



Enterprise Architect

User Guide Series

# User Interface

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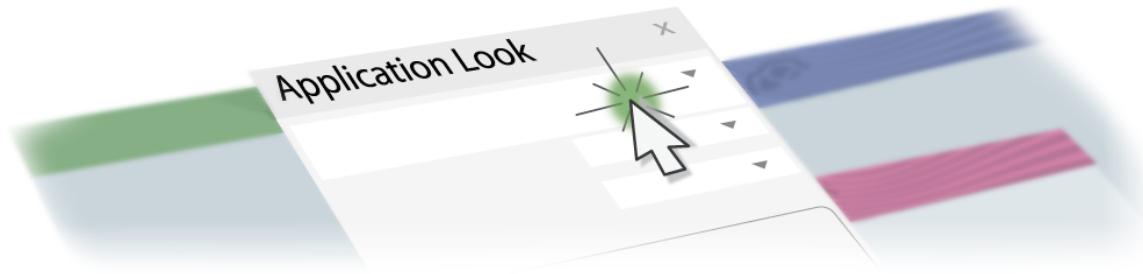
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# User Interface



The Enterprise Architect application workspace (or user interface) provides a powerful and flexible analysis, modeling, design and construction environment. The workspace is built from familiar components, such as toolbars, docking windows, dialogs and menus. Together these elements provide a rich set of tools for working with models, UML, diagrams, source code, executing applications (debugging and visualization), rich text documents, collaborative tools, extension technologies and much more.

The Enterprise Architect user interface is highly customizable both in functionality and in appearance. Visual styles are available based on the popular Microsoft Office and Visual Studio, from the classic look and feel of the Windows XP era right up to the latest Office and Visual Studio incarnations. Dark and light styles are further enhanced with the ability to automatically display source code and diagrams in dark or normal styles.

Customization of toolbars, menus, workspace layouts, Perspectives and shortcuts helps you get the most out of Enterprise Architect for your particular needs. Taking the time to become familiar with the customizations available is well worth while, as it can help you build the precise modeling and design environment you need to focus on your work.

If you want to explore the basic process and tools for creating a model in Enterprise Architect, you can watch the demonstration on the Sparx Systems website, and/or work through the simple Tutorial provided in this section. Use the links under the 'Learn more' heading.

## User Interface Tools

Tool
The Enterprise Architect workspace is the interface through which you create, open and display your models; the main workspace component is the central Diagram View, which is where you create model diagrams, view reports, scroll through lists of model elements, access the internet and edit and debug source code.
The ribbons provide access both to high-level functions related to the project life cycle, and to project and system administration functions; at all levels of the system you can also access functions and operations using context menus.
The windows are used to enter and display information on your project and models; you can rearrange windows to adapt the screen space to your work habits.
Toolbars are small sets of buttons that provide quick access to common operations, both on your project as a whole and on the individual modeling units.
The Diagram Toolbox provides all the components and connectors that you use to create models using the medium of diagrams; the Toolbox automatically matches the kind of diagram you have open, from any technology that is currently active in your model.
You can use keyboard key combinations to quickly initiate a wide range of actions throughout the system, and Diagram Quick Key (single-key) shortcuts to perform actions on the elements and connectors in an open diagram.

Enterprise Architect provides various customization tools that you can use to:

- Tailor the ribbons, menus, toolbars and function keys you use in your work
- Set the visual style of the application, and
- Customize the workspace layout

You can use several navigation and search tools to search for, track and locate information in your project, and filter the information so that you can explore particular views of your project rather than the entire contents.

# The Start Page

The features described here are available from Enterprise Architect release 14.1 onwards.

The Start Page is the default landing page that displays when you first open Enterprise Architect. It provides a range of useful commands to create and/or access project files, connect to a server repository, or access a project via the Cloud. You can also access a set of Portals that provide the facilities, resources, links, tailored searches and reports for working in a particular task area, such as publishing or developing a model.

The facilities and commands on the Start Page are made available through the 'Open' and 'New' options, the 'Recent' list and the 'Open a Portal' option.

## Access

Opened by default on startup of Enterprise Architect.

Ribbon	Start > View > Workspace > Show Start Page
--------	--

## Open

Option	Action
Local project	Click on this option to display the 'Select Enterprise Architect Project to Open' dialog to browse for and open an existing project file (.eap or .feap).
Server Connection	Click on this option to display the 'Data Link Properties' dialog, from which you begin to specify a data source to connect to, on one of a number of supported repositories. This feature is available in the Corporate, Unified and Ultimate editions.
Cloud Connection	Click on this option to open the 'Cloud Connection' dialog, which you use to specify a project held at a remote location, and to access it through the internet or web. You work on the project using the Enterprise Architect installation on your machine. An advantage of working in this way is that you do not need to have the database drivers installed on your machine, as you would to work on projects held on a DBMS server.

## New

Option	Description
Create a new project	Click on this option to create a new local (.eap or .feap) project file, and to add model structures to it using the Model Wizard.
Manage projects	Click on this option to open the 'Manage Projects' dialog, which you use to manage connections to the Enterprise Architect projects (.eap files, .feap files, DBMS

	server connections and Cloud connections) to which you have access.
--	---

## Recent

This is a list of up to ten Enterprise Architect projects (.eap files, .feap files, DBMS server connections and Cloud connections) that you have opened most recently. The drop-down arrow in the list heading displays options to:

- Switch the list between recently-accessed models and currently 'watched' models, and
- Set up a 'Watched Model' configuration to define what projects to monitor and what actions to capture within the models (see the *Model Watches* Help topic)

Option	Action
<Model names>	<p>Either:</p> <ul style="list-style-type: none"> <li>• Click on a project name in the list to open that project in the <i>current instance</i> of Enterprise Architect (and close any project you already have open), or</li> <li>• Ctrl+click on a project name in the list to launch that project in a <i>separate instance</i> of Enterprise Architect, in addition to the current project</li> </ul> <p>You can also right-click on a project name in the list and display a short context menu with options to:</p> <ul style="list-style-type: none"> <li>• Open the selected project in the current instance of Enterprise Architect (and close any project you already have open)</li> <li>• Launch the selected project in a new instance of Enterprise Architect (keeping the current project open in the current instance)</li> <li>• Add the model to the list of watched models that you are monitoring for various kinds of activity</li> <li>• Remove the selected project from the list (which removes the link to the project, not the project file itself)</li> </ul>

## Open a Portal

This option displays a drop-down list of the Portals available in Enterprise Architect. Click on the appropriate Portal name to display that Portal on the left or right of the screen.

Portal Name	Description
	The Perspective Portal provides a number of work Perspectives grouped by general work area. Each Perspective filters the modeling windows and dialogs to present only the modeling Patterns you might use in the work defined by the Perspective. When you select a Perspective the Model Wizard displays, showing the 'Model Patterns' tab and providing the model templates that you might use to initially create a model supporting the type of work. The Portal also includes a category for Perspectives that you have created yourself.
	The Workspace Portal provides links to the system-provided workspaces and working sets that you might use to lay out the Enterprise Architect work area, and to any working sets and workspaces that you have created yourself.
	The Window Portal provides links to the Enterprise Architect windows you use to

	navigate through, develop and manage your model.
	The Status Portal provides links to run searches that locate recent activities of various types across the model.
	The Extend Portal lists the MDG Technologies currently active in your model, and for each one provides links to the facilities for working with those technologies within Enterprise Architect.
	The Execute Portal provides a wide range of options that help you to perform Visual Execution Analysis, Simulation, Profiling and Debugging of your modeled application.
	The Guidebook Portal provides links to the library of Enterprise Architect User Guides in PDF format. The Portal initially displays with ten categories of document, each of which can be expanded to a list of the PDF documents in that category.
	The Learning Portal provides links to either the web version of the <i>Enterprise Architect User Guide</i> , or the locally-installed Help if you have downloaded that. The Portal also provides links to a number of useful web pages on the Sparx Systems website, such as the Tutorials, Webinars and Video Demonstrations pages.
	The Revisit Portal provides links to the diagrams, source files and system windows that you currently have open, and the diagrams and source files that you have recently opened and then closed again.

## Notes


- You can hide the Start Page, or show it again, by toggling the 'Start > View > Workspace > Show Start Page' ribbon option; this setting persists after shut down and restart of Enterprise Architect until you explicitly toggle the option again

## How to Remove Links to Recent Projects

In the 'Manage Projects' dialog and on the Start Page 'Recent' section, the projects that you have opened most recently are listed in the order of opening date/time up to a maximum of ten projects, with the most recently opened project at the top of the list. If the list identifies projects that you do not want to be so immediately accessible, you can remove them specifically from the list.

Removing a project from the list only removes the hyperlink to the project and does not remove the project from the file system or repository.

### Access

Ribbon	 > Open Project or Start > View > Workspace > Show Start Page > Recent
Keyboard Shortcuts	Ctrl+O

### Remove a project hyperlink from the 'Manage Projects' list

Step	Action
1	On the 'Manage Projects' dialog, in the 'Recent Projects' panel, click on the name of the project to be removed.
2	Click on the Remove Selection from List button. The project link is immediately removed from the list.

### Remove a project hyperlink from the Start Page, Recent list

Step	Action
1	On the Start Page, right-click on the name of the project to remove and select the 'Remove Selection from List' option.
2	The name of the project disappears from the list.

### Notes

- You can only remove one project link from the list at a time
- To remove a link there must be at least two projects in the list





## The Start Page (14.0)

The features described here are available at Enterprise Architect release 14.0.

The Start Page is the default landing page that displays when you first open Enterprise Architect. It provides a range of useful commands to create and/or access project files, connect to a server repository, or access a project via the Cloud. You can also access a set of Portals that provide the facilities, resources, links, tailored searches and reports for working in a particular task area, such as publishing or developing a model.

The facilities and commands on the Start Page are made available through the 'Open' options, the 'Recent' list and the Portal icons.

### Access

Opened by default on startup of Enterprise Architect.

Ribbon	Start > View > Workspace > Show Start Page
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### Open

Option	Action
New File	Click on this option to create a new .eap or .feap project file, and to add model structures to it using the Model Wizard.
Open File	Click on this option to display the 'Select Enterprise Architect Project to Open' dialog to browse for and open an existing project file (.eap or .feap).
Server Connection	Click on this option to display the 'Data Link Properties' dialog, from which you begin to specify a data source to connect to, on one of a number of supported repositories. This feature is available in the Corporate, Unified and Ultimate editions.
Cloud Connection	Click on this option to open the 'Cloud Connection' dialog, which you use to specify a project held at a remote location, and to access it through the internet or web. You work on the project using the Enterprise Architect installation on your machine. An advantage of working in this way is that you do not need to have the database drivers installed on your machine, as you would to work on projects held on a DBMS server.

### Recent

This is a list of up to ten Enterprise Architect projects (.eap files, .feap files, DBMS server connections and Cloud connections) that you have opened most recently. The drop-down arrow in the list heading displays options to:

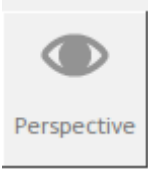
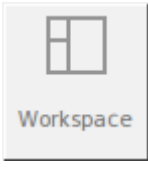
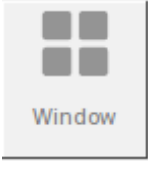
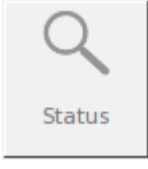
- Switch the list between recently-accessed models and currently 'watched' models, and
- Set up a 'Watched Model' configuration to define what projects to monitor and what actions to capture within the






models (see the *Model Watches* Help topic)

Option	Action
<Model names>	<p>Either:</p> <ul style="list-style-type: none"> <li>Click on a project name in the list to open that project in the <i>current instance</i> of Enterprise Architect (and close any project you already have open), or</li> <li>Ctrl+click on a project name in the list to launch that project in a <i>separate instance</i> of Enterprise Architect, in addition to the current project</li> </ul> <p>You can also right-click on a project name in the list and display a short context menu with options to:</p> <ul style="list-style-type: none"> <li>Open the selected project in the current instance of Enterprise Architect (and close any project you already have open)</li> <li>Launch the selected project in a new instance of Enterprise Architect (keeping the current project open in the current instance)</li> <li>Add the model to the list of watched models that you are monitoring for various kinds of activity</li> <li>Remove the selected project from the list (which removes the link to the project, not the project file itself)</li> </ul>

## Portal icons

These icons provide access to the Portals available in Enterprise Architect. Click on the appropriate Portal icon to display that Portal on the left or right of the screen.

Portal Name	Description
	The Perspective Portal provides a number of work Perspectives grouped by general work area. Each Perspective filters the modeling windows and dialogs to present only the modeling Patterns you might use in the work defined by the Perspective. When you select a Perspective the Model Wizard displays, showing the 'Model Patterns' tab and providing the model templates that you might use to initially create a model supporting the type of work. The Portal also includes a category for Perspectives that you have created yourself.
	The Workspace Portal provides links to the system-provided workspaces and working sets that you might use to lay out the Enterprise Architect work area, and to any working sets and workspaces that you have created yourself.
	The Window Portal provides links to the Enterprise Architect windows you use to navigate through, develop and manage your model.
	The Status Portal provides links to run searches that locate recent activities of various types across the model.

 Extend	<p>The Extend Portal lists the MDG Technologies currently active in your model, and for each one provides links to the facilities for working with those technologies within Enterprise Architect.</p>
 Execute	<p>The Execute Portal provides a wide range of options that help you to perform Visual Execution Analysis, Simulation, Profiling and Debugging of your modeled application.</p>
 Guidebook	<p>The Guidebook Portal provides links to the library of Enterprise Architect User Guides in PDF format. The Portal initially displays with ten categories of document, each of which can be expanded to a list of the PDF documents in that category.</p>
 Learning	<p>The Learning Portal provides links to either the web version of the <i>Enterprise Architect User Guide</i>, or the locally-installed Help if you have downloaded that. The Portal also provides links to a number of useful web pages on the Sparx Systems website, such as the Tutorials, Webinars and Video Demonstrations pages.</p>
 Revisit	<p>The Revisit Portal provides links to the diagrams, source files and system windows that you currently have open, and the diagrams and source files that you have recently opened and then closed again.</p>

## Notes


- You can hide the Start Page, or show it again, by toggling the 'Start > View > Workspace > Show Start Page' ribbon option; this setting persists after shut down and restart of Enterprise Architect until you explicitly toggle the option again

# The Enterprise Architect Ribbons

When you open Enterprise Architect version 13 or later you will see a set of ribbons at the top of the screen. This is a modern, contemporary way of accessing the tool's powerful features. Ribbons bring many features immediately to the surface, making them easily accessible to a modeler; both new users and those who have been using Enterprise Architect for many years will be delighted to find their preferred tools right at their fingertips. Each ribbon provides actions with a particular focus, and the commands on the ribbons are grouped by function into panels.

## Searching for an Item

The ribbons expose a wide range of Enterprise Architect features, and the system provides two facilities to help you locate and access the feature you need:

- Click on the 'Find Command' field at the end of the sequence of tabs and type in some text relating to the feature you want to locate, then press the Enter key; this displays a hierarchical menu of options that match your search text, and when you click on an option the appropriate dialog opens  
Note that this facility is only available in the 'Microsoft Office 2016' Visual Style theme
- Click on the  button (for File Management options) to the left of the ribbon tabs and, on the resulting dialog, type your search text in the 'Search' field at the bottom; a list of options relating to the search text is immediately displayed down the left hand side of the dialog and, when you click on an option, the appropriate dialog opens

Also, when you 'mouse over' any option on any of the ribbons, a tool-tip displays in the left end of the Status Bar at the bottom of the screen, summarizing the function of the option.

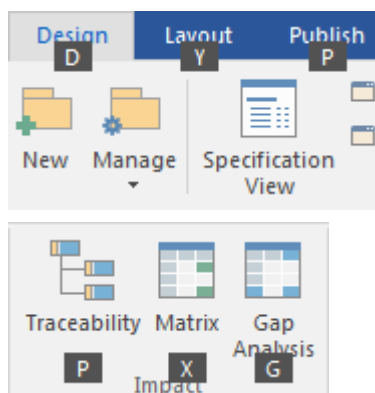
You therefore have help in identifying both what option provides a function, and what function an option provides.

## Contextual Ribbons

Some ribbons are contextual and are only needed when you are performing a particular task. For example, the 'Document-Edit' ribbon is only needed when you are viewing or editing a document inside Enterprise Architect. This ribbon will remain visible while a document is open; when all documents are closed the ribbon will be hidden from view.

## Using the Keyboard with Ribbons

The actions that are presented on the ribbons can also be accessed using the keyboard. If you tap and release the Alt key, each panel will be annotated with a letter code. Pressing this letter on the keyboard will activate the ribbon and display a further set of annotations for the actions in the ribbon.



