.



Two options are available:

- **Export for Tibco.** See [Export To TIBCO Business Studio](#).
- **Check BPMN Rules before export:** this option checks whether processes you want to export conform to BPMN modeling rules. If not, a message asks if you want to continue with the export. Click **Yes** to continue or **No** to stop the export.

4. Click **Next**.

The window that follows shows progression of the export.

5. Click **Finish**.

MEGA/XPDL OBJECT CORRESPONDENCE

The XPDL export feature translates a Workflow specification in MEGA into a XPDL-compliant output file. It is based on a set of mappings between the MEGA System Process and Organizational Process metamodel and XPDL version 2.1.

Conventions

MEGA concept names start with uppercase. Example: Task.

XPDL elements are delimited by <..>.

XPDL attributes are prefixed by ::.

XPDL concepts relate to the following WfMC Specification document: “Process Definition Interface – XML Process Definition Language, WfMC-TC-1025, Version 2.1a”.

Special Behaviors

Each exported Workflow will generate a default <Pool> and a default <Lane>.

The internal participants will be exported as <Artifact> typed Group for graphical layout purpose and as <Participant> which will perform the tasks.

The external participants will be exported as <Pool> and as <Participant>.

Only graphical Sequence Flows, Message Flows and Notes are exported.

Application, IT Service and User Interface objects are exported as Extended Attributes. Its name, id and comment are concerned.

The export tool considers objects and links using the rules detailed in the object correspondence table. The diagrams are only used to retrieve graphical information of exported objects. One possible consequence is that in the result you can have, after import in another tool, more objects appearing in the result diagram.

Object correspondences

The following table indicates concepts managed by the export tool:

MEGA Concepts	XPDL Concepts
 Organizational Process	 <WorkflowProcess>
 Name	Name
 _Hexaidabs	Id
 Comment	Description
 Owned Operation	<Activities>
 Owned Element	

MEGA Concepts	XPDL Concepts
▣ Gateway ▣ Event ▣ Sequence Flow (*) ▣ Data Object ▣ Message Flow (*) ▣ Participant 🔗 Content 🔗 Internal Participant 🔗 Owned Organizational Process 🔗 Organizational Process Used	<Activities> <Activities> <Transitions> <Artifacts> <MessageFlows> <Participants> <DataFields> <Participants> <WorkflowProcess> <WorkflowProcess>
▣ Operation ▣ Name ▣ _Hexaidabs ▣ Comment ▣ Compensation ▣ Transaction ▣ Loop ▣ Multiple ▣ Loop Condition 🔗 User Interface ▣ Name ▣ _Hexaidabs ▣ Comment 🔗 IT Service ▣ Name ▣ _Hexaidabs ▣ Comment 🔗 Application ▣ Name ▣ _Hexaidabs ▣ Comment	🔗 <Activity> - Name - Id - Description - IsForCompensation - IsATransaction <Loop> <Loop :: LoopType> <LoopCondition> <Task::TaskUser> <ExtendedAttribute :: GuiName> <ExtendedAttribute :: Guild> <ExtendedAttribute :: GuiDescription> <Task::TaskService> <ExtendedAttribute :: ServiceName> <ExtendedAttribute :: ServiceId> <ExtendedAttribute :: ServiceDescription> <Task::TaskService> <ExtendedAttribute :: ServiceName> <ExtendedAttribute :: ServiceId> <ExtendedAttribute :: ServiceDescription>

MEGA Concepts	XPDL Concepts
- System Used - System Specification - IT Service - Application - Name _Hexaidabs - Comment - Participant - Called Organizational Process - Note (*)	<Task::TaskService> <Task::TaskService> <ExtendedAttribute :: ServiceName> <ExtendedAttribute :: ServiceId> <ExtendedAttribute :: ServiceDescription> <Performer> <Implementation :: SubFlow> <Artifact :: Annotation>
- Content - Name _Hexaidabs	<> <DataField> - Name - Id
- Gateway - Name _Hexaidabs - Comment - Gateway Type - Note (*)	<> <Activity :: Route> - Name - Id - Description - See Table 1 <Artifact :: Annotation>
- Event - Name _Hexaidabs - Comment - Event Nature - Event Type - Triggered Sequence Flow - Bounded Activity - Note (*)	<> <Activity :: Event> - Name - Id - Description - See Table 2 - See Table 2 <Transition> - Target <Artifact :: Annotation>
- Sequence Flow - Predicate _Hexaidabs	<> <SequenceFlow> - Name - Id

MEGA Concepts	XPDL Concepts
- Comment - Sequence Type - Predecessor - Successor - Data Object - Note (*)	Description <i>See Table 3</i> <Transition :: From> <Transition :: To> <Artifact :: DataObject> <Artifact :: Annotation>
Data Object - Name _Hexaidabs - Data Object Status - Producer of Data Object - Consumer of Data Object - Sequence Flow	<Artifact :: DataObject> Name Id State <Association :: Source> <Association :: Target> <Association :: Object>
Message Flow _Hexaidabs - Content - Name - Source Element - Target Element - Note (*)	<MessageFlow> Id Name <MessageFlow :: Source> <MessageFlow :: Target> <Artifact :: Annotation>
Participant - Name _Hexaidabs - Comment - Assignment - Name - MetaClass Name	<Participant> & <Artifact :: Group> Name Id Description <Artifact :: Description> <i>See Table 4</i>
Note - Name _Hexaidabs - Comment	<Artifact :: Annotation> Name Id TextAnnotation

MEGA Concepts	XPDL Concepts
System Process - Name _Hexaidabs - Comment - Owned Task - Owned Element - Gateway - Event - Sequence Flow (*) - Data Object - Message Flow (*) - Participant - Content - Internal Participant - Owned System Process - Organizational Process within Model	<> <WorkflowProcess> - Name - Id - Description <Activities> <Activities> <Transitions> <Artifacts> <MessageFlows> <Participants> <DataFields> <Participants> <WorkflowProcess> <WorkflowProcess>
Task - Name _Hexaidabs - Comment - Compensation - Transaction - Loop - Multiple - Loop Condition - Task Type - User Interface - Name _Hexaidabs - Comment - IT Service - Name	<> <Activity> - Name - Id - Description - IsForCompensation - IsATransaction <Loop> <Loop :: LoopType> <LoopCondition> <i>See Table 5</i> <Task::TaskUser> <ExtendedAttribute :: GuiName> <ExtendedAttribute :: Guild> <ExtendedAttribute :: GuiDescription> <Task::TaskService> <ExtendedAttribute :: ServiceName>

MEGA Concepts	XPDL Concepts
▢ _Hexaidabs ▢ Comment 🔗 Participant 🔗 Called System Process 🔗 Note (*)	<ExtendedAttribute :: ServiceId> <ExtendedAttribute :: ServiceDescription> <Performer> <Implementation :: SubFlow> <Artifact :: Annotation>
▢ Functional Process ▢ Name ▢ _Hexaidabs ▢ Comment 🔗 Owned Functional Activity 🔗 Owned Element ▢ Gateway ▢ Event ▢ Sequence Flow (*) ▢ Data Object ▢ Message Flow (*) ▢ Participant 🔗 Internal Participant 🔗 Owned Functional Process 🔗 Functional Process Used	🔗 <WorkflowProcess> - Name - Id - Description <Activities> <Activities> <Activities> <Transitions> <Artifacts> <MessageFlows> <Participants> <Participants> <WorkflowProcess> <WorkflowProcess>
▢ Functional Activity ▢ Name ▢ _Hexaidabs ▢ Comment ▢ Compensation ▢ Transaction ▢ Loop ▢ Multiple ▢ Loop Condition 🔗 Application ▢ Name ▢ _Hexaidabs	🔗 <Activity> - Name - Id - Description - IsForCompensation - IsATransaction <Loop> <Loop :: LoopType> <LoopCondition> <Task::TaskService> <ExtendedAttribute :: ServiceName> <ExtendedAttribute :: ServiceId>

MEGA Concepts	XPDL Concepts
 Comment  IT Service  Name  _Hexaidabs  Comment  Participant  Called Functional Process  Note (*)	<ExtendedAttribute :: ServiceDescription> <Task::TaskService> <ExtendedAttribute :: ServiceName> <ExtendedAttribute :: ServiceId> <ExtendedAttribute :: ServiceDescription> <Performer> <Implementation :: SubFlow> <Artifact :: Annotation>
 Business Process  Name  _Hexaidabs  Comment  Owned Element  Gateway  Event  Sequence Flow (*)  Data Object  Message Flow (*)  Participant  Internal Participant  Owned Business Process  Organizational Process  System Process  Functional Process	 <WorkflowProcess> - Name - Id - Description <Activities> <Activities> <Transitions> <Artifacts> <MessageFlows> <Participants> <Participants> <WorkflowProcess> <WorkflowProcess> <WorkflowProcess> <WorkflowProcess>

(*) Only if the object is represented on a diagram

Table 1:

MEGA Gateway Type	XPDL
 Gateway Type  Exclusive Event  Exclusive Data	 <Route> :: GatewayType = Exclusive & :: ExclusiveType = Event :: GatewayType = Exclusive & :: ExclusiveType = Data

MEGA Gateway Type	XPDL
Parallel Inclusive Complex	:: GatewayType = Parallel :: GatewayType = Inclusive :: GatewayType = Complex

Table 2:

MEGA Event Nature					
		Start	End	Throw	Catch
		<StartEvent>	<EndEvent>	<IntermediateEvent> CatchThrow = Throw	<IntermediateEvent> CatchThrow = Catch
MEGA Event Type	Generic	:: Trigger = None	:: Result = None	:: Trigger = None	:: Trigger = None
	Message	:: Trigger = Message	:: Result = Message	:: Trigger = Message	:: Trigger = Message
	Timer	:: Trigger = Timer	:: Result = None *	:: Trigger = None *	:: Trigger = Timer
	Error	:: Trigger = None *	:: Result = Error	:: Trigger = None *	:: Trigger = Error
	Cancel	:: Trigger = None *	:: Result = Cancel	:: Trigger = None *	:: Trigger = Cancel
	Compensation	:: Trigger = None *	:: Result = Compensation	:: Trigger = Compensation	:: Trigger = Compensation
	Conditional	:: Trigger = Conditional	:: Result = None *	:: Trigger = None *	:: Trigger = Conditional
	Link	:: Trigger = None *	:: Result = None *	:: Trigger = Link	:: Trigger = Link
	Signal	:: Trigger = Signal	:: Result = Signal	:: Trigger = Signal	:: Trigger = Signal
	Terminate	:: Trigger = None *	:: Result = None *	:: Trigger = None *	:: Trigger = None *
	Multiple	:: Trigger = Multiple	:: Result = Multiple	:: Trigger = Multiple	:: Trigger = Multiple

* = Default behavior because the combination is not possible

Table 3:

MEGA Sequence Type	XPDL
Sequence Type Conditioned Standard Default	<> <Condition> :: Type = CONDITION & :: <Expression> - :: Type = OTHERWISE

Table 4:

MEGA Assignment	XPDL
Assignment Org-Unit Application IT Service System Process Others	<> <ParticipantType> :: Type = ORGANIZATIONAL_UNIT :: Type = SYSTEM :: Type = SYSTEM :: Type = SYSTEM :: Type = ROLE

Table 5:

MEGA Task Type	XPDL
 Task Type	 <Task>
 Task With GUI	<TaskUser>
 IT Service Call	<TaskService>
 System Process Call	<SubFlow>
 Manual Task	<TaskManual>
 Script Task	<TaskScript>
 Send Task	<TaskSend>
 Receive Task	<TaskReceive>

EXPORT TO TIBCO BUSINESS STUDIO

The XPDL export tool of MEGA enables the export of workflows modeled in MEGA and their import into TIBCO Business Studio®.