## Customizing the Ribbons

If a ribbon presents more options than you require, you can customize it to hide the panel containing those options, or hide the whole ribbon. To do this, you select the 'My Ribbon Sets' tab on the 'Workspace Layout' dialog (Start > View > Workspace > My Workspaces), create a Ribbon Set to customize the ribbon display, and define the ribbons and panels to show or hide in that Ribbon Set. You can re-activate hidden ribbons and panels by editing this Ribbon Set.

The 'My Ribbon Sets' tab also provides the option of defining one of the ribbons as the default to automatically display when Enterprise Architect is opened in a work session. Normally the 'Start' ribbon is fully open when the system is accessed.

## Minimizing the Ribbon Bar

On occasion you might need more screen space to view diagrams and other model representations. To help with this, you can conveniently minimize the ribbons and completely hide them from view. The ribbon **tabs** will still be visible, so you can click on the required tab and redisplay the corresponding ribbon until the focus is returned to another part of the user interface. Many modelers will find that leaving the ribbons maximized will provide a convenient visual reminder of the actions that are available while working on models.

To minimize or restore the ribbons, right-click on the ribbon bar and select or deselect the 'Minimize the Ribbon' option. Alternatively, double-click on the currently-displayed ribbon tab.

# File Management

When managing the project as a unit, you can create, open, close or save projects, provide desktop shortcuts to a project, or perform print tasks.

## Access



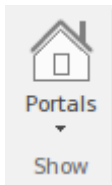
## File Management Options

Option	Action
New Project	Create a new Enterprise Architect project, using the Model Wizard to help you define the base technology, model types and Patterns to use as a framework. Shortcut: Ctrl+N
Open Project	Open an existing project, or create a new project from scratch or from a base template project. Shortcut: Ctrl+O
Reload Project	Reload the current project. (Use this in a multi-user environment to refresh the Project Browser). Shortcut: Ctrl+Shift+F11
Close Project	Close the current project.
Save Project As	Save the current project with a new name (as a .eap or .feap file). The current project can be a base template or a complete operational project.
Save as Shortcut	Create a desktop shortcut to the current project. (This option is also active in the 'Lite', read-only edition of Enterprise Architect.)
Print Setup	Configure your printer's settings.
Page Setup	Configure the page settings to print the current diagram.
Print Preview	Preview how the currently displayed diagram will print.
Print	Print the currently displayed diagram. You can also make use of other facilities to change the scale of the printed diagram (the number of pages it takes up) and to print or omit page headers and footers on the diagram. By de-selecting the 'Printable' option on an element on a diagram, you can omit that element and its connectors from the printed diagram. Shortcut: Ctrl+P
Print to PDF	Save the currently displayed diagram as a PDF file. A browser displays to select the

	<p>PDF file name and directory path.</p> <p>By de-selecting the 'Printable' option on an element on a diagram, you can omit that element and its connectors from the diagram in the PDF output.</p>
Recent Documents	Select from a list of up to ten of the most recently opened projects, to re-open the selected project.
Search	Type the name of an operation or command that you want to locate; a list of options relating to the search text is immediately displayed down the left hand side of the dialog and, when you click on an option, the appropriate dialog opens.
Exit	Exit from Enterprise Architect.

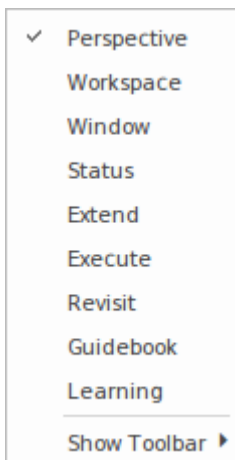
## Show Panel

The 'Show' panel contains a single 'Portals' icon.



Clicking on this icon displays a list of the Portals and toolbars that you might use to set up the user interface to support a particular area of work. When you click on a Portal name the corresponding Portal displays on the left or right of the work area (according to your personal settings). Similarly, when you select the 'Show Toolbar | <toolbar name>' option, the toolbar displays at the top of the work area, just underneath the Ribbon bar.

The name of the selected Portal and each selected toolbar is marked with a tick, so the list provides a summary of what Portal and toolbars are active.



## The Portals and Toolbars

Portal/Option	Description
Perspective	<p>Provides a range of model Patterns from which you can generate model structures for particular areas of work. The Patterns are organized into groups within Perspectives, and presented for selection through the 'Model Patterns' tab of the Model Wizard. The system-provided Perspectives are:</p> <ul style="list-style-type: none"> <li>• Standard UML Modeling</li> <li>• Strategy</li> <li>• Analysis, such as Mind Mapping and Requirements modeling</li> <li>• Requirements</li> <li>• UX Design</li> <li>• Business Modeling</li> <li>• Software Engineering</li> <li>• Systems Engineering</li> <li>• Database Engineering</li> <li>• Enterprise Architecture</li> </ul>

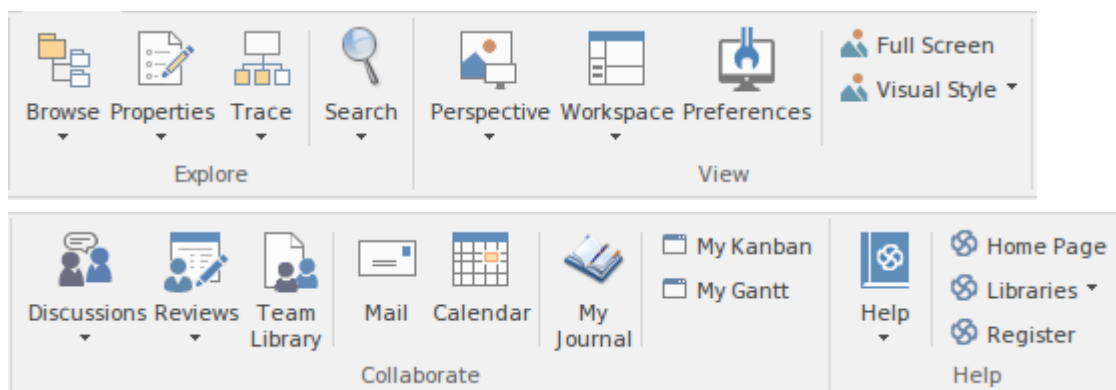


	<ul style="list-style-type: none"> <li>• Information Exchange</li> <li>• Construction, such as Road Maps and Test Management</li> <li>• Management</li> </ul> <p>The Portal also includes a category for Perspectives that you have created yourself, which provide the Patterns from MDG Technologies that you have specified in the Perspective.</p>
Workspace	<p>Provides links to the system-provided workspaces that you might use to lay out the Enterprise Architect work area, and to any workspaces that you have created yourself. The categories provided are:</p> <ul style="list-style-type: none"> <li>• My Workspaces</li> <li>• Core modeling</li> <li>• Design</li> <li>• Software management</li> <li>• Simulation</li> <li>• Construction</li> <li>• BABOK and the BABOK Reader</li> </ul>
Window	<p>Provides links to the Enterprise Architect windows and displays that you use to develop a model and create and manage the objects within it. These facilities are grouped under the activity areas of:</p> <ul style="list-style-type: none"> <li>• Exploring the model</li> <li>• Displaying object properties</li> <li>• Managing the display of diagrams</li> <li>• Working with specialized tools</li> <li>• Tracing relationships between objects</li> <li>• Enabling collaboration between team members</li> <li>• Managing tests</li> <li>• Managing resource tasks</li> <li>• Project management and maintenance</li> <li>• Developing code and document templates</li> </ul>
Status	<p>Provides links to run searches that locate recent activities of various types across the model. The searches are grouped to identify:</p> <ul style="list-style-type: none"> <li>• Recently created elements, linked documents, diagrams and discussions</li> <li>• Recent formal reviews</li> <li>• Recent informal discussions and chats</li> <li>• Recently started, finished, overdue or active tasks</li> <li>• Results of recently-run tests</li> <li>• Recently reported and implemented Changes</li> <li>• Recently reported and investigated Defects</li> <li>• Recently reported and investigated Issues</li> </ul>
Extend	<p>Lists the MDG Technologies currently active in your model - such as ArcGIS, NEIM (4.0) and Eclipse - and for each one provides links to the facilities for working with those technologies within Enterprise Architect.</p>

Execute	<p>Provides a wide range of options that help you to:</p> <ul style="list-style-type: none"> <li>• Perform Execution Analysis on your model - building and running the Analyzer scripts</li> <li>• Open the Record &amp; Analyze, Profiler, Debugger and/or Testpoints dialogs for monitoring the execution of your modeled application</li> <li>• Set up and perform simulations of the execution of your application</li> <li>• Control the progress of a simulation</li> <li>• Access various windows that display specific aspects of debugging an application</li> <li>• Control the progress of a debug</li> <li>• Set up and run recording of the execution of an application</li> <li>• Display the dialogs to prepare to profile the execution of an application</li> <li>• Create and edit code from the model</li> </ul>
Revisit	<p>Provides links to the working sets, diagrams, documents and system windows that you currently have open, and the diagrams and source files that you have recently opened and then closed again. The Portal also has options to re-open other files that you might have opened from within Enterprise Architect.</p>
Guidebook	<p>Provides links to the library of Enterprise Architect User Guides in PDF format. The Portal initially displays with ten categories of document, each of which can be expanded to a list of the PDF documents in that category.</p>
Learning	<p>Provides links to either the web version of the <i>Enterprise Architect User Guide</i>, or the locally-installed Help if you have downloaded that. The Portal also provides links to a number of useful web pages on the Sparx Systems website, such as the Resources, Tutorials, Webinars and Video Demos pages.</p>
Show Toolbar	<p>Select this option to display a list of the ten standard Enterprise Architect Toolbars, from which you can select the Toolbars to insert above the central work area or to dock in some other convenient location on the screen. You can hide each Toolbar again by deselecting the name in the list.</p>

## Start Ribbon

The 'Start' ribbon provides a range of facilities for exploring, navigating and viewing the information in the repository. These include tools to navigate and search for items, to view the important events, messages, discussions and work that is relevant to a modeler on a given day, and to view and change your workspace settings, including styles and preferences. This ribbon also provides access to the Help facilities, including registering licence keys and checking for updates.



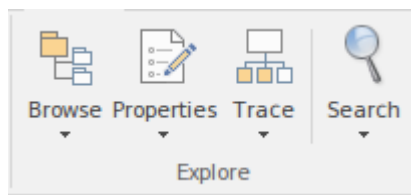
## Panels

Panel	Description
Explore	You can use the 'Explore' panel to navigate the repository and explore its contents. Most repositories will contain thousands - if not tens of thousands - of elements, and having tools to navigate through and locate items of interest is critical when working in the repository. There are a number of Browsers that are tree views, showing the hierarchical relationships of Packages (folders), elements, diagrams, features, resources, views, items and more. The 'Properties' option provides access to a collection of windows that provide information about the model and system activity. They provide a rich set of methods for viewing information about elements as you navigate through them in diagrams or the Project Browser. The Notes window provides descriptive text, the Summary window lists the important aspects of an element and the Properties window provides details of an element's metadata and more. The 'Trace' option provides facilities for following relationships and linkages between elements through the model. The Search helps you to find elements, diagrams and Packages regardless of their location.
View	The 'View' panel helps you to define the look and feel of the application, setting preferences that change the style of the interface to suit the work role you are performing. You can define any number of workspace layouts, saving sets of windows that are specific to a role that ultimately increases your productivity as a modeler. There is a wide range of preferences you can set to tailor the way the application behaves under your login, including setting colors, fonts and diagram styles.
Collaborate	Enterprise Architect is a powerful collaboration platform and allows any number of people to work on models and diagrams at the same time, in a cooperative and team effort. The collaboration tools include Reviews and Discussions of elements, the Team Library, Model Mail - which contains messages from other modelers - the Project Calendar listing important events, the 'My Journal' daily reminder facility, Gantt Charts listing work allocations and Kanban diagrams where tasks are

	<p>presented. The tools ensure that communication about the elements, diagrams, lists and matrices are available in the model and links can be created back to these items from the collaboration tools. The 'Collaborate' panel conveniently brings these tools together, ensuring that you are informed about what you need to attend to and made aware of information that is important to your role.</p>
Help	<p>The 'Help' panel provides access to the powerful Help system and to a wide range of on-line facilities to support your use of the tool, including the management of Licence Keys. The Help system contains both overviews of functional areas of the application and detailed topics on how to use specific tools, helping you to be highly productive. The Help is normally accessed as an on-line, web-based system, but you can select to download the file-based Help to provide a local Help system. You can also open the Learning Center library, which provides user-focused guidance for common tasks.</p>

## Explore Panel

You can use the 'Explore' panel to navigate the repository and explore its contents. Most repositories will contain thousands - if not tens of thousands - of elements, and having tools to navigate through and locate items of interest is critical when working in the repository. There are a number of Browsers that are tree views, showing the hierarchical relationships of Packages (folders), elements, diagrams, features, resources, views, items and more. The 'Properties' option provides access to a collection of windows that provide information about the model and system activity. They provide a rich set of methods for viewing information about elements as you navigate through them in diagrams or the Project Browser. The Notes window provides descriptive text, the Summary window lists the important aspects of an element and the Properties window provides details of an element's metadata and more. The 'Trace' option provides facilities for following relationships and linkages between elements through the model. The Search helps you to find elements, diagrams and Packages regardless of their location.



### Available Facilities

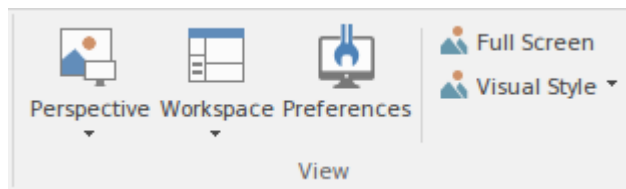
Facility	Description
Browse	<p>Click on this icon to select from a list of tools for displaying the structure and content of the model, including:</p> <ul style="list-style-type: none"> <li>Project Browser - displays the 'Global' tab of the Project Browser, which lists the entire contents of the project</li> <li>Context Browser - displays the 'Context' tab of the Project Browser, which shows only the selected node and its contents</li> <li>Navigator - displays and hides the Navigator bar, which helps you to navigate the hierarchy of Packages in the repository using a textual breadcrumb control, showing you the current Package location</li> <li>Element Browser - shows a summary of the added properties of the selected element</li> <li>Team Library - use to review and add to a hierarchically-structured repository of comments, reports, reviews and documents on any structure, feature or aspect of the project or of other, related projects</li> <li>Model Views - use to capture information on the objects in your model from different aspects that you define yourself, helping you to encapsulate your model under the areas in which you are interested</li> <li>Resources - a repository of project-standard and re-usable document generation templates, MDG Technologies, Relationship Matrix profiles, commonly-used model elements, stylesheets, UML Profiles and Patterns, with facilities for creating and modifying these structures and facilities and, in some cases, for applying the facility to the current model directly from the window</li> <li>System Output - displays the data that Enterprise Architect generates during each of a range of processes; the data from each type of operation generally has its own window tab</li> </ul>
Properties	Click on this icon to select from a list of Properties pages and windows for the

	<p>features and internal contents of elements, such as the:</p> <ul style="list-style-type: none"> <li>• Properties dialog - displaying the name, status, and general properties of the object</li> <li>• Notes window - displaying any notes created for the object</li> <li>• 'Requirements' page of the Responsibilities window</li> <li>• 'Constraints' page of the Responsibilities window</li> <li>• 'Scenarios' page of the Responsibilities window</li> <li>• Features window for attributes, operations, receptions, Parts/Properties, Interaction Points and Connection Points</li> <li>• Tagged Values window - add, edit and delete Tagged Values on the currently-selected element</li> <li>• Summary - displaying the Summary View showing the object properties</li> <li>• Linked Document - displaying the Document window showing the 'Linked Document' tab</li> <li>• Construct - displaying the Construct window to add resources and project management items to the object</li> </ul>
Trace	<p>Click on the drop-down arrow to select from a list of options for reviewing relationships and relationship chains and performing a Gap Analysis on the model or part of the model:</p> <ul style="list-style-type: none"> <li>• Relationships -provides a comprehensive view of all relationships of one or more selected elements, showing the type, direction, stereotype, source and target elements, and characteristics of the source and target elements</li> <li>• Traceability - helps you follow the connections in a chain of elements, starting with a single element to establish the dependencies radiating from that element</li> <li>• Relationship Matrix - shows how sets of elements in one Package are linked to each other, or to elements in another Package, and helps you to add and delete relationships where necessary</li> <li>• Gap Analysis Matrix - helps you explore the implementation of features in the model, and identify potential gaps between solution architectures</li> </ul>
Search	<p>Click on the drop-down arrow to display this selection of search facilities that you can use to locate objects in the model, or code in source files.</p> <ul style="list-style-type: none"> <li>• Model - display the Find in Project view, which provides access to the full range of standard and customized searches in your project</li> <li>• Files - locate and open source files having specific characteristics, using the 'Find in Files' dialog</li> <li>• Recent Diagrams - display the 'Find in Project' view defaulted to an executed specific search for recently modified (that is, Active) diagrams. The default time period is the three days prior to today's date</li> <li>• Recent Elements - display the 'Find in Project' view defaulted to an executed specific search for recently modified (that is, Active) elements. The default time period is the three days prior to today's date</li> <li>• Recent Tasks - display the 'Find in Project' view defaulted to an executed specific search for Active Tasks (those that are in progress)</li> <li>• Diagram - display the Find in Project view, pre-loaded with the Diagram Details search to locate diagrams of a specific name or type</li> <li>• Package - display the Find in Project view, pre-loaded with the Find Package search to locate Packages of a specific name or type</li> <li>• Browse for Diagram - locate and select a specific diagram using the 'Select Classifier' dialog, which shows the full hierarchy of Packages in the model</li> </ul>

	<ul style="list-style-type: none"><li>• Browse for Package - locate and select a specific Package using the 'Find Package' dialog, which shows the full hierarchy of Packages in the model</li></ul>
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## View Panel

The 'View' panel helps you to define the look and feel of the application. You can set preferences that change the style of the interface to suit the work role you are performing. You can define any number of workspace layouts, saving sets of windows that are specific to a role that ultimately increases your productivity as a modeler. There is a range of preferences you can set to tailor the way the application behaves for you individually, including setting colors, fonts and diagram styles.