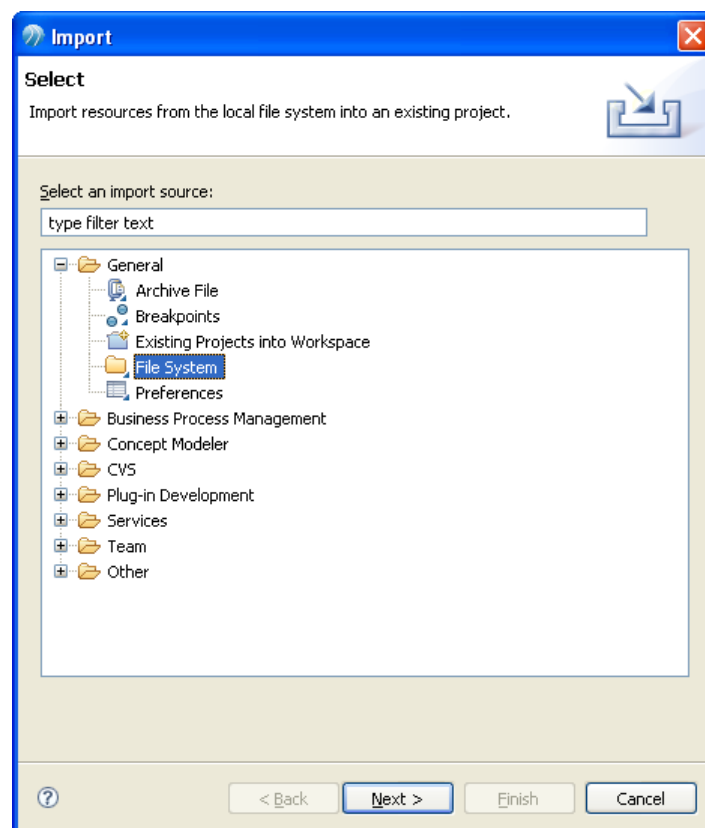
To obtain workflow that can be used in TIBCO Business Studio, simply export the description of this workflow in XPDL format.

To do this:

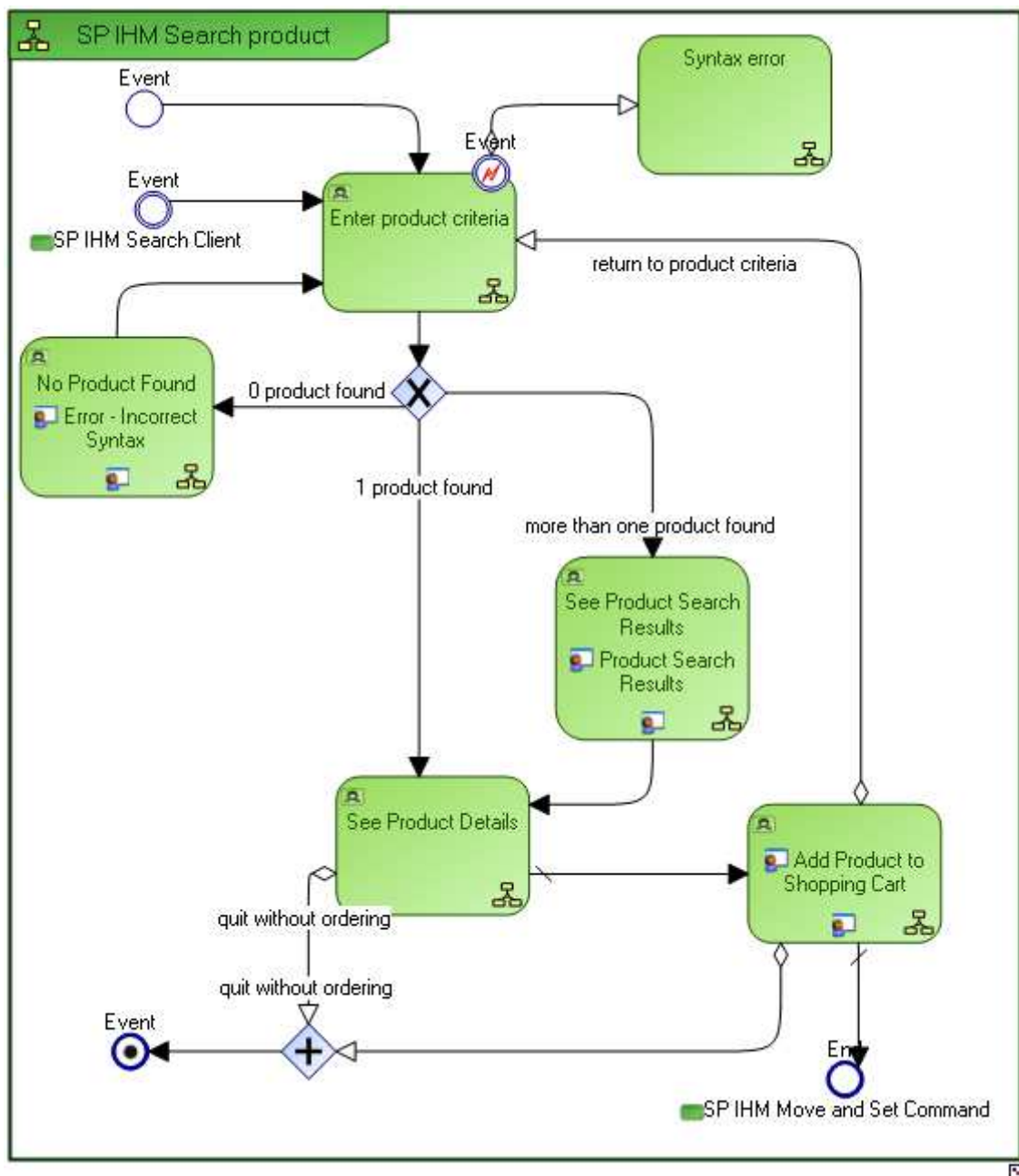
1. In MEGA, select **File > Export > XPDL 2.1 (*.xpdl)**.

The export dialog box appears.

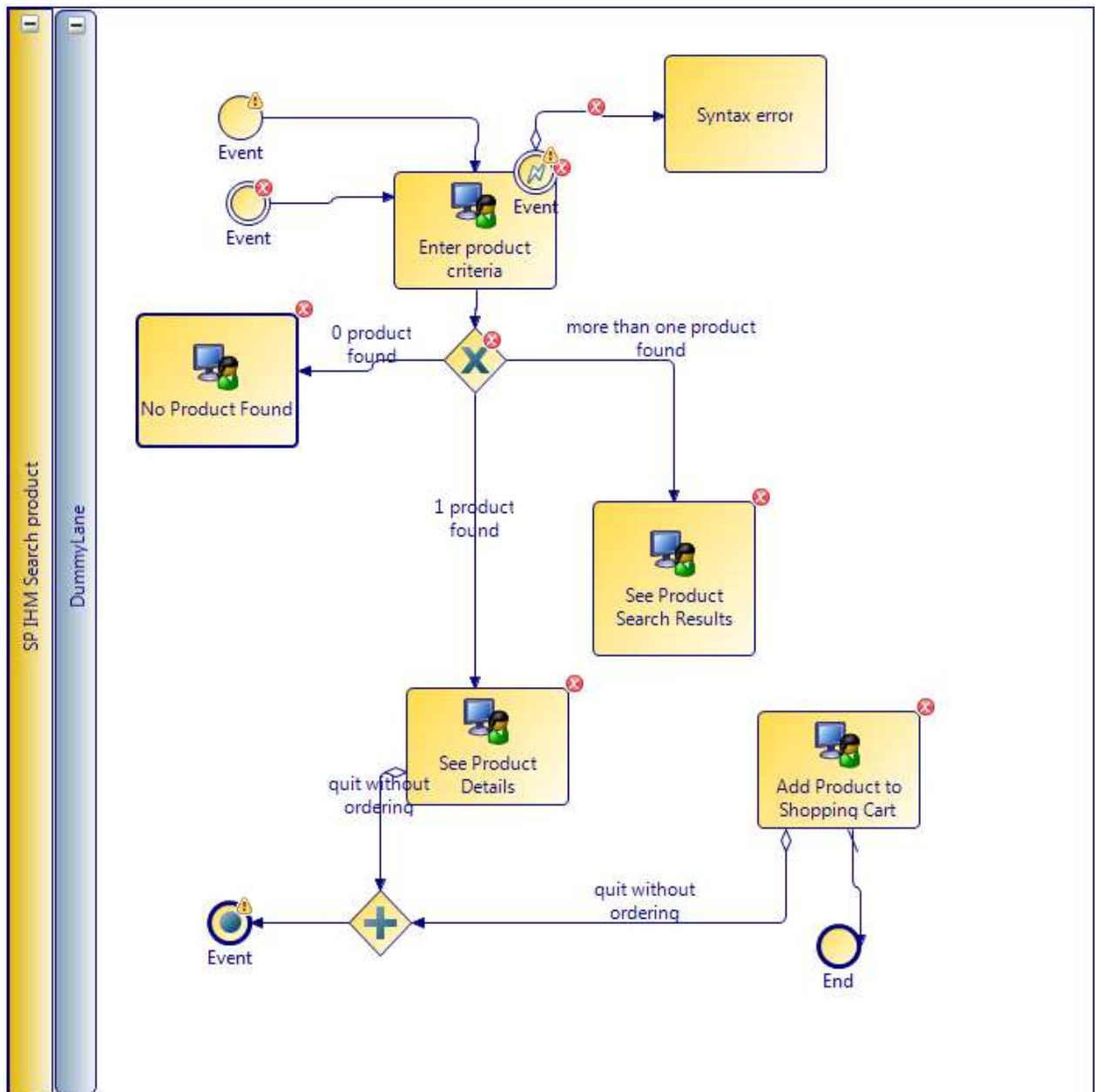
2. Select the system processes or the organization processes to be exported.
3. Specify the name of the file to be exported.
4. Check the option “Export for Tibco” (if available)
5. Click **Next**.
6. Click the **Export** button.
7. In TIBCO Business Studio, import the XPDL file in a “Process Packages Folder” by using the “File System” import source:



Example of workflow in MEGA:



Example of the workflow imported into TIBCO Business Studio:



HOPEX XMI 2.1 Import for UML2

XMI IMPORT OVERVIEW

The XML Metadata Interchange XMI is an OMG standard for exchanging UML Models between different UML products such as modeling tools and UML Design.

The XMI Import project aims at importing the content of .xmi and .uml files into HOPEX so that users can reproduce diagrams from other platforms. Only the data (the objects) are imported, not the drawings.

Prerequisites

The XMI Import feature supports UML versions from 2.3 to 2.5. A file with a version lower than 2.3 or higher than 2.5 can be imported, without guarantee of full success.

However, any URI not corresponding to one of the ones provided by the OMG (see links down below) does not allow the import.

<http://schema.omg.org/spec/XMI/index.htm>

<http://schema.omg.org/spec/UML/index.htm>

Scope of XMI Import

The purpose of the XMI Import tool is to import XMI data into HOPEX repository. The objects imported are those belonging to the Class Diagram, Use Case Diagram, Component Diagram, Composite Structure Diagram, Activity Diagram, Communication Diagram, Sequence Diagram, State Machine Diagram, Interaction Overview Diagram, Object Diagram, Deployment Diagram, etc.

Only objects are imported, not the drawings.

The exact list of the supported objects and their properties is detailed below.

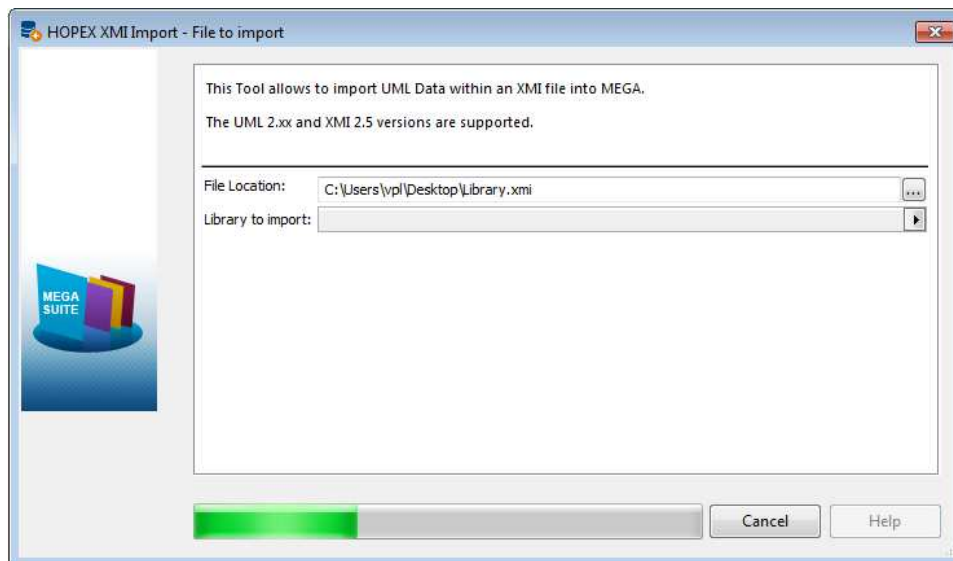
IMPORTING XMI AND UML FILES

Depending on the source tool, the XMI import tool can import .xmi or .uml files.

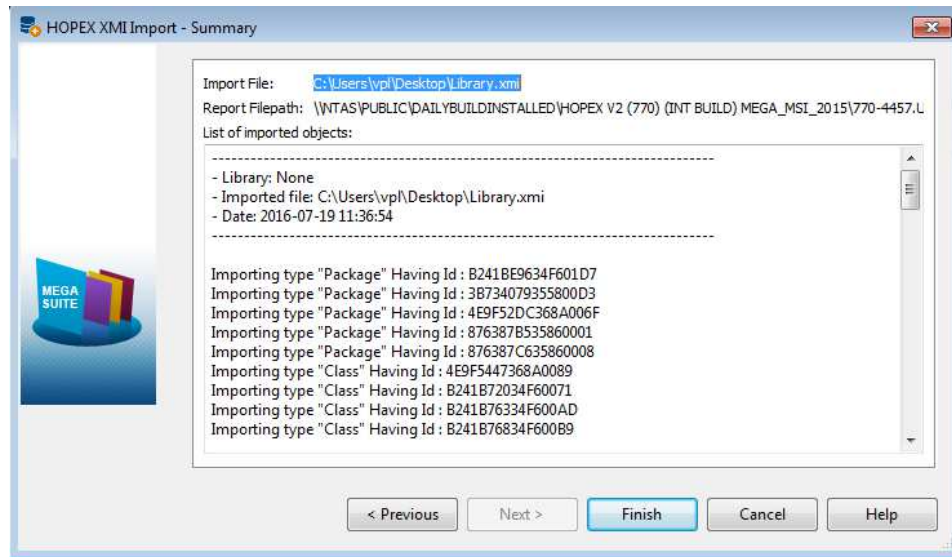
To import a file:

1. In HOPEX, select **File > Import > XMI 2.1 UML 2.3 (*.uml; *.xmi)**
The import wizard appears.
2. In **File Location**, select the file to be imported.
3. Select the library in which you want to import the data (optional).
4. Click **Next**.

The wizard shows the import process progression.



Then it shows the report of imported data.



HOPEX/XMI OBJECT MAPPING

The following paragraph indicates what kinds of objects are imported by UML2 diagram types. Only objects belonging to the selected package are imported.

All objects that do not belong to a package are attached to a package called “Default Package”.

A package “UML Primitive Types” is imported by default if not already.

Class Diagram

Classes, attributes, associations, association ends, generalizations, generalization sets, operations, parameters, data types, primitive types, interfaces, enumerations, etc.

Use Case Diagram

Use cases, actors, packages, constraints, extension points (text), participations, extensions (link), inclusions (link), generalization, dependencies, etc.

State Machine Diagram

State machines, regions, states, pseudo states, transitions, constraints, etc.

Protocol State Machine Diagram

Protocol state machines, regions, states, pseudo states, transitions, constraints, etc.

Activity UML Diagram

Actions, control nodes, Input Pins, Output Pins, Exchange Pins, central buffer nodes, data store nodes, activity partitions, control flows, object flows, exception handlers, activities uml, activity parameter nodes, structured activity nodes, expansion regions, expansion nodes, interruptible activity regions, etc.

Component Diagram

Components, ports, packages, interfaces, required interfaces, provided interfaces, classes, Connectors, realized elements, etc.

Composite Structure Diagram

Collaborations UML, collaboration uses, parts, dependencies, connectors, interfaces, classes, provided interfaces, required interfaces, etc.

Sequence Diagram

Life lines, combined fragments, interaction uses, gates, states invariant, UML messages, constraints, etc.

Messages include those exchanged directly between lifelines as well as messages exchanged through execution specification.

Communication Diagram

Life lines, connectors, UML messages, etc.

Deployment Diagram

Packages, components, artifacts UML, nodes UML, devices, execution environments, interfaces, deployment specifications, deployments, manifestations, deployment configurations, component instances, device instances, node instances, execution environment instances, communication paths, etc.

🔗* Only objects owned by the selected package or its sub-packages are exported.

Objects that are linked to objects contained in the selected export package but owned by another package are also exported in order to ensure links. However, they will be owned by the exported package.

The following table indicates concepts managed by the export tool:

Class Diagram

MEGA Concepts	MetaAttribute	MetaAssociation(End)
Class	Name	Class Target Dependency
	xmi_id	Realization Class
	Visibility	Nested Class
	Comment	Association
	Abstract	Connector
	IsLeaf	Association Class
	IsActive	Attribute
	Client Dependency	Operation (UML)
		Generalization
		Required Interface
		Provided Interface
		Constraint
		Port
		AssociationEnd
		Owned Part
		Behavior: State Machine
		Behavior: Activity Uml
		Behavior: Interaction Uml
		Behavior: Collaboration Uml
		Protocol: ProtocolStateMachineDiagram
		Source Dependency
Data Type	Name	Class Target Dependency

MEGA Concepts	MetaAttribute	MetaAssociation(End)
	xmi_id Visibility Abstract IsLeaf IsActive Client Dependency	Nested Class
Interface	xmi_id Name Visibility Comment Abstract IsLeaf Client Dependency	Class Target Dependency Nested Class Association Attribute Operation (UML) Generalization RequiredInterface SpecificationInterface
Enumeration	_Hexaidabs Name Visibility Comment Client Dependency	Class Target Dependency Attribute Operation (UML) Literal Value RequiredInterface Specification Interface
LiteralValue	_Hexaidabs Name	Value Slot

MEGA Concepts	MetaAttribute	MetaAssociation(End)
Expression	xmi_id Name Visibility Comment Client Dependency	Class Target Dependency Specification Interface
Primitive Type	Name xmi_id Visibility Abstract IsLeaf IsActive	Class Target Dependency Nested Class
Association	xmi_id Name Visibility Comment IsAssociationDerived IsNavigable	Connection Dependency (Target Association) Class via AssociationEnd
Association End	xmi_id Name Aggregation: Composite/Shared	Association Dependency
Association Class	xmi_id	Class Target Dependency

MEGA Concepts	MetaAttribute	MetaAssociation(End)
	Name Visibility Comment IsLeaf Abstract IsActive IsAssociationDerived IsNavigable	Nested Class AssociationEnd Association Association Class Class via AssociationEnd Attribute Operation (UML)
Attribute	xmi_id Name Visibility Comment IsLeaf IsOrdred Uniqueness ReadOnly IsDerived InitialValue Multiplicity: UpperValue, LowerValue	Dependency (Target Attribute) AttributType
Operation (UML)	xmi_id Name Visibility Comment	Precondition Postcondition Parameter ReturnType

MEGA Concepts	MetaAttribute	MetaAssociation(End)
Dependency	Abstract	Target Dependency
	IsQuery	
Dependency	_Hexaidabs	Class Source
	Name	Class Target
	Visibility	Stereotype
	Comment	
Generalization	xmi_id	Super Class
	Name	UML constraint
	Comment	
GeneralizationSet	xmi_id	Generalization
	Name	
	Comment	
	IsComplete	
	IsDisjoint	
Constraint	xmi_id	ConstrainedClass
	Name	ConstrainedGeneralization
	Comment	ConstrainedElement
	MaxInt	Actor (UML)
	MinInt	Package
	Specification	UseCase
		UseCaseParticipation

MEGA Concepts	MetaAttribute	MetaAssociation(End)
Parameter	_Hexaidabs Name Comment	Parameter Type
Behavior (UML)	_Hexaidabs Name	