### Available Facilities

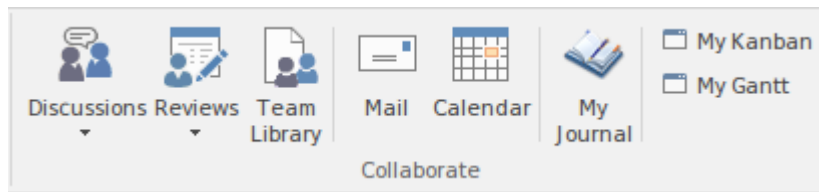
Facility	Description
Perspective	<p>Click on the drop-down arrow to display these commands:</p> <ul style="list-style-type: none"> <li>Select a Perspective - switch to or open the Perspective Portal, from which you can select a Perspective to apply to your Enterprise Architect user interface</li> <li>Open Model Wizard - display the Model Wizard at the 'Model Patterns' tab, showing the last-selected Perspective</li> <li>Clear Current Perspective - reset the system windows and dialogs to display all Patterns and not any group defined by a Perspective</li> <li>Customize List of Available Perspectives - display the Perspective Sets window, where you can filter the Perspectives displayed for selection, or customize your own</li> <li>Help - display the Help topic <i>Introducing Perspectives</i></li> </ul>
Workspace	<p>Click on the drop-down arrow to display these options:</p> <ul style="list-style-type: none"> <li>Select a Workspace - displays the 'Workspace Layout' dialog at the 'Workspace' tab, from which you can select a system-provided Workspace to apply</li> <li>Select a Window - switches to the Window Portal, from which you can select a window to add to the current Workspace</li> <li>Save Current Window Layout - save the current work area layout as a new workspace</li> <li>My Workspaces - displays the 'Workspace Layout' dialog at the 'My Workspaces' tab, on which you can create a new custom Workspace or select and apply an existing customized Workspace</li> <li>My Working Sets - displays the 'Manage Working Sets' dialog, on which you can define the windows and dialogs you want to automatically display when you next log on to Enterprise Architect, either to pick up where you left off or to form a 'home base' for your day-to-day work</li> <li>Set My Default Package - displays the 'Find Package' dialog, from which you select a default Package to select and expand in the Project Browser when the model is loaded; this does not affect, nor is it affected by, any default diagram selected to open when the model is loaded</li> </ul>



	<ul style="list-style-type: none"> <li>• Set My Default Diagram - set either a specific diagram as your default User diagram, or no diagram (which still blocks the Model default diagram - if set - from being displayed automatically)</li> <li>• Clear My Default Diagram - cancel the setting of a your <i>user</i> default diagram; the Model default diagram, if set, will display automatically</li> <li>• Show Start Page - show or hide the Start Page; this setting persists through shut down and restart, until you specifically change the option</li> <li>• Always on Top - force the main Enterprise Architect window to be on top of all other windows</li> <li>• Show All Ribbons - if you have applied a Ribbon Set to only show a subset of ribbons, this option restores all ribbons to the ribbon band</li> <li>• Manage Views - provides a further menu of options for controlling how a selected view is displayed: <ul style="list-style-type: none"> <li>- Float View - display the current View as a floating window, allowing it to be displayed in 'Full Screen' mode or to be moved to a different display monitor</li> <li>- Focus View - set the input focus back to the View that last had focus (intended to be accessed via command shortcut keys (Ctrl+Shift+0))</li> <li>- Reload View - load the latest information from the model database, to update the display of the current View</li> <li>- Close View - close the current View; you will be prompted to save any unsaved modifications</li> <li>- Close All Except Current - close all Views except the current view; you will be prompted to save any unsaved modifications</li> <li>- Close All - close all Views; you will be prompted to save any unsaved modifications</li> <li>- Save All Modified Views - for every View that is currently open, save to the model database any modifications to the appearance of the View; these include modifications such as changes to color, size or position</li> <li>- Auto Hide Active Window - autohide the currently active window</li> <li>- Auto Hide All Docked Windows - autohide all open and docked windows</li> <li>- Close Active Window - close the currently active window</li> </ul> </li> </ul>
Preferences	Click on the drop-down arrow to display the 'Preferences' dialog, on which you can set the general options of Enterprise Architect. You can control how the system behaves when you open a project, including setting the home directories and web pages the project refers to and how the Project Browser responds when items are selected in it.
Full Screen	Click on this icon to toggle Enterprise Architect in and out of 'Full Screen' mode.
Visual Style	Displays the 'Application Look' dialog, on which you can select from a range of visual styles, themes and accent colors. You can also choose options such as displaying window tabs at the top or bottom of the windows and displaying element properties using tree or list style displays.

## Collaborate Panel

Enterprise Architect is a powerful collaboration platform and allows any number of people to work on models and diagrams at the same time, in a cooperative and team effort. The collaboration tools include Reviews and Discussions of elements, the Team Library, Model Mail - which contains messages from other modelers - the Project Calendar listing important events, the 'My Journal' daily reminder facility, Gantt Charts listing work allocations and Kanban diagrams where tasks are presented. The tools ensure that communication about the elements, diagrams, lists and matrices are available in the model and links can be created back to these items from the collaboration tools. The 'Collaborate' panel conveniently brings these tools together, ensuring that you are informed about what you need to attend to and made aware of information that is important to your role.



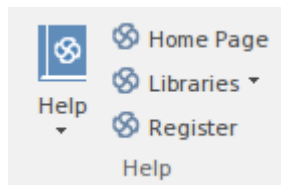
### Available Facilities

Facility	Description
Discussions	<p>Displays either the Discussions window (main icon), on which you can manage current discussions of elements and diagrams, or a menu (drop-down arrow) providing these options:</p> <ul style="list-style-type: none"> <li>Discuss - to display the Collaborate window at the 'Discuss' tab, on which you can create a new discussion or add to an existing discussion on a specific element or diagram</li> <li>Discussion History - to display the Discussions window, on which you can manage the separate discussions of elements recorded in the model</li> <li>Find Recently Discussed Elements - to run a report that presents elements that have been the subject of discussion in the last x days (you specify the number of days in the 'Search Term' field)</li> <li>Chat - to display the Collaborate window at the 'Chat' tab, ready to participate in an exchange of brief comments on any point, with members of one of the defined user security groups</li> <li>Chat History - executes a report that lists all Chat items recorded over the specified period (default 3 days); you can filter the Chat items by Discussion Group in the report</li> <li>Help - to display the <i>Informal Discussions</i> Help topic</li> </ul>
Reviews	<p>Displays either the Collaborate window (main icon), on which you can set up and manage reviews of elements or diagrams, or a menu (drop-down arrow) providing these options:</p> <ul style="list-style-type: none"> <li>Review - to display the Collaborate window at the 'Review' tab, on which you can join a review and create new discussion points or responses within that review, on any element or diagram</li> <li>Review History - to display the Reviews window at the 'History' tab, showing the elements included in a selected review; you can switch to the 'Details' tab to show the details of a selected reviewed element</li> <li>All Reviews - to display the Reviews window, listing all current and recent reviews of elements</li> </ul>

	<ul style="list-style-type: none"><li>• Help - to display the <i>Formal Review Elements</i> Help topic</li></ul>
Team Library	Click on this icon to open the Team Library, which you use to review and add to a hierarchically-structured repository of comments, reports, reviews and documents on any structure, feature or aspect of the project or of other, related projects.
Mail	The Model Mail facility provides you with the ability to send, receive and respond to emails within the project team, under your User Security ID, either as an individual user or as a member of a group that has a shared mail inbox.
Calendar	Displays the Project Calendar, defaulted to today's date, on which you can check for scheduled meetings and reminders of events, and add items for today or any day in the future.
My Journal	Enterprise Architect provides a great facility for maintaining a daily journal, in which you can type all kinds of ideas, comments, notes, suggestions, events, to-do lists and other reminders of what you have done or intend to do within the model. This is a great way to keep the momentum flowing day to day. The facility is simple to use, allowing you to quickly jot down your thoughts as they occur to you.
My Kanban	Displays the Kanban diagram that you have set as your personal default.
My Gantt	Displays a Gantt chart listing the tasks that have been allocated to you and that are not yet complete.

## Help Panel

The 'Help' panel provides access to the powerful Help system and to a wide range of on-line facilities to support your use of the tool, including the management of Licence Keys. The Help system contains both overviews of functional areas of the application and detailed topics on how to use specific tools, helping you to be highly productive. The Help is normally accessed as an on-line, web-based system, but you can select to download a file-based version of the Help to provide a local Help system. You can also open the Learning Center, which provides user-focused guidance for common tasks, especially those specific to your own use of the system that you have documented yourself.



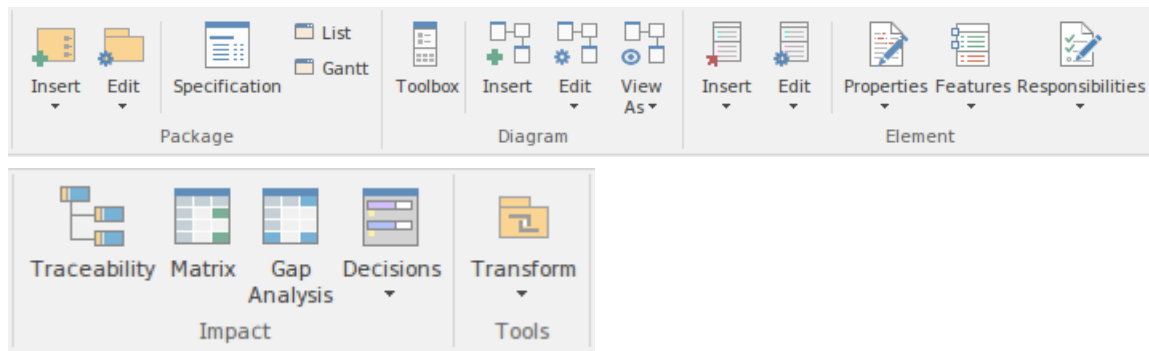
### Available Facilities

Facility	Description
Help	<p>The Help icon displays a menu containing a wealth of options for opening and exploring the Help, obtaining information from a number of other sources, and requesting support from Sparx Systems.</p> <ul style="list-style-type: none"> <li>• Open Help System - opens the Help as a set of pages in HTML format, either on the web or local to your system, beginning with the <i>Introduction to Enterprise Architect</i> topic</li> <li>• Search Help - opens the 'Find in Files' search facility, which you use to specify and search for a text string in the Help</li> <li>• Go to Help Topic - opens a specific Help topic that you identify by name, if you already know the topic you want to display</li> <li>• Open Keyboard Accelerator Map - displays the 'Help Keyboard' dialog, which identifies which keyboard keys have been mapped to Enterprise Architect commands; you can customize these mappings if necessary</li> <li>• Configure Google Translate - displays a short dialog in which you specify the language into which you want to translate the online Help when you display a page; the requested page is passed to the Google Translate site and displayed in the specified language (this option does not operate on the downloaded local Help)</li> <li>• Explore Online Resources - opens a submenu of options for accessing resources on the Sparx Systems web site: <ul style="list-style-type: none"> <li>- Install Help Locally - displays a prompt to download the 'EA UserGuide' installer file (EAUserGuide.msi), which you use to install the Help files locally</li> <li>- User Forum and News - opens the Sparx Systems User Forum, which you can read as a guest or as a logged-in user</li> <li>- Request a Feature - opens the standard form for submitting a request for a feature you would like to see in Enterprise Architect</li> <li>- Bug Report Page - opens the standard form for reporting the details of a bug you have found in Enterprise Architect (also prompts you for your registered user ID and password)</li> <li>- Automation Interface - opens the Sparx Systems web page on the Automation Interface, providing a number of examples of its use</li> <li>- Introducing UML - accesses the Sparx Systems online UML tutorials</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- Pricing and Purchase Options - displays details on purchasing or upgrading Enterprise Architect over the internet</li> <li>• Open the Example Model - opens the EAExample model within the current instance of Enterprise Architect</li> <li>• Register and Manage Your License Key(s) - configure and manage the license keys used to register Enterprise Architect and its Add-Ins</li> <li>• Check for Updates - displays the Sparx Systems web page on the latest build and its release notes</li> <li>• View the License Agreement - displays the Enterprise Architect End User License Agreement</li> <li>• Ordering Information - displays information on how to purchase Enterprise Architect</li> <li>• Read Me - displays the Readme.txt file, which details the changes and enhancements in Enterprise Architect, build by build</li> <li>• About EA - displays a window showing your installation details, including the program version, your registration key, your repository connection, the Enterprise Architect edition and your user id</li> </ul>
Home Page	Click on this option to open the Home page of the Sparx Systems web site.
Libraries	<p>Click on the drop-down arrow to display these commands;</p> <ul style="list-style-type: none"> <li>• Learning Center - displays the Learning Center as a view in the central workspace area</li> <li>• Download - download the Learning Center library from the Sparx Reusable Asset Service Registry</li> <li>• Manage - install, enable and disable Library files</li> </ul>
Register	Click on this option to open the 'Licence Management' dialog and register a new Enterprise Architect license key.

## Design Ribbon

The 'Design' ribbon is used to develop and visualize a model by creating diagrams, matrices and lists of important aspects of the system. Requirements and other specifications can be created and viewed and, regardless of the technology or language of expression, compelling representations can be created, viewed and tied together to form either powerful blueprints of a system to be implemented or documentation of an existing system.



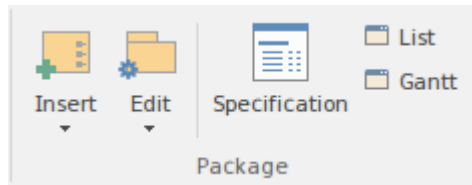
### The Design Ribbon Panels

Panel	Description
Package	The 'Package' panel provides facilities to create and manage folders (Packages). New models can be added that typically contain a number of other Packages. These Packages form the structure of the model and can be used to group elements, diagrams or other Packages. You can work on the contents of a Package as a series of textual descriptions in the Specification Manager. A Package can also be viewed as a list of elements that will include other Packages, or as a Gantt chart describing the allocation of resources to the elements in the Package. Snapshots of Packages - including the complete model - can be taken and comparisons made to the current Package.
Diagram	The 'Diagram' panel contains a set of facilities for creating and managing diagrams and the elements they contain. Diagrams are a powerful way of presenting and visualizing a model's elements and their connections. Different types of diagram can be easily constructed using the Diagram Toolbox, each page of which provides the elements and connectors for creating a specific type of diagram. Any diagram can be enhanced by a range of overlays that transform the diagram into an expressive view such as a Kanban board, a Roadmap diagram, or swimlanes that allow elements to be allocated to different aspects such as responsibility or ownership. A diagram can also be viewed as a list of elements or as a Gantt chart describing the allocation of resources to the elements, or as a textual specification.
Element	The 'Element' panel provides facilities to create, edit and manage the elements that are the building blocks of models. Elements can be created and specified with attributes, operations, Receptions, Tagged Values, Scenarios, Requirements and Constraints.
Impact	The 'Impact' panel provides a set of tools for viewing how elements are related to each other in the repository. While diagrams provide one way of visualizing the relationships, the Traceability window, the Relationship Matrix and the Gap Analysis Matrix present the information in a compelling and often more appealing format. The matrices allow visual analysis to be performed and they can be exported to Spreadsheets if more detailed analysis is required. Decision tables can

	be created for individual elements.
Tools	The 'Tools' panel provides the powerful Transformation tools for transforming a model from one format or technology to another.