Use Case Diagram

MEGA Concepts	MetaAttribut	MetaAssociation(End)
UseCase	xmi_id Name Visibility Comment	UsesUseCase OwnedExtension ExtensionPoint Behavior: State Machine Behavior: Protocol State Machine Behavior: Interaction UML Behavior: Activity UML Behavior: Collaboration UML Constraint Generalization
Actor (UML)	xmi_id Name Visibility Comment	Participation Constraint Generalization
Participation	xmi_id	UseCase

	Name	Actor (UML)
	Comment	Constraint
	Multiplicity	
Extension	xmi_id	Extended Use Case
	Name	Extension Location
	Comment	

Composite Structure and Communication Diagram

MEGA Concepts	MetaAttribut	MetaAssociation(End)
Collaboration uml	xmi_id	CollaborationRole
	Name	OwnedConnector
	Comment	OwnedCollaborationUse
	IsAbstract	
	IsLeaf	
Collaboration use	xmi_id	Type
	Name	
	Comment	
Part	xmi_id	ConnectorEnd (of the LifeLine who represents the part)
	Name	Dependency
	Visibility	
	Client Dependency	
	IsLeaf	
	IsUnique	

	IsOrdered Multiplicity Aggregation: Composite/Shared Comment	
Connector	xmi_id Name Connector Kind IsLeaf	OwnedConnectorEnd
ConnectorEnd	xmi_id Name Multiplicity	Connector

State Machine

MEGA Concepts	MetaAttribut	MetaAssociation(End)
State Machine	xmi_id Name Comment Reentrant	DetailedState Region
Region	xmi_id Name Comment	State PseudoState Transition
State (UML)	xmi_id	Detailing Behavior

	Name Comment	Outgoing Incoming OwnedRegion DoActivity ExitActivity EntryActivity ConnectionPoint (Entry Point/ Exit Point)
Pseudo State	xmi_id Name Comment PseudoStateKind	Outgoing Transition Incoming Transition
Transition (UML)	xmi_id Name Comment	Source Target Source Pseudo State Target Pseudo State Trigger Effect (Behavior) Constraint
Event (UML)	xmi_id Name Comment	EventKind
Protocol State Machine	xmi_id Name Visibility	Region

	Comment	
Trigger (UML)	xmi_id	Event (UML)
	Name	
	Comment	

Sequence, Communication and Interaction Overview Diagram

MEGA Concepts	MetaAttribut	MetaAssociation(End)
Interaction UML	xmi_id Name Comment	Gate Fragment (Combined Fragment, State Invariant, ...) LifeLine Message Action Parameter Operation (UML) OwnedInteraction (UML) OwnedInteractionOperand
Interaction Operand	xmi_id Name Comment	Fragment (Combined Fragment, State Invariant, ...) OwnedInteraction (UML) OwnedInteractionOperand
OccurrenceSpecification	xmi_id Name Comment	Event (UML) Message
ExecutionSpecification	xmi_id Name	start finish

	Comment	
LifeLine	xmi_id Name Comment	ElementRepresentedByALifeline ElementCoveringLifeline OwnedSelector
Combined Fragment	xmi_id Name InteractionOperatorKind Comment	InteractionOperand CoveredLifeLine
Interaction Use	xmi_id Name Comment	RefersTo CoveredLifeLine
State Invariant	xmi_id Name Comment	InvariantConstraint CoveredLifeLine
Gate	xmi_id Name Comment	
Message UML	xmi_id Name MessageKind MessageSort Comment	Receiver Sender Connector

Activity and Interaction Overview Diagram

MEGA Concepts	MetaAttribut	MetaAssociation(End)
Action	xmi_id	OutgoingControlFlow
	Name	OutgoingObjectFlow
	IsLeaf	IncomingControlFlow
	ActionKind	IncomingObjectFlow
	Comment	OwnerGroup
		RequestOperation
		CalledBehavior
		StructuralFeatureElementManagedByAnAction
		RequestSignal
		Association
		ClassManagedByAnAction
		Variable
		InputPin
		OutputPin
		ProtectingExceptionHandler
		Trigger
		LocalPostCondition
		LocalPreCondition
		Constraint
Control Node	xmi_id	OutgoingControlFlow
	Name	OutgoingObjectFlow
	IsLeaf	IncomingControlFlow
	Comment	IncomingObjectFlow
	ControlNodeType	OwnerGroup

Input Pin	xmi_id Name IsLeaf InputPinKind ControlType OrderingKind Comment	OutgoingControlFlow OutgoingObjectFlow IncomingControlFlow IncomingObjectFlow Constraint
Output Pin	xmi_id Name IsLeaf OutputPinKind ControlType OrderingKind Comment	OutgoingControlFlow OutgoingObjectFlow IncomingControlFlow IncomingObjectFlow Constraint
Exchange Pin	xmi_id Name IsLeaf ControlType OrderingKind Comment	OutgoingObjectFlow IncomingObjectFlow OwnerGroup
Central Buffer Node	xmi_id Name IsLeaf	OutgoingObjectFlow IncomingObjectFlow OwnerGroup

	ControlType OrderingKind Comment	
Data Store Node	xmi_id Name IsLeaf ControlType OrderingKind Comment	OutgoingObjectFlow IncomingObjectFlow OwnerGroup Constraint
Activity Partition	xmi_id Name IsDimension IsExternal Comment	ContainedElement Constraint
Object Flow	xmi_id Name IsLeaf Comment	Guard Weight SourceElement TargetElement Constraint
Control Flow	xmi_id Name IsLeaf Comment	Guard Weight SourceElement TargetElement

Exception Handler	xmi_id	Constraint
	Name	ProtectedNode
	Comment	ExceptionInput Constraint
Activity UML	xmi_id	ElementOwnedByAnActivityUML
	Name	Constraint
	Reentrant	
	SingleExecution	
	IsLeaf	
	Comment	
Activity Parameter Node	xmi_id	OutgoingObjectFlow
	Name	IncomingObjectFlow
	IsLeaf	Constraint
	ControlType	
	OrderingKind	
	Comment	
Structured Activity Node	xmi_id	OutgoingControlFlow
	Name	OutgoingObjectFlow
	IsLeaf	IncomingControlFlow
	MustIsolate	IncomingObjectFlow
	Comment	OwnerGroup
		ContainedElement InputPin

		OutputPin Constraint
Expansion Node	xmi_id Name IsLeaf ControlType OrderingKind Comment	OutgoingControlFlow OutgoingObjectFlow IncomingControlFlow IncomingObjectFlow Region Constraint
Expansion Region	xmi_id Name IsLeaf MustIsolate ExpansionKind Comment	OutgoingControlFlow OutgoingObjectFlow IncomingControlFlow IncomingObjectFlow OwnerGroup ContainedElement ExpansionNode InputElement OutputElement
Interruptible Activity Region	xmi_id Name Comment	OwnerGroup ContainedElement Constraint
Loop Node	xmi_id Name IsLeaf	OutgoingControlFlow OutgoingObjectFlow IncomingControlFlow

	MustIsolate TestedFirst Comment	IncomingObjectFlow OwnerGroup ContainedElement InputPin OutputPin Constraint Test
Conditional Node	xmi_id Name IsLeaf MustIsolate Assured Determinate Comment	OwnerGroup ContainedElement InputPin OutputPin Constraint OutgoingControlFlow OutgoingObjectFlow IncomingControlFlow IncomingObjectFlow
Sequence Node	xmi_id Name IsLeaf MustIsolate Comment	OutgoingControlFlow OutgoingObjectFlow IncomingControlFlow IncomingObjectFlow OwnerGroup ContainedElement InputPin OutputPin Constraint

Package Diagram

MEGA Concepts	MetaAttribut	MetaAssociation(End)
Package	Name xmi_id Visibility Comment	Client Dependency Package Target Dependency Owned Class Owned Package Owned Association Association Class Owned Dependency Owned Element (UML): Generalization Owned Use Case Owned Actor (UML) Constraint Behavior: State Machine Behavior: Protocol State Machine Behavior: Activity Uml Behavior: Interaction Uml Behavior: Collaboration Uml Owned Component Owned Event

Component Diagram

MEGA Concepts	MetaAttribut	MetaAssociation(End)
Component	xmi_id Name Comment	required Interface provided Port

	Isleaf Visibility Client Dependency	OwnedPart
Port	xmi_id Name Comment Client Dependency	
Interface	xmi_id Name Visibility Comment Abstract IsLeaf Client Dependency	Class Target Dependency Nested Class Association Association Class Attribute Operation (UML) Generalization RequiredInterface SpecificationInterface

Deployment Diagram

MEGA Concepts	MetaAttribut	MetaAssociation(End)
Artifact UML	xmi_id Name Comment Client Dependency	Target Dependency OwnedAttribute OwnedOperation NestedArtifact
Node UML	xmi_id	Deployment

	Name Comment Client Dependency	
Device	xmi_id Name Comment Client Dependency	Deployment
Execution Environment	xmi_id Name Comment Client Dependency	Deployment
Deployment Specification	xmi_id Name Comment Client Dependency	Target Dependency
Instance (Node UML/Device/Execution Specification/Component)	xmi_id Name Comment Client Dependency	Instantiated Element Target Dependency
Communication Path	xmi_id Name Comment	Communication Path End

Deployment	xmi_id Name Comment	Deployed Element Deployment Configuration
Manifestation	xmi_id Name Comment	Multiplicity Deployed Element Deployment Configuration

Object Diagram

MEGA Concepts	MetaAttribut	MetaAssociation(End)
Instance	xmi_id Name Comment	
Link	xmi_id Name Comment	LinkEnd
LinkEnd	xmi_id Name Comment	Instance

HOPEX XMI 2.1 Export for UML2

XMI EXPORT OVERVIEW

The XML Metadata Interchange XMI is an OMG standard for exchanging UML Models between different UML products such as modeling tools and UML Design.

The XMI 2.1 Export project aims at exporting the content of HOPEX Diagrams as .xmi files so that models modeled in HOPEX can be imported by UML tools such as Eclipse EMF.

Prerequisites

The XMI 2.1 export feature is available with HOPEX UML, and supports XMI version 2.1 with UML 2.3.

Scope of XMI Export

The purpose of XMI export is to translate the specification of HOPEX Class Diagrams, Use Case Diagrams, Component Diagram, Composite Structure Diagram, Activity Diagram, Communication Diagram, Sequence Diagram and State Machine Diagrams into XMI. Diagrams and diagrams drawings are not considered except with UML2 plugin for Eclipse.

The tool handles translation of the concepts of the above HOPEX diagrams that have a correspondence in UML 2.0. The list of supported mappings is detailed below.

EXPORTING XMI FILES

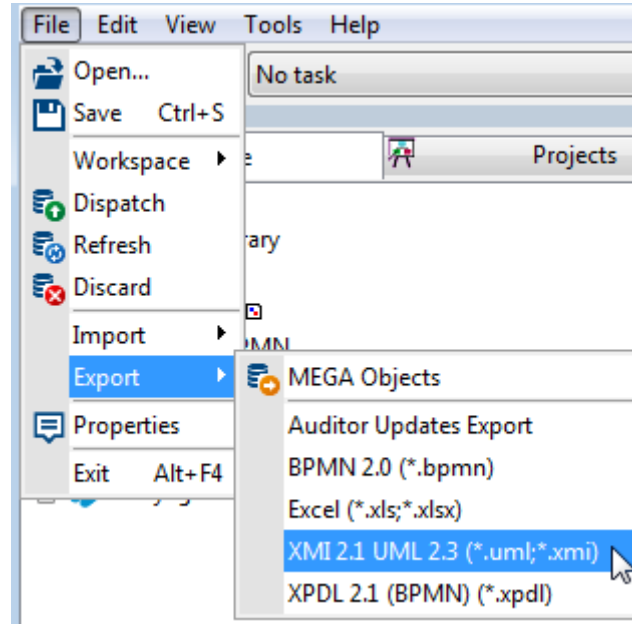
Depending on the destination tool, the XMI export tool produces two types of file. For Eclipse with UML plugin, the export will produce one .uml file for data and some .umlclass, .umlusc and/or .umlstm files for diagrams (each file represents an HOPEX diagram).

For other modeling tools, as Enterprise Architect or MagicDraw UML, the export will produce one .xmi file for data but no diagram description files will be generated.

Export for Eclipse with UML2 plugin

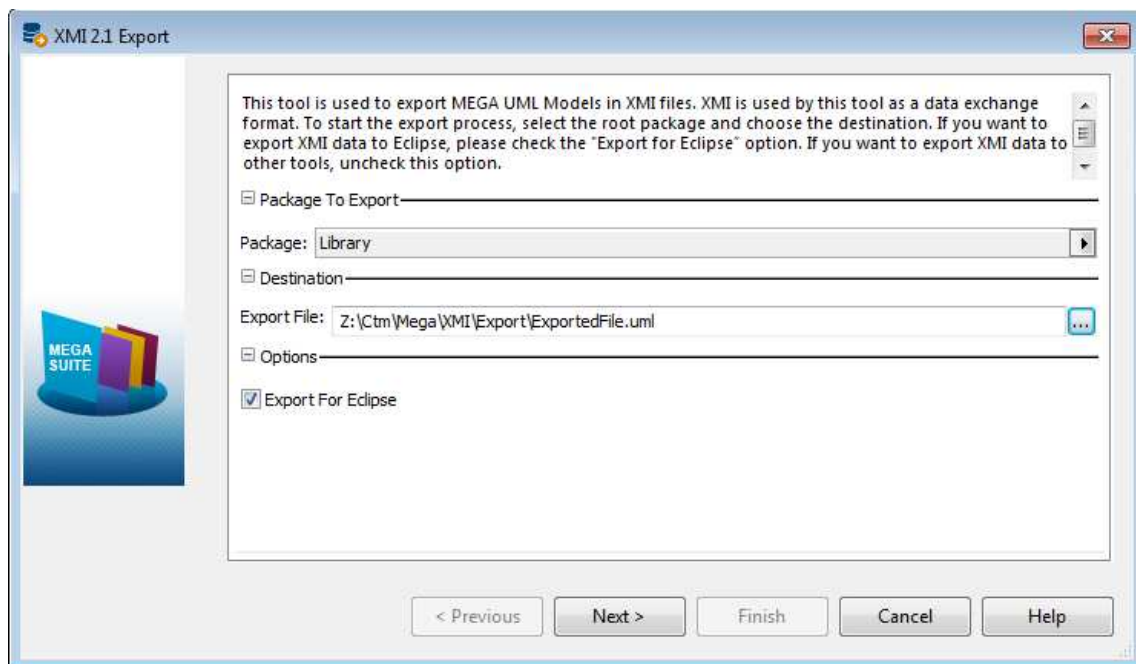
To export HOPEX data for Eclipse with UML2 plugin:

1. In HOPEX, select **File > Export > XMI 2.1 UML 2.3 (*.uml; *.xmi)**



The export dialog box appears.

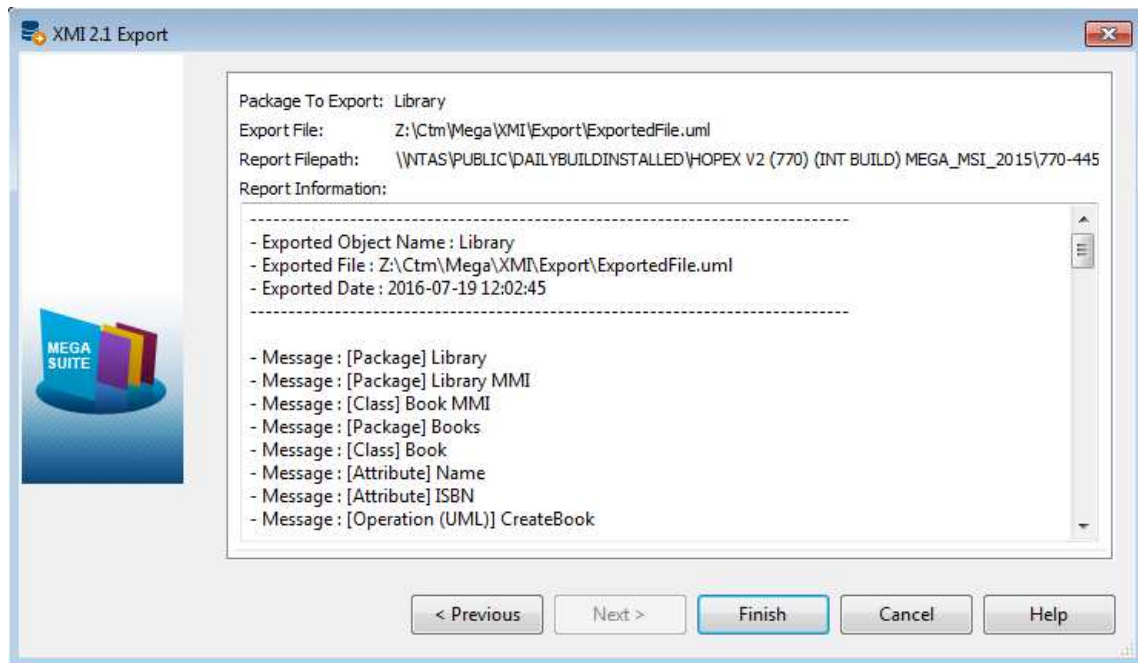
2. Select the **Package** to be exported.
3. Specify the name and path of the file to be exported.
4. **Check the Export for Eclipse** parameter.



5. Click **Next >**

The window shows the export process progression.

Then the window showing the report of all exported data appears:



Export for other tools

Because many modeling tools do not support the UML Diagram Interchange Specification, the MEGA XMI 2.1 Export feature exports .xmi file for data but no diagram description files for other tools than Eclipse.

To export HOPEX data for modeling tools such as Enterprise Architect or MagicDraw UML:

1. In HOPEX, select **File > Export > XMI 2.1 UML 2.3 (*.uml; *.xmi)**.

The export dialog box appears.

2. Select the **Package** to be exported.
3. Specify the name and path of the file to be exported.
4. **Uncheck the Export for Eclipse** parameter.
5. Click **Next >**.

The window that appears shows the export process progression.

Then the window showing the report of all exported data appears.

HOPEX/XMI OBJECT MAPPING

The XMI export feature translates a class diagram or use case diagram or state machine diagram or even protocol state machine diagram specified in HOPEX into an XMI compliant output file.

The following paragraph indicates what kinds of objects are exported by UML2 diagram types. Only objects belonging to the selected package are exported.

Class Diagram

Packages, classes, interfaces, enumerations, literal strings (expression text), associations, association roles, generalizations, constraints, required interfaces (link), provided interfaces (supported interface link), data types (class stereotype), primitive types (class stereotype), attributes, operations.

Use Case Diagram

Use cases, actors, packages, constraints, extension points (text), participations, extensions (link), inclusions (link), generalization, dependencies.

State Machine Diagram

State machines, regions, states, pseudo states, transitions, constraints

Protocol State Machine Diagram

Protocol state machines, regions, states, pseudo states, transitions, constraints

Activity UML Diagram

Actions, control nodes, Input Pins, Output Pins, Exchange Pins, central buffer nodes, data store nodes, activity partitions, control flows, object flows, exception handlers, activities uml, activity parameter nodes, structured activity nodes, expansion regions, expansion nodes, interruptible activity regions.

Component Diagram

Components, ports, packages, interfaces, required interfaces, provided interfaces, classes, Connectors, realized elements.

Composite Structure Diagram

Collaborations UML, collaboration uses, parts, dependencies, connectors, interfaces, classes, provided interfaces, required interfaces.

Sequence Diagram

Life lines, combined fragments, interaction uses, gates, states invariant, messages UML, constraints.

Messages include those exchanged directly between lifelines as well as messages exchanged through execution specification.

Communication Diagram

Life lines, connectors, messages UML.

Deployment Diagram

Packages, components, artifacts UML, nodes UML, devices, execution environments, interfaces, deployment specifications, deployments, manifestations, deployment configurations, component instances, device instances, node instances, execution environment instances, communication paths.

🔗* Only objects owned by the selected package or its sub-packages are exported.

Objects that are linked to objects contained in the selected export package but owned by another package are also exported in order to ensure links. However, they will be owned by the exported package.