## Package Panel

The 'Package' panel provides facilities to create and manage folders (Packages). New models can be added that typically contain a number of other Packages. These Packages form the structure of the model and can be used to group elements, diagrams or other Packages. A Package can also be viewed as a list of elements that will include other Packages, or as a Gantt chart describing the allocation of resources to the elements in the Package.



### Available Facilities

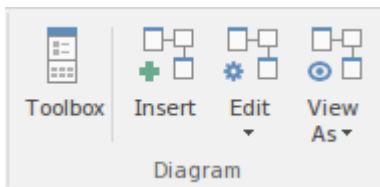
Facility	Description
	<p>Click on the icon itself to open the Model Wizard view, which provides Patterns from a wide range of technologies that you can use to quickly generate new models in your project.</p> <p>Alternatively, click on the drop-down arrow and select either the option to use the Model Wizard, or the 'Insert a simple Package' option to create a new child Package under the currently selected Package. The 'New Package' dialog displays, on which you specify whether to create the Package from a Pattern (with child structures), with a child diagram, or as a Package only.</p>
	<p>Click on the drop-down arrow to select from a number of facilities that you can use to manage Packages in the model.</p> <ul style="list-style-type: none"> <li>• Properties - maintain the properties of the current Package, using the 'Properties' dialog</li> <li>• Manage Baselines - display a short menu from which you can select to display the 'Baselines' dialog for the selected Package, to create and compare Baselines of the Package with the current version, or to execute a report that finds and lists all the Baselines in the model</li> <li>• Advanced - display a menu of options for performing operations on the selected Package:             <ul style="list-style-type: none"> <li>- Update Status - provide a bulk update on the Status, Phase and Version of the selected Package and its elements</li> <li>- Apply Auto Naming - apply configured auto naming conventions to existing elements in the selected Package</li> <li>- Toggle Level Numbering - toggle the display of automatically applied level numbering within the Specification Manager and the Project Browser, for elements within the currently displayed Package</li> <li>- Generated Report Options - display a dialog on which you specify whether to include the selected Package in generated reports, or specifically exclude it from the reports</li> <li>- Clone Structure as New Version - copy the structure of the selected Package and paste it into the Project Browser as a new Package and contents; a prompt displays for you to enter a version number for the new Package, followed by a browser on which you select its parent Package</li> <li>- Apply Transformation - display the 'Model Transformation' dialog, from which you select and apply a model</li> </ul> </li> </ul>






	<p>transformation on the elements of the current Package</p> <ul style="list-style-type: none"> <li>• Show in Relationship Matrix - select to display the elements of the current Package in the Relationship Matrix, using the Package as the Source, the Target, or both</li> <li>• Validation - display a short menu of options to create validation rules and run and cancel a validation of the current Package</li> <li>• Copy to Clipboard - immediately copy the selected Package to the clipboard</li> <li>• Paste from Clipboard - paste a Package held on the clipboard as a child of the selected Package</li> <li>• Search for Package - display the Find in Project view, pre-loaded with the 'Find Package' search to locate Packages of a specific name or type</li> <li>• Browse for Package - display a 'Project Browser' dialog listing only Packages, through which you can easily locate and select a specific Package from within the model hierarchy</li> <li>• Lock Package - display the 'Lock Package' dialog for the selected Package, on which you restrict changes to the Package</li> </ul>
	<p>Click on this icon to display the Specification Manager, a document-based interface to a selected Package in the model, providing the means of creating and reviewing elements as text representations of objects in the Project Browser. When you select this option, the 'Design' ribbon changes to the 'Specification-Specify' ribbon.</p>
	<p>Click on this icon to display the selected Package in the Package Browser window, in List View mode.</p>
	<p>Click on this icon to display the selected Package in the Package Browser window, in Gantt View mode.</p>

## Diagram Panel

The 'Diagram' panel contains a set of facilities for creating and managing diagrams and the elements they contain. Diagrams are a powerful way of presenting and visualizing a model's elements and their connections. They can be enhanced by a range of overlays that transform the diagram into an expressive view such as a Kanban board, a Roadmap diagram, or swimlanes, which allow elements to be allocated to different aspects such as responsibility or ownership. A diagram can also be viewed in a number of other formats, such as a list of elements or a Gantt chart describing the allocation of resources to the elements.



### Available Facilities

Facility	Description
	Click on this icon to display the Diagram Toolbox (if it is not already open); the Diagram Toolbox is a panel of icons specific to a diagram type that you can use to create elements and connectors on a diagram.
	Click on this icon to create a new diagram under the selected Package or element. The 'New Diagram' dialog displays, through which you can create a new diagram of any type under any technology supported by Enterprise Architect, based on a diagram Pattern.
 ▼	<p>Click on the drop-down arrow to display a list of options for actions to apply to the selected diagram.</p> <ul style="list-style-type: none"> <li>• Properties - maintain the properties of the current diagram, using the diagram 'Properties' dialog</li> <li>• Advanced - provides a short menu of options for:               <ul style="list-style-type: none"> <li>- Comparing the current diagram with a previously-captured Baseline of the diagram</li> <li>- Saving the current diagram as a Profile</li> <li>- Add the current diagram to a Working Set</li> </ul> </li> <li>• Clone as New Version - copy the currently-selected diagram in the Project Browser and paste it into the Project Browser as a new diagram; a prompt displays for you to enter a version number for the new diagram, followed by a browser on which you select its parent Package</li> <li>• Lock - display the 'Lock Diagram' dialog for the currently-open diagram, on which you restrict changes to the diagram</li> <li>• Swimlanes - divide the currently-open diagram into logical areas or partitions using the 'Swimlanes' page of the 'Swimlanes and Matrix' dialog</li> <li>• Kanban - convert the currently open diagram to Kanban format, using the 'Kanban' dialog</li> <li>• Roadmap - convert the currently open diagram to a roadmap with a timescale, using the 'Roadmap options' dialog</li> <li>• Make all Elements Selectable - click on this option to make all the elements on</li> </ul>

	<p>the current diagram selectable, so that they each can be worked on</p> <ul style="list-style-type: none"> <li>• Configure Z Order - display the 'Modify Z Order' dialog, on which you set the Z order of each element on the diagram</li> <li>• Set as My Default - set the current diagram as your User Default diagram</li> <li>• Search for Diagram - display the Find in Project view, pre-loaded with the 'Diagram Details' search to locate diagrams of a specific name</li> <li>• Browse for Diagram - display the 'Select Classifier' browser, through which you can locate and open a diagram in your model</li> <li>• Change Type - change the diagram type</li> </ul>
	<p>Click on the drop-down arrow to display a list of options to display the currently open and selected diagram:</p> <ul style="list-style-type: none"> <li>• In the standard graphical display format</li> <li>• As a tabular, editable list of elements (Diagram List)</li> <li>• In a Gantt Chart format, showing the Project Resources assigned to each element</li> <li>• With each element represented by a text description in the Specification Manager</li> <li>• Toggle Inline Specification View - for the graphical display format, select between displaying and hiding a Specification view of the diagram elements in the right half of the diagram</li> </ul>

## Notes

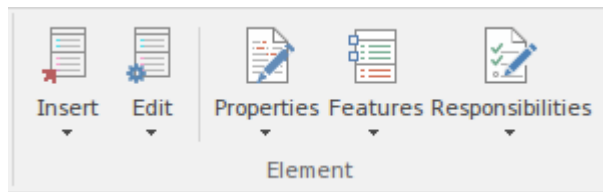
If an element is:

- Selectable, you can move it around the diagram and perform right-click context-menu operations
- Unselectable, you cannot move it around the diagram and the only right-click operation available is to make the element selectable

The 'Make all Elements Selectable' option has no effect on double-click operations on the element, such as displaying child diagrams.

## Element Panel

The 'Element' panel provides facilities to manage elements, which are the building blocks of models. Elements can be created and specified with attributes and operations. You can also define scenarios for the activities that the element represents.



### Available Facilities

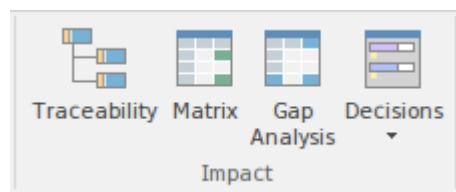
Facility	Description
	<p>Click on the drop-down arrow to display a short list of options for adding elements to the model:</p> <ul style="list-style-type: none"> <li>• Insert New Element into Model - define and add a new element to the currently-selected Package or element and, if required, the currently open diagram, using the 'New Element' dialog</li> <li>• Insert Multiple New Elements - add a number of individual elements to the currently-open diagram, using the 'Create Multiple Elements' dialog</li> <li>• Insert Related Elements - identify elements that are related to the currently selected element and, if they are not on the currently-open diagram, add them to it</li> <li>• Insert Existing Elements - add an existing element to the currently-open diagram; the option displays the 'Select Element' browser, which you use to locate the element to add</li> </ul>
	<p>Click on the drop-down arrow to display a list of commands you can use to identify, research, update and protect the element you have selected in a diagram or in the Project Browser.</p> <ul style="list-style-type: none"> <li>• Lock - open the 'Lock Element' dialog through which you can set or clear editing locks on the selected element</li> <li>• Clone Element as New Version - copy the structure of the selected element and paste it into the Project Browser as a new element and contents; a prompt displays for you to enter a version number for the new element, followed by a browser on which you select its parent Package or element</li> <li>• Edit Linked Document - open the Linked Document editor for the linked document on the currently-selected element</li> <li>• Parents and Interfaces - add or delete Generalization and Realization relationships to Parent or Interface Classes, using the 'Set Parents and Interfaces' dialog</li> <li>• Overrides and Implementations - set the system to automatically override methods from parent Classes and from realized Interfaces, using the 'Override Operations/Interfaces' dialog</li> <li>• Change Type - change the type of the selected element, using the 'Select Element Type' dialog</li> <li>• Find in Diagrams - find the selected element in every diagram in which it has</li> </ul>

	<p>been used; if the element is used in more than one diagram, the 'Element Usage' dialog displays</p> <ul style="list-style-type: none"> <li>Find in Project Browser - highlight in the Project Browser an element selected from a diagram</li> <li>Bookmark - add or remove a Bookmark on the selected element on the diagram; the element is marked with a red triangle</li> <li>Find Elements with Linked Documents - display the Find in Project view, pre-loaded with an executed search for elements that have Linked Documents; right-click on an item and select the 'Edit Linked Document' option to review the element's document</li> <li>Find Elements with Linked Documents modified recently - opens the Find in Project view preloaded with an executed search for elements that have Linked Documents that have updated within the last seven days (you can re-execute the search with a different number of days); right-click on an item and select the 'Edit Linked Document' option to review the element's document</li> <li>Search Model - display the Find in Project view, through which you can search for the use of any aspect of an element across the model</li> </ul>
	<p>Click on this icon to display a short menu of options for editing the element properties, including Tagged Values and Linked Documents:</p> <ul style="list-style-type: none"> <li>Properties - define the properties of the element using the dockable Properties window</li> <li>Notes - create and review the notes on the element, using the Notes window</li> <li>Linked Document - create or review the Linked Document on the element, using the 'Linked Document' tab of the Document window</li> <li>Tagged Values - add, edit and delete Tagged Values on the currently-selected element, using the Tagged Values window</li> <li>Properties Dialog - define the properties of the selected element using the element's 'Properties' dialog</li> <li>Element Browser - show a summary of the added properties of the selected element, in the Element Browser</li> </ul>
	<p>Click on the drop-down arrow to display a list of options for creating and editing the features of the selected element on the Features window, including:</p> <ul style="list-style-type: none"> <li>Attributes - display the 'Attributes' page to create, manage and delete attributes</li> <li>Operations - display the 'Operations' page to create, manage and delete operations and their properties</li> <li>Receptions - display the 'Receptions' page to create, manage and delete Receptions</li> <li>Parts / Properties - display the 'Parts / Properties' page to view, create, manage and delete structural elements such as Parts and Properties on the selected element</li> <li>Interaction Points - display the 'Interaction Points' page to view, manage, add and remove edge-mounted elements (such as Ports) that form the primary interaction points of complex, composite elements</li> <li>Connection Points - if the selected element is a State, this tab helps you manage Entry and Exit Points specifically</li> </ul>
	<p>Click on this icon to display a short menu of options:</p> <ul style="list-style-type: none"> <li>Overview - a summary list of the Requirements, Constraints and Scenarios in the selected element</li> <li>Requirements - create, edit and delete internal requirements of the selected</li> </ul>

	<p>element, using the 'Requirements' page of the Responsibilities window</p> <ul style="list-style-type: none"><li>• Scenarios - create, edit and delete scenarios using the 'Structured Specification' tab of the 'Scenarios' page of the Responsibilities window</li><li>• Constraints - create, edit and delete constraints on the selected element, using the 'Constraints' page of the Responsibilities window</li><li>• Find Scenarios - locate and list all elements that contain structured scenarios</li><li>• Help - display the top-level Help topic on Scenarios</li></ul>
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## Impact Panel

A model is a structure of Packages and elements, most of which have interactions with each other at various levels. The 'Impact' panel provides a set of facilities for establishing how the objects interact and - equally important - where actions and interactions are missing.

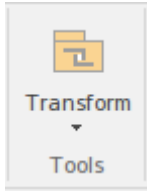


### Available Facilities

Facility	Description
Traceability	Click on this icon to follow the connections in a chain of elements, starting with a single element to establish the dependencies radiating from that element, using the Traceability window.
Matrix	Click on this icon to examine how sets of elements in one Package are linked to each other, or to elements in another Package, using the Relationship Matrix. You can also add and delete relationships using the Matrix.
Gap Analysis	Click on this icon to explore the implementation of features in the model, and to identify potential gaps between solution architectures, using the Gap Analysis Matrix.
Decisions	<p>Click on the drop-down arrow to display a short menu of options for working with Decision Tables for the selected element.</p> <ul style="list-style-type: none"> <li>• Manage Decisions - create and configure a simple Decision Model for the current element, using the Decision Table Editor</li> <li>• Find Decisions - locate and list all elements that contain Decision Tables</li> <li>• Help - display the top-level Help topic on Decision Models</li> </ul>

## Tools Panel

The 'Tools' panel provides a very significant model development facility that streamlines the construction or generation of domain-specific or platform-specific models.



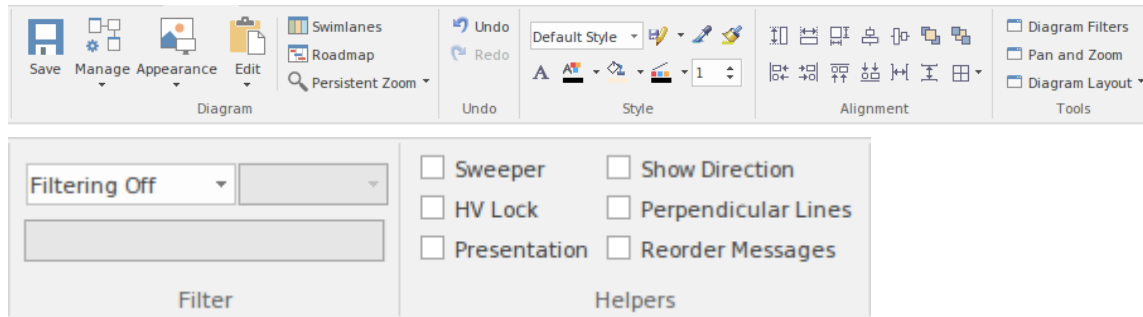
### Available Facilities

Facility	Description
Transform	<p>Click on the drop-down arrow to display options for applying Transformation Templates in building physical models from more abstract content.</p> <ul style="list-style-type: none"><li>• Apply Transformation - display the 'Model Transformation' dialog, from which you select and apply a model transformation on the elements of the current Package</li><li>• Transform Selection - display the 'Model Transformation' dialog, from which you define and perform one or more transformations on the selected elements, to generate new model content</li><li>• Transform Templates - edit and configure the templates used to perform transformations, in the Transformation Editor view</li><li>• Help - display the <i>Model Transformation</i> Help topic</li></ul>



## Layout Ribbon

The 'Layout' ribbon can be used to create sophisticated views of a model alignment of elements and sections to create high-quality diagrams. Diagrams are one of the most powerful and compelling ways of visualizing information. The appearance of elements in diagrams can be completely changed by adding border, fill and text colors, creating meaning and appeal. Diagram Filters and Layout tools can be used to automatically change the appearance of diagrams, and Swimlanes and Roadmaps can be configured, adding rich presentations. A filter can be applied to hide elements that don't meet a specific condition, and a range of helpers can assist with element alignment.




## Panels

Panel	Description
Diagram	The 'Diagram' Panel provides a collection of tools for managing the use of diagrams and for manipulating the appearance and presentation of elements in a diagram.
Undo	The 'Undo' panel provides options to roll back - or undo - the changes in a diagram's appearance, or to re-establish undone changes.
Style	The 'Style' panel contains a range of tools for applying different styles to the elements in a diagram, to emphasize their importance or relevance in the context of the diagram. An element's fonts, fill and borders can be colored and styled, and the settings can be individually copied to other elements or saved as a style that can be applied to other elements as a group.
Alignment	The 'Alignment' panel provides a series of tools that can be used to refine the positions of the diagram's elements relative to each other. Groups of elements can be selected and their edges or centers aligned vertically or horizontally. An element's position in the visual stack can be altered by moving them forward or backwards, and you can display a convenient grid that can be configured so that elements and connectors 'snap' into position on the grid.
Tools	The 'Tools' panel provides a series of facilities for laying out, viewing or filtering the elements in a diagram. These are powerful tools that assist in working with large or detailed diagrams. Diagram Filters can be used to hide elements that aren't relevant in a certain context. The Pan and Zoom window helps you change a diagram's magnification, and to quickly traverse a large diagram. The Diagram Layout facility can automatically change and organize the layout of elements in a diagram.
Filter	The 'Filter' panel helps in emphasizing aspects of a diagram, filtering out elements so that only the relevant or important elements are clearly visible whilst the other elements are muted. The filtering can be based on a variety of element properties that can be set for exact matches, presence of text strings or ranges of dates. The

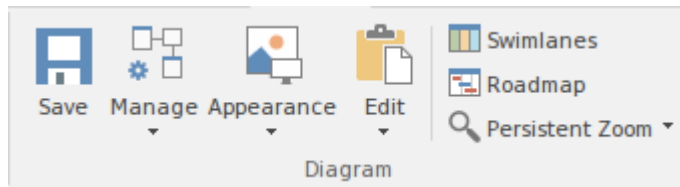
	tool is invaluable for quickly locating and visualizing particular elements in a diagram.
Helpers	The 'Helpers' panel contains a series of specialized tools for working with the elements in a diagram, to save time, preserve layouts and enhance visualization.

## Notes

- You can also temporarily display an abbreviated toolbar of formatting options beside an element or connector; for:
  - Elements, select one or more elements on the diagram and click on the 'paintbrush' icon beside the element (and, for multiple selected elements, the  icon)
  - Connectors, right-click on the connector; the toolbar appears above the context menu
- To set the global appearance of all elements throughout a model, use the 'Preferences' dialog; select the 'Start > View > Preferences' ribbon option, then select 'Diagram | Standard Colors' and 'Diagram | Appearance' from the options tree
- To override the global appearance and define a default appearance for a selected element (or several selected elements) on all diagrams on which it occurs, right-click on the element and choose the 'Appearance | Default Appearance' option

## Diagram Panel

The 'Diagram' panel provides a collection of tools for managing the use of diagrams and for manipulating the appearance and presentation of elements in a diagram.



### Available Facilities

To activate these facilities, open a diagram in the Diagram View. Some facilities are available even when a diagram is not open.

Facility	Description
Save	Click on the icon to save changes to the current diagram.
Manage	<p>Click on the drop-down arrow to display a list of options for managing the diagram's behavior.</p> <ul style="list-style-type: none"> <li>• Add to Working Set - add the diagram to a working set to open when you open the model</li> <li>• Compare to Baseline - compare the current diagram layout with the layout captured in a Baseline</li> <li>• Change Type - change the diagram type</li> <li>• Sequence Communication Messages - (in a Communication diagram) change the sequence of messages</li> <li>• Set as User Default - set the current diagram to automatically display when you open the model</li> <li>• Set as Model Default - set the current diagram to automatically display when any user opens the model</li> <li>• Save as Profile - save the diagram as a UML Profile</li> </ul>
Appearance	<p>Click on the drop-down arrow to display a list of options for configuring the appearance of the current diagram.</p> <ul style="list-style-type: none"> <li>• Standard mode - defaults to selected to apply the normal rendition of the diagram; if the current diagram is in 'hand-drawn' or 'white board' mode, select this option to revert to normal display</li> <li>• Hand Drawn - display the current diagram in 'hand drawn' mode</li> <li>• White Board - display the current diagram in 'white board' mode</li> <li>• Set Visible Relationships - display the 'Set Visible Relations' dialog through which you select the relationship connectors to show or hide on the current diagram</li> <li>• Show Diagram Property Note - display the diagram property note on the current diagram</li> <li>• Theme &amp; Appearance Options - set the theme and appearance options for all diagrams that you review, using the 'Diagram &gt; Themes' page of the</li> </ul>

	<p>'Preferences' dialog</p> <ul style="list-style-type: none"> <li>• Show Status Colors (All Diagrams) - display status colors on the status compartment or borders of all status-applied elements on all diagrams you review; deselect to display the elements with the default element fill and shadow colors</li> <li>• Configure Status Colors - set the status types and colors, using the 'Status' page of the 'General Types' dialog</li> <li>• Reset Local Element Colors - reset the fill, line and font colors of all elements on the selected diagram to the defaults, so that the rendering can use the previous color level (such as standard colors or stereotype colors)</li> <li>• Hide Page Borders (All Diagrams) - hide the printable-page border lines on all diagrams that you review; deselect the option to redisplay the borders (overridden by the 'Hide page borders (current diagram)' setting on the 'Diagram' page of the 'Diagram Properties' dialog)</li> </ul>
Edit	<p>Click on the drop-down arrow to display a list of options for selecting, copying and pasting elements on the current diagram.</p> <ul style="list-style-type: none"> <li>• Properties - set the diagram properties using the 'Diagram Properties' dialog</li> <li>• Select All Elements - select every element in the diagram</li> <li>• Select Elements by Type - specify an element type and - if appropriate - stereotype, and select all elements of that type in the diagram</li> <li>• Copy Selected Element(s) - copy all selected elements to the clipboard</li> <li>• Clear Current Selection - clear all selected elements in the diagram</li> <li>• Make All Elements Selectable - set all elements in the current diagram to Selectable, so that you can move them around the diagram and perform operations on them (make elements unselectable by right-clicking on them and clicking on the 'Unselectable' option)</li> <li>• Paste as Reference - paste elements from the clipboard into the diagram as links to the original elements (the elements being copied from a different diagram)</li> <li>• Paste as New - paste elements from the clipboard into the diagram as new elements; the 'Paste Elements as New' dialog displays, on which you change the names of the new elements</li> <li>• Paste Image as Element - paste a single image of the copied element(s) and any connectors between them from the clipboard into the current diagram; the image is enclosed within a System Boundary, and the element images cannot be selected or moved within the boundary</li> <li>• Autosize Selected Elements - returns the selected element(s) to the default size for the element type, or to the minimum size that can show the element contents; the resizing operates from the center of the element, so that you do not have to reorganize the diagram layout</li> </ul>
Swimlanes	<p>Click on this icon to divide the currently-open diagram into logical areas or partitions using the 'Swimlanes and Matrix' page of the 'Diagram Properties' window (an instance of the dockable 'Properties' window that reflects the properties of the currently selected modeling object).</p>
Roadmap	<p>Click on this icon to convert the currently open diagram to a Roadmap with a timescale, using the 'Roadmap options' dialog.</p>
Persistent Zoom	<p>This option provide a number of zoom settings that you can apply to your diagram:</p> <ul style="list-style-type: none"> <li>• 75%</li> <li>• 100%</li> </ul>

	<ul style="list-style-type: none"><li>• 150%</li><li>• 200%</li></ul> <p>When you select a zoom level, it persists when you close and re-open the diagram.</p>
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## Notes

The 'Set as User Default' and 'Set as Model Default' options are available in the Corporate, Unified and Ultimate editions of Enterprise Architect; User Security must be enabled.)

The User Default diagram overrides the Model Default diagram; the User Default setting is itself overridden by a project shortcut, which defines displays to present on opening the project.

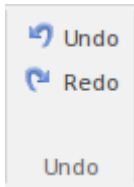
To cancel a User Default diagram, either:

- Create a dummy diagram, set it as the User Default and delete it, or
- Delete the original diagram (if it is no longer relevant)

This still blocks the Model Default diagram, whilst security is enabled; to re-establish the Model Default diagram, set it as the User Default.

## Undo Panel

When working with diagrams, it is quite common for a modeler to make a series of changes and then decide to revert to a previous state of the diagram, using the Undo tool to step back through all the unsaved changes that have been made. If necessary, the changes can be reinstated using the Redo tool. For practical purposes, there is no limit to how many consecutive unsaved changes can be undone or redone.

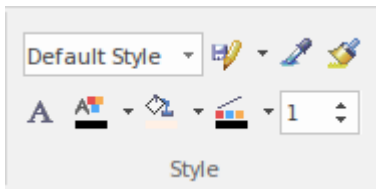


### Available Facilities

Facility	Description
Undo	Click on this icon to reverse the last unsaved and unreversed change made to the diagram.
Redo	Click on this icon to re-establish the last undone and unsaved change made to the diagram.

## Style Panel

The 'Style' panel provides a range of tools for applying different styles to the elements and connectors in a diagram, to emphasize their importance or relevance in the context of the diagram. An element's fonts, fill and borders, and a connector's line, can be colored and styled, and the settings can be individually copied to other elements and connectors, or grouped and saved as a style that can be applied to other elements and connectors.



### Available Facilities

Facility	Description
Style List	Click on the drop-down arrow on this field and select an existing style to apply to the selected object(s) in the diagram.
Save Style	Click on this icon to display a short menu of options for creating styles. <ul style="list-style-type: none"> <li>Save as New Style - save the style of the selected object under a new name (for example, after changing the appearance of the object); a dialog displays in which you type the new style name, and when you click on the OK button the style is added to the 'Style List' field</li> <li>Save Style - save the style of the object under its existing style name (after changing the appearance of the object)</li> <li>Refresh List - change the 'Style List' field setting back to 'Default Style'</li> <li>Delete Current Style - delete the style currently shown in the 'Style List' field; the field reverts to 'Default Style' but the objects using that style stay as they are</li> </ul>
Get Style	Click on this icon to copy the style of the currently selected object, to immediately apply to other objects.
Apply Style	Click on this icon to apply the style copied using the 'Get Style' icon to the currently selected object. You can keep clicking on new objects and on this icon to apply the style to several objects. As long as the style characteristic applies to the object (such as line width and line color) you can apply the style to any kind of object, although you would usually apply a style to closely related objects.
Set Font	Click on this icon to set the text font, style, size and effects for the selected element(s). (You can also select from a small range of text colors.)
Text Color	Click on this icon to select from a wide range of colors in which to display the text of the selected element(s).
Fill Color	Click on this icon to select from a wide range of colors to set as the fill color of the selected element(s).

Line Color	Click on this icon to select from a wide range of colors to set for the borders of the selected element(s) or lines of the selected connector.
Line Width	Click on the 'spinner' arrows to set the selected element border or connector line width to a value between 1 (thinnest) and 5 (thickest).



## Alignment Panel

The 'Alignment' panel provides a series of tools that can be used to refine the positions of the diagram's elements relative to each other. Groups of elements can be selected and their edges or centers aligned vertically or horizontally. An element's position in the visual stack can be altered by moving them forward or backwards, and you can display a convenient grid that can be configured so that elements and connectors 'snap' into position on the grid.



### Available Facilities

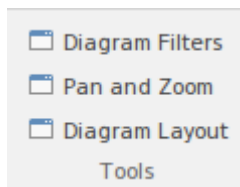
Most of the options on this panel become available when you select two or more elements together (press Ctrl or Shift as you click on the elements). Usually, the last-selected element is the reference element against which the others align; this element is indicated by a hatched border.

Facility	Description
Make Same Height	Click on this icon to make all selected elements the same height as the reference element.
Make Same Width	Click on this icon to make all selected elements the same width as the reference element.
Make Same Size	Click on this icon to make all selected elements the same height and width as the reference element.
Align Vertically	Click on this icon to align the centers of all selected elements vertically with the center of the reference element.
Align Horizontally	Click on this icon to align the centers of all selected elements horizontally with the center of the reference element.
Bring to Top	Move the selected elements to the top of the diagram relative to other elements (the top of the Z-Order).
Send to Back	Move the selected elements to the back of the diagram relative to other elements (the bottom of the Z-Order).
Align Left	Click on this icon to align the left edges of all selected elements vertically with the left edge of the reference element. Shortcut: Ctrl+Alt+Left Arrow
Align Right	Click on this icon to align the right edges of all selected elements vertically with the right edge of the reference element. Shortcut: Ctrl+Alt+Right Arrow
Align Tops	Click on this icon to align the top edges of all selected elements horizontally with

	<p>the top edge of the reference element.</p> <p>Shortcut: Ctrl+Alt+Up Arrow</p>
Align Bottoms	<p>Click on this icon to align the bottom edges of all selected elements horizontally with the bottom edge of the reference element.</p> <p>Shortcut: Ctrl+Alt+Down Arrow</p>
Space Horizontally	<p>Click on this icon to evenly separate the selected elements by the same amount horizontally.</p>
Space Vertically	<p>Click on this icon to evenly separate the selected elements by the same amount vertically.</p>
Snap to Grid	<p>Click on this icon to display a short menu of options for applying a grid to help you position elements on each diagram you review. If all of the options are deselected, you can move and resize elements freely.</p> <ul style="list-style-type: none"><li>• Standard Grid - make elements 'snap' to the nearest grid point when you move or resizing them</li><li>• Smart Placement - place elements even distances away from other elements and space elements evenly; for Sequence diagrams, this helps position Notes on Messages</li><li>• Show Grid - display the grid on the diagram as pale gray dots against the diagram background</li><li>• Show smart placement guides - display instant lines on the diagram to indicate where critical points (top, bottom, sides, center of sides) on the element being moved or resized lie in relation to the original position of the element or to another element or connector way point</li></ul>

## Tools Panel

The 'Tools' panel provides a suite of facilities for aligning, viewing or filtering the elements in a diagram. These are powerful tools that assist in working with large or detailed diagrams. Diagram Filters can be used to obscure elements that aren't relevant in a certain context. The Pan and Zoom window helps you change a diagram's magnification, and to quickly traverse a large diagram. The Diagram Layout facility can automatically change and organize the layout of elements in a diagram.

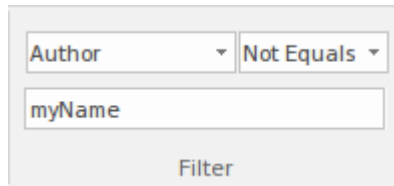


### Available Facilities

Facility	Description
Diagram Filters	Click on this icon to display the 'Diagram Filters' dialog, which you use to create and apply filters for selectively muting parts of the diagram that are not relevant to an aspect you are investigating.
Pan and Zoom	Click on this icon to display the Pan & Zoom window, which helps you to scan across large diagrams and 'dive into' areas of interest.
Diagram Layout	<p>Click on this icon to display a menu of options that you can use to select, configure and apply a wide range of diagram layouts to the current diagram. These options include:</p> <ul style="list-style-type: none"> <li>• Apply Default Layout - automatically apply the default standard Digraph layout to the current diagram</li> <li>• Open Diagram Layout Tools - display the 'Layout Tools' dialog, through which you can select, configure and apply one of the predefined diagram layouts to the current diagram</li> <li>• &lt;diagram layouts&gt; - the eleven predefined diagram layouts, each option automatically applies the current settings for that layout from the 'Layout Tools' dialog to the current diagram; note that the 'Digraph' option applies any settings you have adjusted, whereas the 'Apply Default Layout' option ignores such adjustments</li> </ul>

## Filter Panel

The 'Filter' panel helps in emphasizing aspects of the currently-open diagram, quickly filtering out elements outside a context so that only the relevant or important elements are clearly visible whilst the other elements are muted. The context can be derived from a variety of element properties (as defined in the Properties window), some of which can be set to an exact match, the presence of text strings or a date range. The tool is invaluable for quickly locating and visualizing particular elements in a diagram.