The following table indicates concepts managed by the export tool:

HOPEX Concepts	
	Package
	Name
	_Hexaidabs
	Visibility
	Comment
	Client Dependency
	Package Target Dependency
	Owned Class
	Owned Package
	Owned Association
	Association Class
	Owned Dependency
	Owned Element (UML): GeneralizationSet
	Owned Use Case
	Owned Actor (UML)
	Constraint
	Behavior: State Machine
	Behavior: Protocol State Machine
	Behavior: Activity Uml
	Behavior: Interaction Uml

HOPEX Concepts

Behavior: Collaboration Uml

Owned Component

Owned Event

 Class

 Name

 _Hexaidabs

 Visibility

 Comment

Abstract

 IsLeaf

 IsActive

Client Dependency

Class Target Dependency

Realization Class

Nested Class

🏠 Association

Connector

Association Class

Attribute

⚡ Operation (UML)

Generalization

Required Interface

HOPEX Concepts	
	Provided Interface
	Constraint
	Method
	Port
	AssociationEnd
	Owned Part
	Behavior: State Machine
	Behavior: Activity Uml
	Behavior: Interaction Uml
	Behavior: Collaboration Uml
	Data Type
	Name
	_Hexaidabs
	Visibility
	Abstract
	IsLeaf
	IsActive
	Client Dependency
	Class Target Dependency
	Nested Class
	Interface
	_Hexaidabs

HOPEX Concepts	
	Name
	Visibility
	Comment
	Abstract
	IsLeaf
	Client Dependency
	Class Target Dependency
	Nested Class
	Association
	Association Class
	Attribute
	Operation (UML)
	Generalization
	RequiredInterface
	SpecificationInterface
	Enumeration
	_Hexaidabs
	Name
	Visibility
	Comment
	Client Dependency
	Class Target Dependency

HOPEX Concepts
 Attribute  Operation (UML)  Literal Value  RequiredInterface  Specification Interface
 Expression  _Hexaidabs  Name  Visibility  Comment  Client Dependency  Class Target Dependency  Specification Interface
 Primitive Type  Name  _Hexaidabs  Visibility  Abstract  IsLeaf  IsActive  Class Target Dependency  Nested Class

HOPEX Concepts	
Association _Hexaidabs Name Visibility Comment IsAssociationDerived IsNavigable Connection Dependency (Target Association) Class via AssociationEnd	
Association Class _Hexaidabs Name Visibility Comment IsLeaf Abstract IsActive IsAssociationDerived IsNavigable Class Target Dependency Nested Class	

HOPEX Concepts	
	AssociationEnd
	Association
	Association Class
	Class via AssociationEnd
	Attribute
	Operation (UML)
	Attribute
	_Hexaidabs
	Name
	Visibility
	Comment
	IsOrdred
	Uniqueness
	ReadOnly
	IsDerived
	InitialValue
	Multiplicity : UpperValue, LowerValue
	Dependency (Target Attribute)
	AttributType
	OverloadedAttribute
	Operation (UML)
	_Hexaidabs

HOPEX Concepts	
	Name
	Visibility
	Comment
	Abstract
	IsQuery
	Precondition
	Postcondition
	Method
	Parameter
	ReturnType
	Target Dependency
	Dependency
	_Hexaidabs
	Name
	Visibility
	Comment
	Class Source
	Class Target
	Generalization
	_Hexaidabs
	Name
	Comment

HOPEX Concepts	
	Super Class
	UML constraint
	GeneralizationSet
	_Hexaidabs
	Name
	Comment
	IsComplete
	IsDisjoint
	Target Dependency
	Generalization
	Constraint
	_Hexaidabs
	Name
	Comment
	MaxInt
	MinInt
	ConstrainedClass
	ConstrainedGeneralization
	ConstrainedElement
	Actor (UML)
	Package
	UseCase

HOPEX Concepts	
	UseCaseParticipation
	Parameter
	_Hexaidabs
	Name
	Comment
	Parameter Type
	Behavior (UML)
	_Hexaidabs
	Name
	Specification
	UseCase
	_Hexaidabs
	Name
	Visibility
	Comment
	UsesUseCase
	OwnedExtension
	ExtensionPoint
	Behavior: State Machine
	Behavior: Protocol State Machine
	Behavior: Interaction UML
	Behavior: Activity UML

HOPEX Concepts	
	Constraint
	Generalization
	Actor (UML)
	_Hexaidabs
	Name
	Visibility
	Comment
	Participation
	OwnedExtension
	Constraint
	Generalization
	Participation
	_Hexaidabs
	Name
	Comment
	Multiplicity
	UseCase
	Actor (UML)
	Constraint
	Extension
	_Hexaidabs
	Name

HOPEX Concepts	
	Comment
	Extended Use Case
	Extension Location
	State Machine
	_Hexaidabs
	Name
	Comment
	Reentrant
	DetailedState
	Region
	Region
	_Hexaidabs
	Name
	Comment
	State
	PseudoState
	Transition
	State (UML)
	_Hexaidabs
	Name
	Comment
	Detailing Behavior

HOPEX Concepts	
	Outgoing
	Incoming
	OwnedRegion
	OwnedRegion
	DoActivity
	ExitActivity
	EntryActivity
	Pseudo State
	_Hexaidabs
	Name
	Comment
	PseudoStateKind
	Outgoing Transition
	Incoming Transition
	Transition (UML)
	_Hexaidabs
	Name
	Comment
	Source
	Target
	Source Pseudo State
	Target Pseudo State

HOPEX Concepts	
	Trigger
	Effect (Behavior)
	Constraint
Event (UML)	
	_Hexaidabs
	Name
	Comment
Protocol State Machine	
	_Hexaidabs
	Name
	Reentrant
	Comment
	Region
Action	
	_Hexaidabs
	Name
	IsLeaf
	ActionKind
	Comment
	OutgoingControlFlow
	OutgoingObjectFlow

HOPEX Concepts	
	IncomingControlFlow
	IncomingObjectFlow
	OwnerGroup
	RequestOperation
	CalledBehavior
	StructuralFeatureElementManagedByAnAction
	RequestSignal
	Association
	ClassManagedByAnAction
	Variable
	InputPin
	OutputPin
	ProtectingExceptionHandler
	Trigger
	LocalPostCondition
	LocalPreCondition
	Control Node
	_Hexaidabs
	Name
	IsLeaf
	Comment
	OutgoingControlFlow

HOPEX Concepts
 OutgoingObjectFlow  IncomingControlFlow  IncomingObjectFlow  OwnerGroup
 Input Pin  _Hexaidabs  Name  IsLeaf  ControlType  OrderingKind  Comment  OutgoingControlFlow  OutgoingObjectFlow  IncomingControlFlow  IncomingObjectFlow
 Output Pin  _Hexaidabs  Name  IsLeaf  ControlType  OrderingKind  Comment

HOPEX Concepts
 OutgoingControlFlow  OutgoingObjectFlow  IncomingControlFlow  IncomingObjectFlow
 Exchange Pin  _Hexaidabs  Name  IsLeaf  ControlType  OrderingKind  Comment  OutgoingControlFlow  OutgoingObjectFlow  IncomingControlFlow  IncomingObjectFlow  OwnerGroup
 Central Buffer Node  _Hexaidabs  Name  IsLeaf  ControlType  OrderingKind

HOPEX Concepts
- Comment - OutgoingObjectFlow - IncomingObjectFlow - OwnerGroup
Data Store Node _Hexaidabs - Name - IsLeaf - ControlType - OrderingKind - Comment - OutgoingObjectFlow - IncomingObjectFlow - OwnerGroup
Activity Partition _Hexaidabs - Name - IsDimension - IsExternal - Comment - ContainedElement
Object Flow

HOPEX Concepts	
	_Hexaidabs
	Name
	IsLeaf
	Comment
	Guard
	Weight
	SourceElement
	TargetElement
 Control Flow	
	_Hexaidabs
	Name
	IsLeaf
	Comment
	Guard
	Weight
	SourceElement
	TargetElement
 Exception Handler	
	_Hexaidabs
	Name
	Comment
	ProtectedNode

HOPEX Concepts	
	ExceptionInput
	Activity UML
	_Hexaidabs
	Name
	Reentrant
	SingleExecution
	IsLeaf
	Comment
	ElementOwnedByAnActivityUML
	Activity Parameter Node
	_Hexaidabs
	Name
	IsLeaf
	ControlType
	OrderingKind
	Comment
	OutgoingObjectFlow
	IncomingObjectFlow
	Structured Activity Node
	_Hexaidabs
	Name
	IsLeaf

HOPEX Concepts
 MustIsolate  Comment  OutgoingControlFlow  OutgoingObjectFlow  IncomingControlFlow  IncomingObjectFlow  OwnerGroup  ContainedElement
 Expansion Node  _Hexaidabs  Name  IsLeaf  ControlType  OrderingKind  Comment  OutgoingControlFlow  OutgoingObjectFlow  IncomingControlFlow  IncomingObjectFlow  Region
 Expansion Region  _Hexaidabs

HOPEX Concepts	
	Name
	IsLeaf
	MustIsolate
	ExpansionKind
	Comment
	OutgoingControlFlow
	OutgoingObjectFlow
	IncomingControlFlow
	IncomingObjectFlow
	OwnerGroup
	ContainedElement
	ExpansionNode
	Interruptible Activity Region
	_Hexaidabs
	Name
	Comment
	ContainedElement
	Collaboration uml
	_Hexaidabs
	Name
	Comment
	IsAbstract

HOPEX Concepts
- IsLeaf - CollaborationRole - OwnedConnector - OwnedCollaborationUse
Collaboration use _Hexaidabs - Name - Comment - Type - Dependency
Part _Hexaidabs - Name - Visibility - Client Dependency - IsUnique - IsOrdered - Multiplicity - Comment - ConnectorEnd (of the LifeLine who represents the part) - Dependency
Connector

HOPEX Concepts
 _Hexaidabs  Name  Connector Kind  IsLeaf  Comment  OwnedConnectorEnd
 LifeLine  _Hexaidabs  Name  Comment  ElementRepresentedByALifeline  ElementCoveringLifeline  OwnedSelector
 Combined Fragment  _Hexaidabs  Name  InteractionOperatorKind  Comment  InteractionOperand  CoveredLifeLine
 Interaction Use  _Hexaidabs

HOPEX Concepts	
- Name - InteractionOperatorKind - Comment - RefersTo - CoveredLifeLine	
State Invariant _Hexaidabs - Name - Comment - InvariantConstraint - CoveredLifeLine	
Gate _Hexaidabs - Name - Comment	
Message UML _Hexaidabs - Name - MessageKind - Comment - Receiver - Sender	

HOPEX Concepts	
	Connector
	Artifact UML
	_Hexaidabs
	Name
	Comment
	Client Dependency
	Target Dependency
	Node UML
	_Hexaidabs
	Name
	Comment
	Client Dependency
	Deployment
	Device
	_Hexaidabs
	Name
	Comment
	Client Dependency
	Deployment
	Execution Environment
	_Hexaidabs
	Name

HOPEX Concepts
- Comment - Client Dependency - Deployment
Deployment Specification _Hexaidabs - Name - Comment - Client Dependency - Target Dependency
Instance (Node UML/Device/Execution Specification/Component) _Hexaidabs - Name - Comment - Client Dependency - Instantiated Element - Target Dependency
Communication Path _Hexaidabs - Name - Comment - Communication Path End - Target Dependency

HOPEX Concepts	
Communication Path	_Hexaidabs
	Name
	Comment
	Multiplicity
	Deployment Target
Deployment	_Hexaidabs
	Name
	Comment
	Multiplicity
	Deployed Element
	Deployment Configuration

VISIO IMPORT TOOL



Microsoft Visio® is a diagramming application used to describe a broad scope of projects and concepts, including those related to Enterprise Architecture.

The Visio import tool allows you to import and customize in **HOPEX** diagrams created in Visio®.

VISIO IMPORT PRINCIPLES

Visio diagrams are drawings on one or several pages that offer a static view of a business process or a technical diagram.

Each type of Visio diagram has associated predefined shapes that you can use to build your diagram. Importing a Visio drawing consists of matching its shapes with **HOPEX** objects. The objects created can be MetaClasses, links or paths.

Compatibility

The Visio import tool is available with the **HOPEX Productivity Package**.

It is compatible:

- with versions 2010 and 2015 of Visio
- with .VSD and .VSDX Format.

Importing a Visio file does not require installation of Visio on your machine.