## Fields

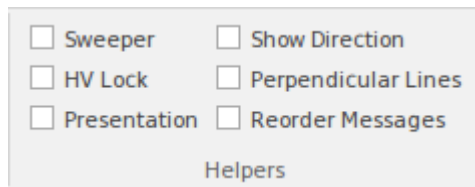
The three fields are unlabelled and are referred to by their position on the panel.

Field	Description
Top Left	<p>This field identifies the type of filter to apply. It defaults to the value 'Filtering Off'. Click on the drop-down arrow and select the filter type.</p> <p>To expose the full list of filter types, either use the vertical scroll bar or drag the 'dotted line' bar down as far as is necessary. The filter types include:</p> <ul style="list-style-type: none"> <li>Relationships - filters for elements that are the source or target of the same type of connector as the selected element</li> <li>Hierarchy - filters for elements on the diagram in the same hierarchy as the selected element, both above and below that element in the hierarchy</li> <li>Name / Alias - filters for elements having the specified text string in the 'Name' or 'Alias' fields</li> <li>Alias - filters for or against elements having the specified text string in the 'Alias' field</li> <li>Author - filters for or against elements created by the specified author(s) (as shown in the 'Author' field)</li> <li>DateCreated - filters for or against elements created before, on or after the specified 'Created' date</li> <li>DateModified - filters for or against elements modified before, on or after the specified 'Modified' date</li> <li>Difficulty - filters for or against elements with internal Requirements of the specified difficulty value (see the element's 'Properties' dialog, 'Requirements' page)</li> <li>GenType - filters for or against elements of the specified code generation language (such as Java) specified in the 'Language' field</li> <li>Filename - filters for or against elements having the specified code generation file path and name in the 'Filename' field</li> <li>Keywords - filters for or against elements having the specified text in the 'Keywords' field</li> <li>Name - filters for or against elements having the specified text string in the 'Name' field</li> <li>Notes - filters for or against elements having the specified text string in the 'Notes' field (see the element's 'Properties' dialog, 'General' page)</li> </ul>

	<ul style="list-style-type: none"> <li>• ObjectType - filters for or against elements having the specified object type as defined in the 'Type' field</li> <li>• Phase - filters for or against elements having the specified phase as defined in the 'Phase' field</li> <li>• Version - filters for or against elements having the specified object type as defined in the 'Version' field</li> <li>• Priority - filters for or against elements with internal Requirements of the specified priority (see the element's 'Properties' dialog, 'Requirements' page)</li> <li>• RequirementType - filters for or against elements with internal Requirements of the specified type (see the element's 'Properties' dialog, 'Requirements' page)</li> <li>• Scope - filters for or against elements having the specified scope value, as defined in the 'Scope' field</li> <li>• Status - filters for or against elements having the specified status, as defined in the 'Status' field</li> <li>• Stereotype - filters for or against elements having the specified stereotype as defined in the 'Stereotype' field</li> <li>• Selectable - filters for or against elements that have been flagged as selectable, using the element context menu</li> <li>• Printable - filters for or against elements that have been flagged as printable, using the element context menu</li> </ul> <p>For some filter types, one or both of the remaining two fields might not be required and they will be grayed out.</p>
Top Right	<p>This field defines the operator to apply to any property or value you define; that is, whether the element property or text contains, is equal to, or is not equal to the defined value, or is within a specified range of values.</p> <p>Click on the drop-down arrow and select the appropriate operator.</p>
Bottom	<p>Type the value or range of values to be matched against the element property or text.</p>

## Helpers Panel

The 'Helpers' panel contains a series of specialized tools for working with the elements in a diagram. These perform useful function that will save time, preserve layouts and enhance visualization. The 'Sweeper' and 'HV Lock' tools move multiple elements vertically, horizontally or diagonally in the diagram. The 'Presentation' tool can be used to show which element is in focus during a workshop or meeting. The 'Show Direction' tool indicates the direction of relationships connected to the selected element.



## Available Facilities

To apply each of these tools to your diagram, click on the checkbox against the tool name. The options remain selected across diagrams and work sessions until explicitly turned off again.

Facility	Description
Sweeper	When the Sweeper is on, you can move sections of the diagram in one direction vertically, horizontally or diagonally. Click on the diagram and move the cursor; the section of diagram ahead of the cursor in its direction of movement is moved in the same direction.
HV Lock	When the HV Lock is on, when you click on an element and start to move it horizontally or vertically, the movement becomes restricted to that direction. So if you start to move the element vertically, you cannot move it horizontally until you release the mouse button and start another movement. The lock prevents any diagonal movement.
Presentation	When the 'Presentation' option is selected, the borders of selected elements are a simple solid colored line. There are no diagram icons (such as the Quick Linker arrow), movement handles or hatching. You cannot select and work on connectors. Whilst you can still move and resize the element(s), you might use this option when you are examining element content rather than element placement on the diagram, or using the diagram for display rather than change.
Show Direction	When this option is selected, the physical direction of connectors on the selected element are indicated by color: incoming relationships are red, and outgoing relationships are green. If the element is not selected, the connectors are not color coded.
Perpendicular Lines	When this option is selected, connectors are forced to adopt a vertical or horizontal position when they are adjusted. Connectors that are not adjusted when this option is selected will remain at whatever angle they present. Not all types of connector are affected by this setting.
Reorder Messages	This option enables and disables the ability to swap the order of messages on a Sequence diagram. When this option is enabled, if you drag a message up or down a lifeline beyond the position of the next or previous message, the messages swap positions. If this option is disabled, then dragging a message will only extend or reduce the spacing between the message being dragged and its preceding message.

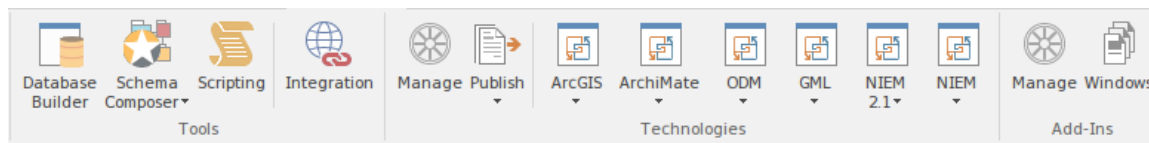


## Specialize Ribbon

The 'Specialize' ribbon provides facilities to enable and access Add-Ins (extensions written in COM) and MDG Technologies that interact with the Enterprise Architect user interface to extend and specialize the product's capabilities.

When an Add-In is added to Enterprise Architect, either by inclusion with the installer or by subsequently importing into Enterprise Architect, it can be assigned to the particular area of functionality that it supports (using the EA\_GetRibbonCategory function), and is represented by an icon in an 'Add-In' panel in the appropriate ribbon. For example, icons for Eclipse and Visual Studio would be included in an 'Add-In' panel on the 'Code' ribbon. Icons for unassigned Add-Ins are shown on this 'Specialize' ribbon, in the 'Add-Ins' panel.

The contents of this ribbon therefore depend on what Add-Ins and Technologies you have installed and enabled, and whether they have been assigned to a particular functional area of Enterprise Architect.



## Panels

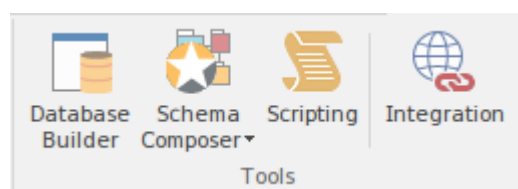
Panel	Description
Tools	The 'Tools' panel provides a collection of facilities to create and run automation scripts, to design and create data models or import existing database schemas into your model and for accessing external data sources.
Technologies	<p>This panel provides the icons for managing and publishing MDG Technologies in Enterprise Architect, and also an icon for each enabled MDG Technology available in your installation of Enterprise Architect.</p> <p>Click on the 'Manage' icon to open the 'MDG Technologies' dialog. This dialog helps you to add and configure paths to additional technology files and to activate or deactivate the built-in technologies.</p> <p>Click on the 'Publish' icon to access options for working with MDG Technologies in general</p> <p>Each Technology icon displays a drop-down list of options for working with the Technology.</p>
Add-Ins	<p>This panel provides two icons for enabling and configuring Add-Ins:</p> <ul style="list-style-type: none"> <li>• Manage - display the 'Manage Add-Ins' dialog, which you use to enable or disable Add-Ins for use; an Add-In that is disabled is not loaded when you start up Enterprise Architect, and no icon appears for it in the ribbons</li> <li>• Windows - display the Add-In window containing any window that has been defined to display in this space, for the currently active Add-In</li> </ul> <p>If your system includes unassigned Add-Ins, an icon for each one is included in this panel.</p>



## Tools Panel

The 'Tools' panel provides facilities for working with various kinds of schemas. The powerful Database Builder is accessed from this panel, as well as facilities for importing existing database schemas from a wide range of supported database products, generating DDL scripts from your database model, and managing and editing the templates used in generating those DDL scripts.

Also accessed from this panel is the model Scripting window, which provides the means to manage, create and edit automation scripts to work with your model.



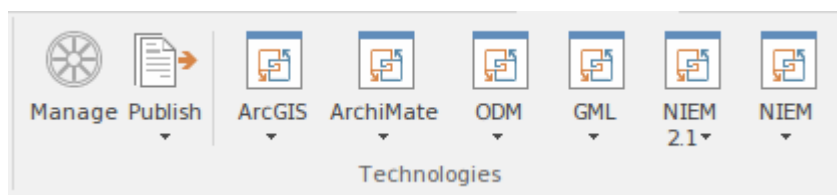
### Available Facilities

Facility	Description
Database Builder	Click on this icon to add, edit and manage database models for a wide range of DBMS products, using the Database Builder view.
Schema Composer	<p>Click on the drop-down arrow to display options for creating and managing custom profiles for the generation of industry-specific XSD files.</p> <ul style="list-style-type: none"> <li>• Open Schema Composer - display the Schema Composer view, which you use to create Schema profiles and generate XSD files from them</li> <li>• Import for Schema Composer - import a Schema Composer profile from an external file, using the 'Schema Importer' dialog</li> <li>• Find Schema Composer Profiles - execute a standard search to locate all Schema Composer profiles in the project</li> <li>• Help - display the <i>The Schema Composer</i> Help topic</li> </ul>
Scripting	Click on this icon to display the Scripting window, through which you can add, edit and manage model based scripts in JavaScript, JScript and VB.Net.
Integration	<p>This icon opens the External Data facility for defining how the data from external sources is represented in Enterprise Architect.</p> <p>When developing a model in Enterprise Architect you could connect to an external application such as TFS or JIRA as the data source. You would then indicate how data items in one application are reflected in the other.</p>

## Technologies Panel

The 'Technologies' panel provides the icons for managing and publishing MDG Technologies in Enterprise Architect, and also an icon for each enabled MDG Technology available in your installation of Enterprise Architect. This topic identifies some of the Technologies that might be represented here. Each Technology icon displays a drop-down list of options for working with the Technology. These options might include:

- Help - open the Help file for the Technology
- About - display a short panel of information on your installation of the Add-In
- Connect to External Model - connect to a project created in another application, to which the Technology provides a bridge
- Import <data> - import data defined in the Technology into Enterprise Architect
- Export <data> - export data from Enterprise Architect to data structures specific to the Technology



### Available Facilities

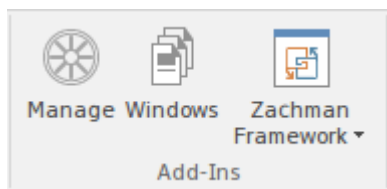
Facility	Description
Manage	Click on the 'Manage' icon to open the 'MDG Technologies' dialog. This dialog helps you to add and configure paths to additional technology files and to activate or deactivate the built-in technologies.
Publish	Click on the 'Publish' icon to access these options for working with MDG Technologies in general: <ul style="list-style-type: none"> <li>• Import MDG Technology - import an MDG Technology into the model either for your own use or for all users of the model; the 'Import MDG Technology' dialog displays</li> <li>• Publish Diagram as Pattern - create a Pattern file from the currently-open diagram, using the 'Save Diagram as Pattern' dialog</li> <li>• Publish Package as UML Profile - create and export a Pattern file based on the current Package, using the 'Save UML Profile' dialog</li> <li>• Generate MDG Technology - open the MDG Technology Creation Wizard to guide you through the process of creating and integrating the structures and resources appropriate to an MDG Technology of your own design</li> </ul>
ArcGIS	Provides access to facilities that help you create ArcGIS models; the ArcGIS system supports the development and management of geodatabases.
ArchiMate2	Provides access to the facilities of the MDG Technology for ArchiMate 2, one of the business modeling tools integrated with Enterprise Architect. It offers a common language for describing the construction and operation of business processes, which you can use to describe, analyze and visualize clearly the relationships between business domains.

ODM	Provides access to the facilities of the MDG Technology for the Ontology Definition Metamodel (ODM), the implementation of the Object Management Group's ODM for Enterprise Architect. It provides ontology modeling capabilities within Enterprise Architect, enabling you to develop large-scale ontologies within the fully-integrated modeling environment, for your project domain.
GML	Provides access to the facilities of the MDG Technology for Geography Markup Language (GML) application schemas, which integrates the Open Geospatial Consortium's GML 3.3 with Enterprise Architect, providing an XML grammar for geographical feature modeling capabilities.
NIEM 2.1	Provides access to the facilities of the MDG Technology for National Information Exchange Model (NIEM) release 2.1, which provides a common framework that is used to define how information can be shared between systems, government agencies and organizations.
NIEM	Provides access to the facilities of the MDG Technology for National Information Exchange Model (NIEM), releases greater than 2.1.
Eclipse	<p>The MDG Link™ for Eclipse is designed to support simultaneous UML development in both Enterprise Architect and Eclipse, adding extra functionality to the code generation abilities of Enterprise Architect and merging the changes with minimal effort. Click on the icon to display a short menu of options for using the Add-In.</p> <ul style="list-style-type: none"> <li>• View Project Connections - display the 'Eclipse Connections' dialog, to review the connections between Enterprise Architect Packages and Eclipse Projects</li> <li>• Options - display the 'Options' dialog on which you set up the Eclipse installation path for Enterprise Architect to use to access Eclipse</li> <li>• Help - open the integrated Help for the MDG Link for Eclipse</li> <li>• About - display a panel of information on your installation of the MDG Link for Eclipse</li> </ul>
Visual Studio	<p>The MDG Link™ for Visual Studio.NET is designed to support simultaneous UML development in both Enterprise Architect and Visual Studio, adding extra functionality to the code generation abilities of Enterprise Architect and merging the changes with minimal effort. Click on the icon to display a short menu of options for using the Add-In.</p> <ul style="list-style-type: none"> <li>• View Project Connections - display the 'Visual Studio Connections' dialog, to review the connections between Enterprise Architect Packages and Visual Studio Projects</li> <li>• MDG Options - display the 'MDG Link Options' dialog to set or cancel Enterprise Architect as the tool for editing source code, and to automatically check for changes on merge (or not)</li> <li>• Import Build Scripts - import build scripts into Enterprise Architect from Visual Studio</li> <li>• Export Linked Package List - export a linked-Package list from Enterprise Architect into Visual Studio</li> <li>• Import Linked Package List - import a linked-Package list into Enterprise Architect from Visual Studio</li> <li>• Help - open the integrated Help for the MDG Link for Visual Studio</li> <li>• About - display a panel of information on your installation of the MDG Link for Visual Studio</li> </ul>



## Add-Ins Panel

This panel provides the facilities for enabling Add-Ins and displaying any windows that they define. The panel also provides icons to access unassigned Add-Ins.



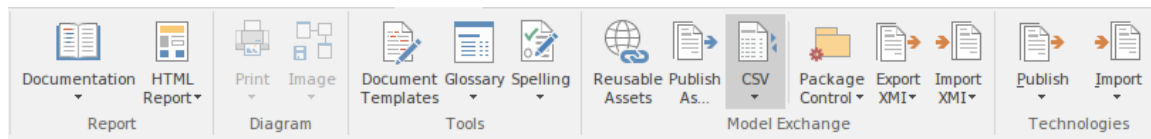
### Available Facilities

Facility	Description
Manage	Displays the 'Manage Add-Ins' dialog, which you use to enable or disable Add-Ins for use; an Add-In that is disabled is not loaded when you start up Enterprise Architect, and no icon appears for it in the ribbons.
Windows	Displays the Add-In window, which contains any window that has been defined to display in this space, for the currently active Add-In.
<unassigned Add-Ins>	An Add-In that is not assigned to an 'Add-Ins' panel in a specific ribbon will have an icon in this 'Specialize > Add-Ins' ribbon panel, as illustrated by the 'Zachman Framework' icon in the example at the top of this topic.