Application Scope

The Visio import tool reproduces diagrams describing the processes of an organization in **HOPEX**. It is therefore optimized for the **MEGA Process** and **HOPEX Business Process Analysis** products.

In diagrams linked to **HOPEX Architecture**, a number of Visio shapes such as servers, firewalls and printers are represented by nodes in **HOPEX**. Their type must be redefined once they are imported in **HOPEX**.

In the case of a database model, **HOPEX** retrieves the names of entities, their attributes and primary keys, but characteristics such as cardinality, datatypes and foreign keys cannot be imported.

Visio import is not suitable for UML modeling.

Visio Concepts

The main Visio concepts are:

- **Page**: A page contains the description of a diagram. A Visio file can contain one or more description pages.
- **Template**: This is the default model provided when you initialize a diagram. Templates guide users in describing a diagram by identifying

the purpose of the diagram and displaying the stencils necessary for creating diagrams.

- **Stencil**: These zones contain the shapes available to create a diagram. A stencil is made up of masters.
- **Master**: This is a shape representing a concept that can be created in a diagram. In MEGA, a master gives rise to a MetaClass.
- **Shape**: A shape represents the use of a master class in a page. In MEGA, this corresponds to the instance of a MetaClass.
- **Connector**: This represents a link in a diagram used to connect two shapes graphically.
- **Property**: A property attached to a shape in a diagram is used to provide additional information to a diagram description. Properties entered by the user in Visio are imported as comments in **HOPEX**.

Mapping Visio and MEGA concepts

Importing Visio diagrams consists of mapping Visio diagrams, shapes, connectors and properties with **HOPEX** objects (Metaclasses, links, paths, etc.), and creating the diagrams in the **HOPEX** repository.

When a Visio diagram is imported, a mapping is established between the Visio concepts and **HOPEX** objects. This mapping can be saved as **Configuration files** for subsequent use.



IMPORTING A VISIO DRAWING



Importing a Visio diagram is guided by a wizard to help you define the objects to be imported and their mappings in **HOPEX**. Mappings can be saved for subsequent use.

- ✓ ["Running Visio Import", page 10](#)
- ✓ ["Visio Import Options", page 13](#)
- ✓ ["Visio Import Example", page 15](#)

RUNNING VISIO IMPORT

To import a Visio diagram, follow this procedure:

1. Select the Visio file and the configuration file
2. View and select the pages to be imported
3. For each page, define the mapping between Visio and **HOPEX** objects.

Step 1: Select a Visio file and a configuration file

To import a diagram created in Visio into **HOPEX**:

1. From the **Tools** menu bar, select **Import** > **Visio (*.vsd)**.
The file import wizard window opens.

The screenshot shows a window titled "Visio Import - File Selection". Below the title bar, it says "This tool allows to import Visio data in Mega". The window is divided into two main sections. The first section, "FILE SELECTION", has a "Visio File:" label followed by a text input field. The second section, "CONFIGURATION FILE SELECTION", has a "Select Export File Mode:" label followed by three radio button options: "Default setting", "New configuration" (which is selected), and "Load configuration file". Below these options is a "Configuration File:" label followed by a text input field.

2. In the **File Selection** frame, select the Visio file to be converted.
3. In the **Configuration File Selection** frame, select the export file mode:
 - **Default settings**: this option applies the mapping file that has been defined in the environment options. See ["Defining a Default Configuration File"](#), page 13.
 - **New configuration**: does not load a predefined map file.
 - **Load configuration**: this option is used to select a mapping file on a computer or network.
4. Click **Next**.

Step 2: View and select pages to be imported

This step displays the contents of the Visio pages so you can select the pages to be imported.

For each page to import you must define:

- the **MetaClass** to which the diagram created in HOPEX will be attached
- the **Described Element** (instance of the MetaClass)
- the **Diagram Type** to create

*If a configuration file has been defined, the values of the **MetaClass** and **Diagram Type** columns may appear automatically.*

When selecting a page, press **See Diagram** to view the corresponding drawing.

^

VISIO PAGES

Page	MetaClass	Described Element	Diagram Type
 Breakdown analysis	Organizational Process		BPMN Organizational Pro...

Page

1

of 1




See diagram

To define the object and diagram to create from a Visio page:

1. Under **Visio Pages**, select the relevant page.
2. Click in the **MetaClass** column and click **List MetaClasses**.

 Visio Import - Select Visio Pages to Import

^

VISIO PAGES

Page	MetaClass	Described Element
 Breakdown analysis		
		List MetaClasses...

3. Search and select the HOPEX MetaClass.
For example Organizational Process.
4. Indicate the **Described Element**.
For example the "Breakdown analysis" Organizational Process.
5. You can select an existing object in HOPEX or enter the name of the object to create.
6. Select the **Diagram Type** to create.
For example BPMN Organizational Process.

7. In the **Import** column, select the box to import the page.
8. Do the same with the other pages.
9. Click **Next**.

Step 3: Define the mapping of objects of each Visio page

In this step you specify the mapping to be done for each item of the Visio pages selected in the previous step. See also ["Mapping Visio and MEGA concepts", page 3](#).

To create mappings between Visio et HOPEX concepts:

1. Under **Visio Pages**, select the appropriate page.
The list of **Masters** and **Shapes** for the page appears.
You can view objects of this list in the diagram by checking the **Locate** box associated with the objects in question. Selected objects are highlighted in red in the diagram.
2. For each Visio master, indicate the corresponding HOPEX MetaClass.

MASTERS		
Master	MetaClass	Locate
Process.26	Operation	☐
Separator	[Do Not Import]	☐
Start/End.25	Event	☐
Subprocess.28	(Empty)	☐
Swimlane	[Do Not Import]	☐
	Composite Conversation	☐

When selecting a master, the list of associated shapes appear.

In the **Attribute/Link** column of each shape, you can specify the shape properties. See also ["Visio Import Example", page 15](#).

3. When mappings are defined, click **Next**.
The report of created objects appears. You can save the report in one of the available formats.
4. Click **OK** to validate and finish the import.
At the end of the import, the configuration file of the mappings you created is downloaded automatically (.xml file). You can back up this configuration file in order to retrieve mappings for subsequent imports.



VISIO IMPORT OPTIONS

Accessing Visio Import Options

To access options related to Visio Import:

1. In the **HOPEX** desktop, click **My Account > Options**.
2. Click **Data Exchange > Import/Export Synchronization > Tools/Third Party Formats**.

The right pane displays the options related to Visio import.

Defining a Default Configuration File

Mappings between Visio and **HOPEX** objects can be saved in a configuration file.

You can define a configuration file to apply by default when importing a Visio file.

To define a default configuration file:

1. Access the Visio import options.
2. In **Visio Import: Configuration file path**, specify the file path.

Defining the Shape Size of Imported Items

You can apply to imported items the size of the shapes defined in Visio or the default size of standard elements in **HOPEX**.

To define the option regarding shape size:

1. Access the Visio import options.
2. Select the value of **Visio Import: shape size** via the drop-down menu. By default, the Visio shape size is applied.

Replacing existing diagrams

An imported element can have different diagrams.

When the option is unchecked, **HOPEX** creates a new diagram.

When the option **Visio import: Replace existing diagrams** is selected, **HOPEX** replaces the existing diagram by the imported diagram. If there is more than one diagram, use the import wizard to choose which diagram to replace.

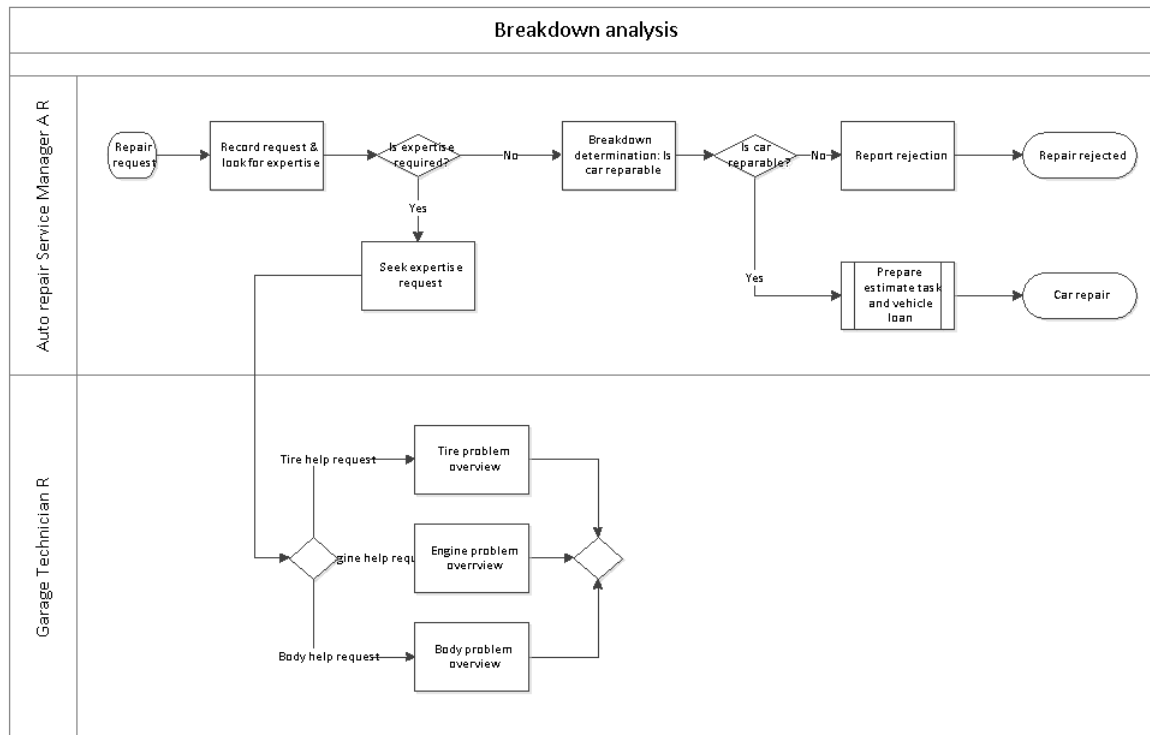
Importing Elements in the Current Library

When the option **Visio Import: Import to the current library** is selected, elements imported are automatically linked to the current library.