## Publish Ribbon

The 'Publish' ribbon brings together all the tools for publishing, documenting and importing and exporting valuable model assets in a wide range of formats and styles, ranging from publications for corporate audiences to spreadsheets, XML schemas, Patterns, Reusable Assets and much more. The model is the repository of valuable organizational information and knowledge, and people who don't access the model directly can still get access to this knowledge through this panel of tools.

The publishing system provides a great deal of flexibility, and outputs and inputs can be tailored to exactly what an audience requires. This includes the flexible Documentation engine, with its in-built and user defined templates and styles that can produce high quality corporate publications directly from the model. Elements and diagrams can be imported and exported, including exchanging information with spreadsheet tools and saving to reusable Patterns and assets.

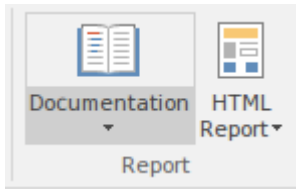


## Panels

Panel	Description
Report	The 'Report' panel groups together a set of tools used to extract information from the model in a variety of useful formats, including docx, pdf and HTML.
Diagram	The 'Diagram' panel provides facilities to generate both hard and electronic copies of diagrams from the model, and to scale images of the diagrams when they are generated
Tools	The 'Tools' panel provides options to create customized document templates, to check the spelling in the current Package or the whole model, and to create and edit entries in the Project Glossary.
Model Exchange	The 'Model Exchange' panel contains tools for controlling Packages and importing and exporting parts of the model in the XML based model exchange format XML, and to formats that can be opened in a spreadsheet. The Reusable Asset Server (RAS) is a valuable resource for either sourcing existing model fragments or saving parts of the current model for reuse on future initiatives.
Technologies	The two facilities available through the 'Technologies' panel enable you to generate files from the Enterprise Architect model in a format that can be used specifically in one of a range of supported technologies, and to import files from the same range of technologies and convert them for use in Enterprise Architect.

## Report Panel

The 'Report' panel provides a set of tools for extracting information from the model for output in a variety of useful formats, including DOCX, PDF and HTML.

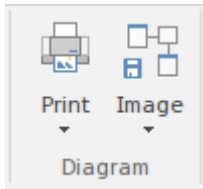


### Available Facilities

Facility	Description
Documentation	<p>Click on this icon to access a short menu of documentation options:</p> <ul style="list-style-type: none"><li>• Generate Rich Text Documentation - generate a document from the content of the model; generate rtf, pdf or docx format, from built-in or customized templates</li><li>• Open a Document File - open an existing document file in RTF or DOCX format, for manual editing</li><li>• Create a Document File - create a new document for manual editing and export it in RTF or DOCX format</li><li>• Run Diagram Report - generate a 'Diagram Only' report on the current Package - the 'Export Diagrams to RTF Document' dialog displays, on which you specify the file location, diagram file format and certain other parameters, to capture images of all diagrams in the current Package</li></ul>
HTML Report	<p>Click on this icon to select from two options for publishing documents on the web:</p> <ul style="list-style-type: none"><li>• Standard HTML Report - publish a document to an internal or internet website as static web pages, in standard HTML</li><li>• Publish to Joomla! - generate an HTML document to a Joomla! database, for internet distribution</li></ul>

## Diagram Panel

The 'Diagram' panel provides facilities to generate both hard and electronic copies of the currently-open and selected diagram from the model.



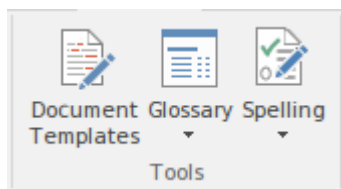
### Available Facilities

Facility	Description
Print	<p>Click on this icon to display a short menu of options for printing the diagram:</p> <ul style="list-style-type: none"> <li>• Print - print the diagram directly on the default printer</li> <li>• Preview - display an image of how the diagram will appear if it is printed</li> <li>• Setup - display the 'Print Setup' dialog to configure the default printer on which the diagram will be printed, which you would have selected on the Windows 'Control' panel</li> <li>• Print to PDF - print the diagram to a PDF file instead of to a printer - a browser displays to select the PDF file name and directory path; by de-selecting the 'Printable' option on an element on a diagram, you can omit that element and its connectors from the diagram in the PDF output</li> </ul>
Image	<p>Click on this icon to save an image of the current diagram. A small menu displays from which you can select to:</p> <ul style="list-style-type: none"> <li>• Save to File - a browser displays in which you select where to save the file, and the format in which to save the file</li> <li>• Save to Clipboard - the image is immediately saved to the Enterprise Architect clipboard</li> <li>• Scale Image To - a list displays of percentage scale options to apply to the diagram images saved to file <i>in bitmap format</i>, with a tick beside the current setting (likely to be the default of 133%); this list and the 'Scale Saved Bitmaps to' field on the 'Diagram' page of the 'Preferences' dialog are parallel and changes to one are automatically reflected in the other</li> </ul> <p>Images saved in any format other than bitmap are not scaled</p> <p>On the 'Diagram' page of the 'Preferences' dialog, selecting the 'Apply scale to clipboard' checkbox also applies the selected scale to bitmap images saved to the clipboard</p>



## Tools Panel

The 'Tools' panel provides options to create customized document templates, to check the spelling in the current Package or the whole model, and to create and edit entries in the Project Glossary.

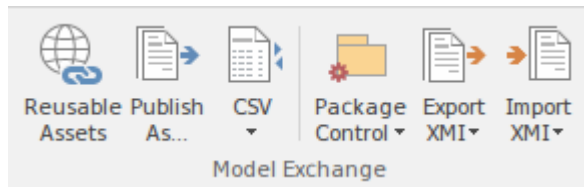


### Available Facilities

Facility	Description
Document Templates	Click on this icon to manage, create and modify the templates used in generating documents in RTF, PDF or DOCX format.
Glossary	Click on this icon to display options for viewing and editing the terms defined in the Project Glossary: <ul style="list-style-type: none"> <li>Glossary View - display the Glossary window, listing all terms defined in the Project Glossary</li> <li>Edit - display the 'Glossary' dialog, which provides options to add, edit, and delete glossary terms and modify the display of terms</li> </ul>
Spelling	Click on this icon to access the project Spell Checking facilities. A short menu displays from which you can select to: <ul style="list-style-type: none"> <li>Spell Check Project - the 'Spell Check' dialog displays, on which you specify what model components to check</li> <li>Spell Check Current Package - the 'Spell Check' dialog again displays, but in this context you do not have to set any parameters</li> <li>Spelling Options - configure the spell checker using the 'Spelling Options' dialog</li> </ul>

## Model Exchange Panel

The 'Model Exchange' Panel contains tools for controlling Packages and for importing and exporting parts of the model both in the XML based model exchange format XMI, and in other formats that can be opened in a spreadsheet. The Reusable Asset Server (RAS) is a valuable resource for either sourcing existing model fragments or saving parts of the current model for reuse on future initiatives.



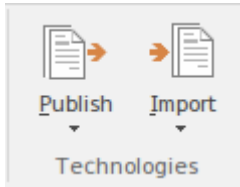
### Available Facilities

Facility	Description
Reusable Assets	Click on this icon to open the Reusable Asset Service (RSA) view in the central work area. The RSA provides a simple and convenient mechanism for modelers to distribute or download reusable model structures, information, corporate directives and standards. The shared repository is accessible via a Cloud Service connection, making it accessible for distributed teams.
Publish As...	Click on this icon to publish a Package at any level in the model as an external file in one of several XML formats, including XMI 1.1, XMI 2.1, ArcGIS and BPMN 2.0 XML. The 'Publish Model Package' dialog displays.
CSV	Click on this icon to access the CSV Import and Export facilities, and to create and maintain the CSV specifications that define how the imports and exports proceed. You can also display the summary Help topic for CSV transfers.
Package Control	<p>Click on this icon to display a menu of options for storing and managing Packages by creating XMI files from them (Package Control), supporting lightweight version management and model exchange.</p> <ul style="list-style-type: none"> <li>• Configure - set up Package Control using the 'Package Control Options' dialog</li> <li>• Save to File - save the Package to its configured XMI file (from the Package Control option), using the 'Export Package to XMI' dialog</li> <li>• Load from File - replace the Package from its saved XMI file, using the 'Import Package from XMI' dialog</li> <li>• View XMI File for Controlled Package - review the content of the (exported) XMI file for the Package, in the Code Editor</li> <li>• Compare Package to XMI - compare the current version of the Package with the exported XMI file for the Package (the 'Compare Model to File' option in Managing Baselines)</li> </ul>
Export XMI	<p>Click on this icon to display options for exporting the current Package to an XMI file for use in other models and/or different modeling tools.</p> <ul style="list-style-type: none"> <li>• Export XMI for Current Package - export the Package to a file in one of several XMI formats, using the 'Export Package to XMI' dialog</li> <li>• Batch Export Controlled Packages - export a number of controlled Packages to</li> </ul>

	XMI in a batch process, using the 'Batch XMI Export' dialog
Import XMI	<p>Click on this icon to display options for importing an XMI file to update one or more Packages in the model.</p> <ul style="list-style-type: none"><li>• Import Model XMI - import a Package from an XMI file in one of several XMI formats, using the 'Import Package from XMI' dialog</li><li>• Merge Model XMI into Current Package - import an XMI file for the Package and merge the content of the file with the Package; you might do this with a sequence of XMI files for the Package, such as when a number of people are working on the same Package offline and storing their work in separate XMI files</li><li>• Batch Import Controlled Packages - import model Packages from an import set for controlled Packages, using the 'Batch XMI Import' dialog</li></ul>

## Technologies Panel

The two facilities available through the 'Technologies' panel enable you to generate files from the Enterprise Architect model in a format that can be used specifically in one of a range of supported technologies, and to import files from the same range of technologies and convert them for use in Enterprise Architect.

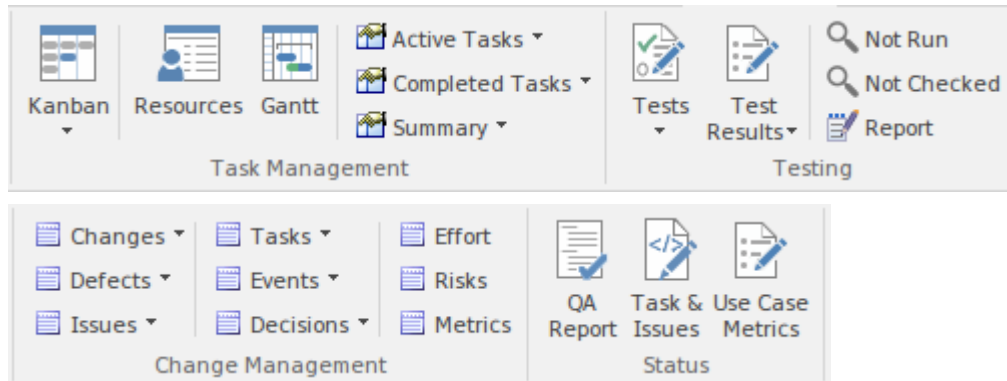


### Available Facilities

Facility	Description
Publish	<p>Display a menu of options for Publishing (exporting) Enterprise Architect model information in a specific format for consumption by other tools or processes.</p> <p>A wide range of output formats is supported, and you can further tailor the output by including or excluding diagram information, Enterprise Architect specific extensions and so on. You would tailor your published file for the capabilities of the tool or process expected to consume it.</p> <p>The 'Normative XMI 2.4.2' option provides a quick means of exporting model information in the latest UML/XMI combination with no Enterprise Architect extension information or diagram information. This format is most useful for standards development and for base interoperability with other UML based tools.</p> <p>Note that you should not use this menu to Publish model information for consumption by other users of Enterprise Architect. For that purpose, use the options in the 'Model Exchange' panel.</p>
Import	<p>Display a menu of options for importing XMI/XML from a variety of formats.</p> <p>ArcGIS, EMX, Rhapsody, OWL/RDF, BPMN 2.0, DMN 1.1 and MDZIP are specifically supported, but a wide range of other tools' XML output can be imported into Enterprise Architect using the 'Other Tools/Formats' menu option.</p>

## Construct Ribbon

The 'Construct' ribbon presents the tools and facilities for visualizing and managing the tasks and the resources needed to construct a system, from the allocation of human resources to tasks, to the powerful Kanban boards and Gantt chart for visualizing the progress of work done. Teams can collaborate directly in the tool and manage a wide range of variations to model elements - including Issues and Defects - and tests can be defined and results recorded.



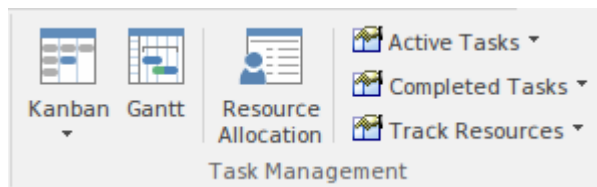
### Panels

Panel	Description
Task Management	The 'Task Management' panel is a collection of tools for managing human resources and their allocation to elements that represent tasks to be completed. Kanban diagrams can be used to visualize boards of elements and a Gantt chart shows the duration of assigned tasks and other important views. The Resource Allocation window is used to assign resources to elements representing work to be done. There are several searches that list a variety of useful views, such as Overdue Tasks, Tasks Starting Today, and more.
Testing	The 'Testing' panel is used for creating and managing all aspects of testing. The Testing window conveniently collects all the tests for an element, and allows new tests to be created and existing ones to be managed. The tests can be fully described and Inputs, Acceptance Criteria, Results, Status and more can be defined for each test. There are several predefined searches that can be run to find recent test results, such as the recent test that have passed. A configurable Test Report can also be generated, creating a single document that describes all tests or any combination of tests.
Change Management	The 'Change Management' panel is used for describing important items that apply to an element. Enterprise Architect is a powerful platform for managing any initiative and can keep track of variations in the life time of any element. Regardless of the methods or processes that are being used elements such as Requirements, User Stories, Business Rules, Components and others will change, have issues, require tasks, have defects and events and decisions will be made about them. All of these variations can be created and managed and a series of useful searches are conveniently made available to find items such as recently requested changes, incomplete tasks and many more.
Status	The 'Status' panel provides facilities for obtaining an overview of the project status, including Quality Assurance reports, Task and Issue reports, and project Use Case Metrics.



## Task Management Panel

The 'Task Management' panel is a collection of tools for managing human resources and their allocation to elements that represent tasks to be completed. Kanban diagrams can be used to visualize boards of elements, and a Gantt chart shows the duration of assigned tasks and other important views. The Allocation window is used to assign resources to elements representing work to be done. There are several searches that list a variety of useful views, such as Overdue Tasks, Tasks Starting Today, and more.