VISIO IMPORT EXAMPLE

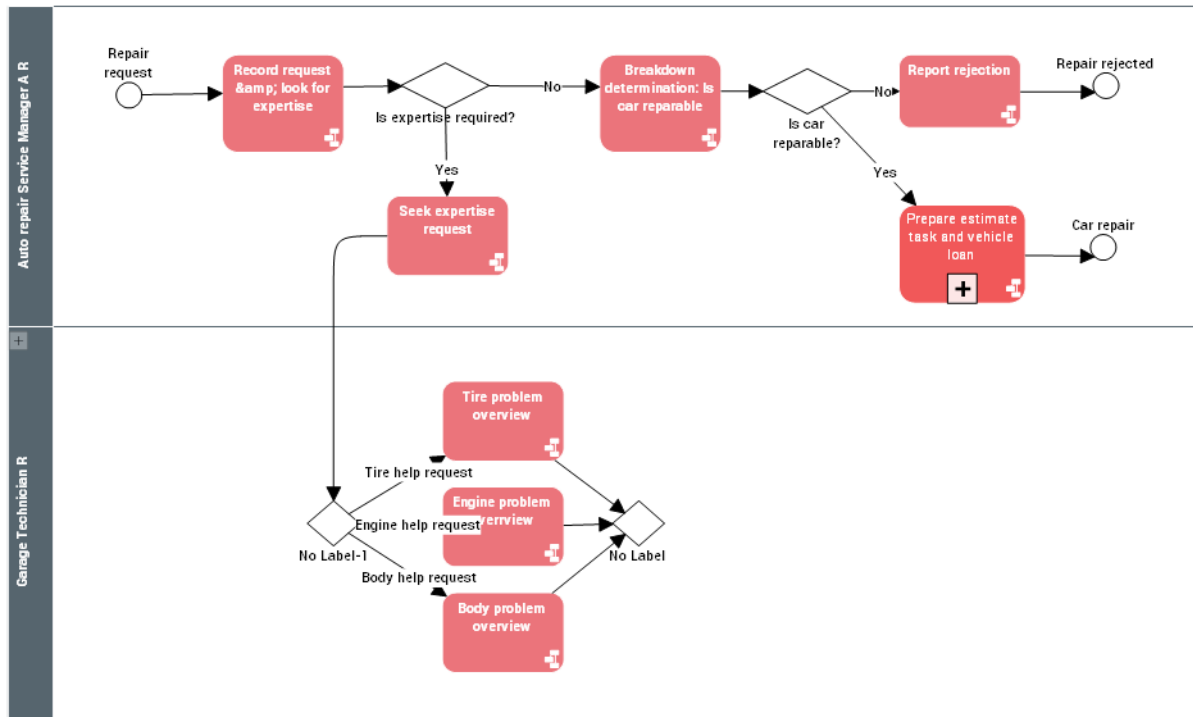
As an example of a drawing to be imported, take the simple flow diagram "Vehicle Breakdown Analysis", which describes steps in vehicle repair.

Visio Diagram



This diagram can be reproduced as the diagram of an organization process in **HOPEX**.

Result in MEGA



Example of Masters and corresponding MetaClasses

Master (VISIO)	MetaClass (MEGA)
Page	Organizational Process
Decision	Gateway
Dynamic Connector	Sequence flow
Process	Operation
Start/End	Event
Subprocess	Organizational Process
Swimlane	Participant

Once you have mapped the Visio Masters with the MEGA MetaClasses, you can define the properties of the related shapes (MetaClass instances).

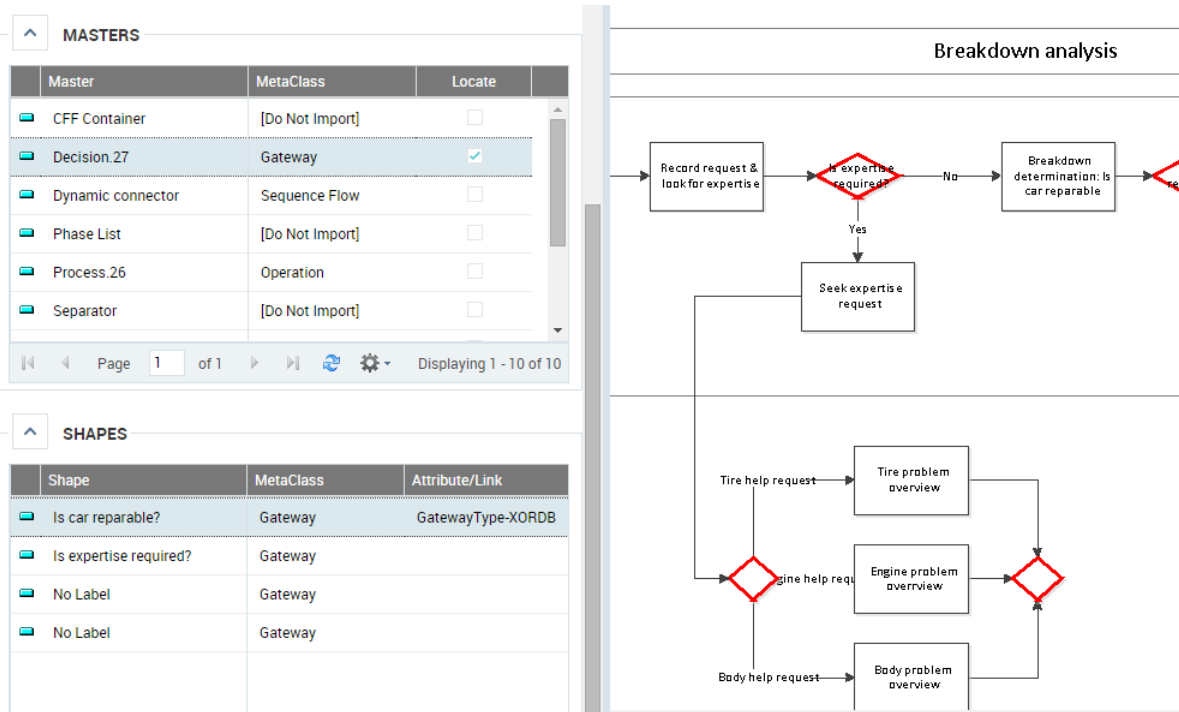
See ["Step 3: Define the mapping of objects of each Visio page", page 12.](#)

Example of Shape Properties

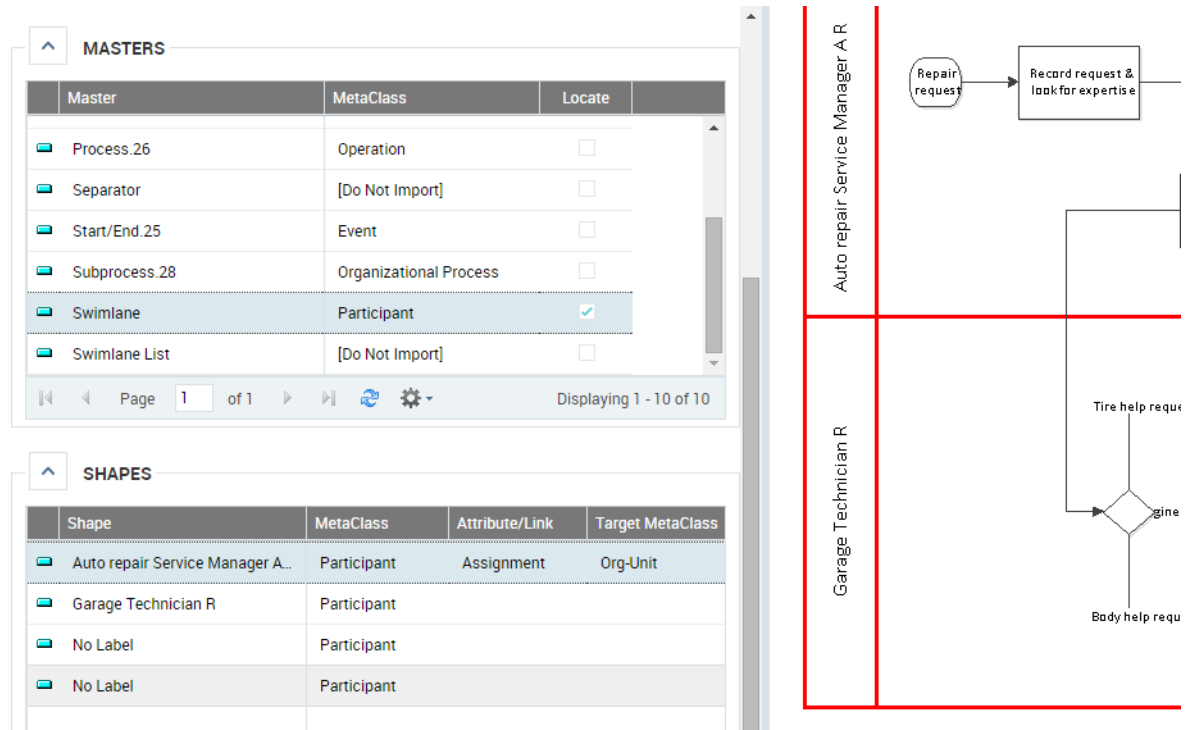
Visio Shape and corresponding MEGA MetaClass	Property
If Decision = Gateway	Gateway type: exclusive, inclusive, parallel, etc.
If Start/End = Event	Event category: end, start, timer, etc.
If Swimlane = Participant	Participant assignment (target MetaClass)

In the example, the "Decision" master, which corresponds to the "Gateway" MetaClass in **HOPEX**, has four occurrences in the diagram.

In the **Attribute/Link** column associated with each occurrence, you can define the type of gateway to create in MEGA (exclusive, inclusive, parallel, etc.).



As for the "Swimlane" master which correspond to participants, you can define the type of object to connect to each participant (Application, Org-Unit, etc.) and even connect a MEGA object to a participant.



To connect an Org-Unit to a participant:

- In the Visio import wizard, select the shape corresponding to the participant, for example "Garage Technician".
- In the **Attribute/Link** column, select "Assignment".
- In the TargetMetaClass, select "Org-Unit".

If the "Garage Technician" Org-Unit already exists in MEGA, the import wizard does not recreate it but connects it to the participant. If it does not exist in MEGA, the import wizard creates the corresponding Org-Unit while connecting it to the participant.

OPTIMIZING VISIO IMPORT RESULTS

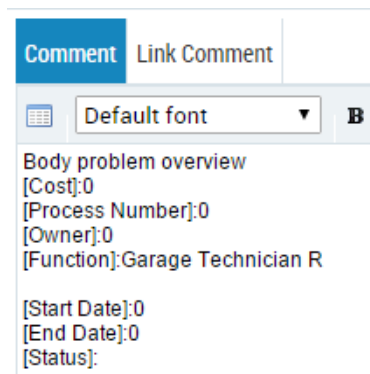
Import results mainly depend on the source file. For optimum results, check that the Visio drawing meets the following conditions:

- Use model shapes to represent diagram objects
For example, use the **Business Process** type shape and not the **Rectangle** drawing object.
- Customized shapes and properties are ignored at import. Do not use customized properties to name drawing objects.

Object Names and Properties

Object names are limited to 255 characters in **HOPEX**. If the Visio object name contains more than 255 characters, the full name appears in the **HOPEX** object comment, under the **Texts** Tab.

The **HOPEX** object comment also contains the properties specified on the Visio shape. Shape properties are listed in brackets.



☛ Properties specific to the corresponding HOPEX Objects may be defined directly in the import wizard. See ["Step 3: Define the mapping of objects of each Visio page", page 12.](#)