### Available Facilities

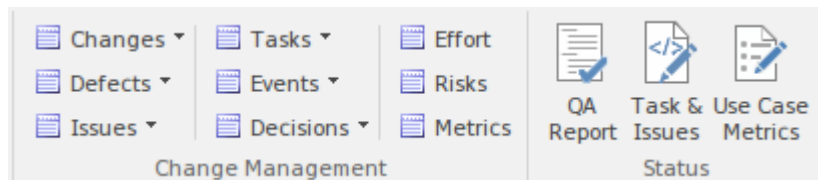
Facility	Description
Kanban	<p>Click on the drop-down arrow to display a list of options for using Kanban diagrams to effectively manage tasks and work assignments necessary to construct the model and its deployable artifacts.</p> <ul style="list-style-type: none"> <li>Find Kanban Diagrams - open the 'Find in Project' tab containing an executed search for finding Kanban diagrams in the model; double-click on an entry to open that Kanban diagram</li> <li>Open Project Kanban - if a Kanban diagram has been set up with the work assignments and tasks for the overall project, open that diagram</li> <li>Open My Kanban - if a Kanban diagram has been set up with your work assignments and tasks, open that diagram</li> <li>New Standard Kanban - create a new standard Kanban diagram to contain active work assignments and tasks, which you can customize as required</li> <li>New Backlog Kanban - create a new Kanban diagram to contain work assignments and tasks that have not yet been allocated to a resource</li> <li>New Iteration Kanban - create a new Kanban diagram to contain active work assignments and tasks associated with the current iteration or sprint</li> <li>New Complete Kanban - create a new Kanban diagram to contain work assignments and tasks that have been completed and are processing through to deployment and maintenance</li> <li>One Stage Workflow - create a single-stage Kanban workflow diagram from a Pattern</li> <li>Two Stage Workflow - create a two-stage Kanban workflow diagram from a Pattern, including a Backlog Kanban and an Iteration Kanban</li> <li>Three Stage Workflow - create a three-stage Kanban workflow diagram from a Pattern, including a Backlog Kanban, an Iteration Kanban and a Complete Kanban</li> </ul>
Resources	Click on this icon to display the Resource Allocation window to assign resources to Task, Issue, Change and other project-level elements.
Gantt	Click on this icon to display the Project Gantt View, to review the breakdown of work for the project and for specific sections of the project. The display defaults to

	the 'Resource View' tab, but you can also select the 'Element View' and 'Report View' tabs.
Active Tasks	<p>Click on this icon to display a short menu of options for searching for and charting tasks within the model.</p> <ul style="list-style-type: none"> <li>• Active Tasks - open the Find in Project view and execute a pre-loaded search for Active tasks; click on an item to display the resource allocation details in the 'Assigned Resources' dialog</li> <li>• Chart of Active Tasks - create a chart within the selected open diagram showing the currently active tasks</li> <li>• Tasks Ending Today - open the Find in Project view and execute a pre-loaded search for tasks scheduled to complete today</li> <li>• Tasks Starting Today - open the Find in Project view and execute a pre-loaded search for tasks scheduled to begin today</li> <li>• Overdue Tasks - open the Find in Project view and execute a pre-loaded search for tasks that are now overdue</li> <li>• Chart of Overdue Tasks - create a chart within the selected open diagram showing the currently overdue tasks</li> </ul>
Completed Tasks	<p>Click on this icon to display a short menu of options for searching for and charting completed tasks within the model.</p> <ul style="list-style-type: none"> <li>• Recently Completed - open the Find in Project view and execute a pre-loaded search for recently-completed tasks; click on an item to display the resource allocation details in the 'Assigned Resources' dialog</li> <li>• Chart of Completed Topics - create a chart within the currently-active diagram showing the recently-completed tasks</li> <li>• Chart for Time Period - create a chart within the currently-active diagram showing the tasks completed during a defined period</li> <li>• All Completed - open the Find in Project view and execute a pre-loaded search for all tasks completed within the lifetime of the project</li> </ul>
Summary	<p>Click on this icon to display a menu of options for searching for and charting the deployment of resources over various periods of time.</p> <ul style="list-style-type: none"> <li>• 30 Day Task Summary (Brief) - provide a brief summary of the tasks performed by resources over the previous month</li> <li>• 30 Day Task Summary (Full) - provide a full summary of the tasks performed by resources over the previous month</li> <li>• 30 Day Resources - search the project for tasks that have started in the last 30 days where the resource name matches (fully or partially) the text in the &lt;Search Term&gt;</li> <li>• 30 Day Roles - search the project for tasks that have started in the last 30 days where the role name matches (fully or partially) the text in the &lt;Search Term&gt;</li> <li>• 30 days grouped by resource (Chart) - create a chart within the currently-active diagram showing the tasks started during the last month, grouped by resource</li> <li>• 30 Day Task Summary (Chart) - create a chart within the currently-active diagram showing the tasks started during the last month</li> </ul>



## Testing Panel

The 'Testing' panel is used for creating and managing all aspects of testing. The Testing window conveniently collects all the tests for an element, and allows new tests to be created and existing ones to be managed. The tests can be fully described and Inputs, Acceptance Criteria, Results, Status and more can be defined for each test. There are several predefined searches that can be run to find recent test results, such as the recent tests that have passed. A configurable Test Report can also be generated, creating a single document that describes all tests or any combination of tests.



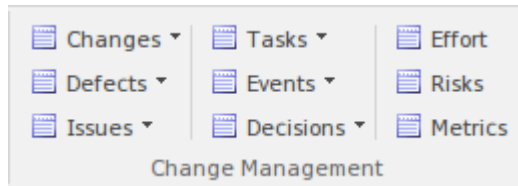
### Available Facilities

Facility	Description
Tests	<p>Click on this icon to display a menu of types of Test that you can define for the current element, using the Testing window.</p> <ul style="list-style-type: none"> <li>• All - display the Testing window with no test type defined in the 'Class Type' field; you might select this option if you are developing a test but not yet certain of what type it should be, or if you are creating a suite of tests of different types</li> <li>• Inspection - display the Testing window set to work on Inspection tests</li> <li>• Unit - display the Testing window set to work on Unit tests</li> <li>• Integration - display the Testing window set to work on Integration tests</li> <li>• System - display the Testing window set to work on System tests</li> <li>• Acceptance - display the Testing window set to work on Acceptance tests</li> <li>• Scenario - display the Testing window set to work on Scenario tests</li> </ul>
Test Results	<p>Click on this icon to display a list of options for generating reports on recently-performed tests, and to represent the results of those tests in various forms of chart.</p> <ul style="list-style-type: none"> <li>• Tests on Recently Modified Elements - open the Find in Project view and execute a pre-loaded search for tests that have defined for recently-modified elements (defaulting to modification within the last 7 days)</li> <li>• Recent Test Results - open the Find in Project view and execute a pre-loaded search for tests that have been run within the last 7 days</li> <li>• Add Pie Chart - generate, in the currently-open diagram, a Pie Chart of the test status statistics from the last seven days, per status type</li> <li>• Add Bar Chart - generate, in the currently-open diagram, a vertical Bar Chart of the test status statistics from the last seven days, per status type</li> <li>• Test Results from last week - generate, in the current diagram, a horizontal, stacked bar chart showing the test status statistics for each day of the last week</li> <li>• Test Results from last 30 days - generate, in the currently-open diagram, a horizontal, stacked bar chart showing the test status statistics for each day of the last 30 days, the most recent date being at the bottom of the chart</li> <li>• Test Results weekly summary - generate, in the currently-open diagram, a horizontal, stacked bar chart showing the test status statistics for each week of</li> </ul>

	<p>the current year</p> <ul style="list-style-type: none"><li>• Recent Test Passes - open the Find in Project view and execute a pre-loaded search for tests that have been given a Pass status within the last 7 days</li><li>• Recent Test Failures - open the Find in Project view and execute a pre-loaded search for tests that have been given a Fail status within the last 7 days</li><li>• Recently Deferred Tests - open the Find in Project view and execute a pre-loaded search for tests that have been given a Deferred status within the last 7 days</li></ul>
Not Run	Click on this icon to open the Find in Project view and execute a pre-loaded search for tests that are currently open but have not been run within the last 7 days.
Not Checked	Click on this icon to open the Find in Project view and execute a pre-loaded search for tests that are currently open but have not been checked within the last 7 days.
Report	Click on this icon to display the 'Generate Test Documentation' dialog, which you use to generate a report on the test records of one or more test types lodged against the elements of the current Package.

## Change Management Panel

The 'Change Management' panel is used for describing important model management items that apply to an element. Enterprise Architect is a powerful platform for managing any initiative and can keep track of variations in the life time of any element. Regardless of the methods or processes that are being used, elements such as Requirements, User Stories, Business Rules and Components will change, have issues, require tasks, have defects and events, and decisions will be made about them. All of these variations can be recorded and managed, and a series of useful searches are conveniently made available to find items such as recently requested changes and incomplete tasks.



### Available Facilities

Facility	Description
Changes	<p>Click on the drop-down arrow to display a menu of options for performing searches and generating charts to manage and visualize changes to elements in the model.</p> <ul style="list-style-type: none"> <li>• Show Changes Window - display the Changes window, which you use to record and manage specific requests for changes to the selected element</li> <li>• Verified Changes - open the Find in Project view and execute a pre-loaded search for elements having Change items with the status 'Verified'</li> <li>• Recently Requested Changes - open the Find in Project view and execute a pre-loaded search for elements having Change items that have been recorded within the last 7 days</li> <li>• Chart Requested Changes - create a chart in the currently-open diagram, showing recently-requested changes</li> <li>• Recently Completed Changes - open the Find in Project view and execute a pre-loaded search for elements having Change items that have been completed within the last 7 days</li> <li>• Chart Completed Changes - create a chart in the currently-open diagram, showing recently-completed changes</li> <li>• New Changes - open the Find in Project view and execute a pre-loaded search for elements that have new Change items</li> <li>• Incomplete Changes - open the Find in Project view and execute a pre-loaded search for Change items that have not been completed</li> </ul>
Defects	<p>Click on the drop-down arrow to display a menu of options for performing searches and generating charts to manage and visualize records of defects raised against elements in the model.</p> <ul style="list-style-type: none"> <li>• Show Defects Window - display the Defects window, which you use to record and manage specific reports of defects in the selected element</li> <li>• Verified Defects - open the Find in Project view and execute a pre-loaded search for elements having Defect items with the status 'Verified'</li> <li>• Recently Reported Defects - open the Find in Project view and execute a pre-loaded search for elements having Defect items that have been recorded within the last 7 days</li> <li>• Chart Reported Defects - create a chart in the currently-open diagram, showing</li> </ul>

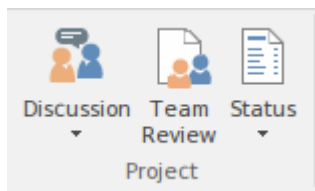
	<p>recently-reported Defect items</p> <ul style="list-style-type: none"> <li>Recently Resolved Defects - open the Find in Project view and execute a pre-loaded search for elements having Defect items that have been resolved within the last 7 days</li> <li>Chart Resolved Defects - create a chart in the currently-open diagram, showing recently-resolved Defect items</li> <li>New Defects - open the Find in Project view and execute a pre-loaded search for elements that have new Defect items</li> <li>Unresolved Defects - open the Find in Project view and execute a pre-loaded search for Defect items that have not been resolved</li> </ul>
Issues	<p>Click on the drop-down arrow to display a menu of options for performing searches and generating charts to manage and visualize records of issues raised against elements in the model.</p> <ul style="list-style-type: none"> <li>Show Issues Window - display the Issues window, which you use to record and manage specific reports of issues with the selected element</li> <li>Verified Issues - open the Find in Project view and execute a pre-loaded search for elements having Issue items with the status 'Verified'</li> <li>Recently Reported Issues - open the Find in Project view and execute a pre-loaded search for elements having Issue items that have been recorded within the last 7 days</li> <li>Chart Reported Issues - create a chart in the currently-open diagram, showing recently-reported Issue items</li> <li>Recently Resolved Issues - open the Find in Project view and execute a pre-loaded search for elements having Issue items that have been resolved within the last 7 days</li> <li>Chart Resolved Issues - create a chart in the currently-open diagram, showing recently-resolved Issue items</li> <li>New Issues - open the Find in Project view and execute a pre-loaded search for elements that have new Issue items</li> <li>Unresolved Issues - open the Find in Project view and execute a pre-loaded search for Issue items that have not been resolved</li> </ul>
Tasks	<p>Click on the drop-down arrow to display a menu of options for performing searches and generating charts to manage and visualize records of tasks opened against elements in the model.</p> <ul style="list-style-type: none"> <li>Show Tasks Window - display the Tasks window, which you use to record and manage specific reports of tasks opened against the selected element</li> <li>Verified Tasks - open the Find in Project view and execute a pre-loaded search for elements having tasks with the status 'Verified'</li> <li>Recently Requested Tasks - open the Find in Project view and execute a pre-loaded search for elements having tasks that have been recorded within the last 7 days</li> <li>Chart Requested Tasks - create a chart in the currently-open diagram, showing recently-requested tasks</li> <li>Recently Completed Tasks - open the Find in Project view and execute a pre-loaded search for elements having tasks that have been completed within the last 7 days</li> <li>Chart Completed Tasks - create a chart in the currently-open diagram, showing recently-completed tasks</li> <li>New Tasks - open the Find in Project view and execute a pre-loaded search for elements that have new tasks</li> </ul>

	<ul style="list-style-type: none"> <li>• Incomplete Tasks - open the Find in Project view and execute a pre-loaded search for tasks that have not been completed</li> </ul>
Events	<p>Click on the drop-down arrow to display a menu of options for performing searches and generating charts to manage and visualize records of events reported against elements in the model.</p> <ul style="list-style-type: none"> <li>• Show Events Window - display the Events window, which you use to record and manage specific reports of events lodged against the selected element</li> <li>• Recently Reported Events - open the Find in Project view and execute a pre-loaded search for elements having events that have been reported within the last 7 days</li> <li>• Chart Reported Events - create a chart in the currently-open diagram, showing recently-reported events</li> <li>• Recently Completed Events - open the Find in Project view and execute a pre-loaded search for elements having events that have been marked as complete within the last 7 days</li> <li>• Chart Completed Events - create a chart in the currently-open diagram, showing events that were recently marked as complete</li> <li>• High Priority Events - open the Find in Project view and execute a pre-loaded search for elements that have events with the status High Priority</li> <li>• Open Events - open the Find in Project view and execute a pre-loaded search for events that are currently open</li> </ul>
Decisions	<p>Click on the drop-down arrow to display a menu of options for performing searches and generating charts to manage and visualize records of decisions associated with elements in the model.</p> <ul style="list-style-type: none"> <li>• Show Decisions Window - display the Decisions window, which you use to record and manage specific records of decisions associated with the selected element</li> <li>• Verified Decisions - open the Find in Project view and execute a pre-loaded search for elements having decisions with the status 'Verified'</li> <li>• Recently Created Decisions - open the Find in Project view and execute a pre-loaded search for elements having decisions that have been recorded within the last 7 days</li> <li>• Chart Created Decisions - create a chart in the currently-open diagram, showing recently-created decisions</li> <li>• Recently Effective Decisions - open the Find in Project view and execute a pre-loaded search for elements having decisions for which the Effective date has passed within the last 7 days (that is, the decision has become effective)</li> <li>• Chart Effective Decisions - create a chart in the currently-open diagram, showing recently-effective decisions</li> <li>• New Decisions - open the Find in Project view and execute a pre-loaded search for elements that have new decisions</li> <li>• Decisions with no Effective date - open the Find in Project view and execute a pre-loaded search for elements that have no Effective date recorded</li> </ul>
Effort	<p>Click on this icon to open the Effort window, on which you can create and maintain Effort records for the currently-selected element.</p>
Risks	<p>Click on this icon to display the Risks window, on which you create and maintain records of Risks to the work on the selected element.</p>
Metrics	<p>Click on this icon to display the Metrics window, on which you create and maintain</p>

	records of metrics that have an influence on the work on an element.
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## Status Panel

The 'Status' panel provides facilities for obtaining an overview of the project status.



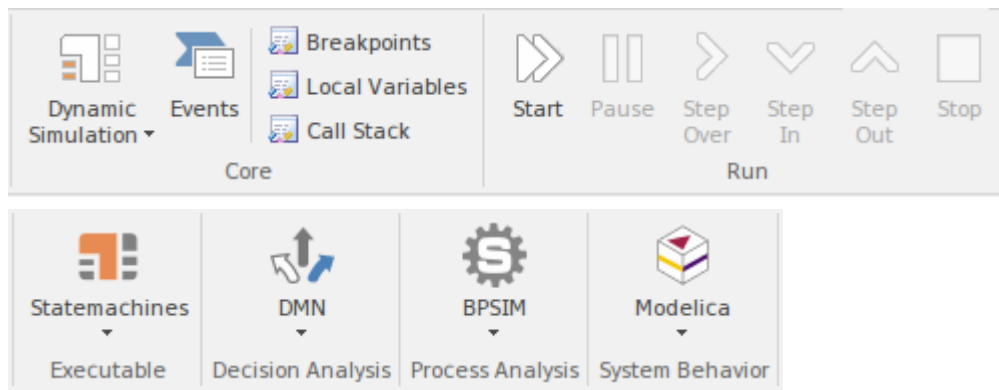
### Available Facilities

Facility	Description
QA Report	<p>Click on this icon to display the QA Reports view, which has separate tabs that enable you to run and display these system-provided status reports:</p> <ul style="list-style-type: none"><li>• Testing Details</li><li>• Maintenance Details</li><li>• Dependency Details</li><li>• Implementation Details</li></ul>
Task & Issues	<p>Click on this icon to access the Project Status view, which provides tabs that summarize the status of each task or issue that relates directly to the current project, and a third tab that summarizes the statistics of the project.</p> <p>Review the project statistics, on the 'Project Statistics' tab. This simply lists the numbers of Packages, diagrams, elements, connectors, elements of each type and element features of each type in the project.</p> <p>For certain items, such as element risks, metrics and effort, if there are no instances of that particular object type it is still listed but with a count of 0.</p>
Use Case Metrics	<p>Click on this icon to display the QA Reports view at the Use Case Metrics tab, to calculate Use Case metrics for the model.</p>

## Simulate Ribbon

The 'Simulate' ribbon presents a range of tools for configuring, building and running simulations.

Enterprise Architect supports simulations based on both Behavioral Models and Executable StateMachines, with the ability to start, pause and resume execution of a simulation, as well as setting break points and viewing Call Stacks or local variables. A number of pre-defined model searches are also provided to assist with locating model artifacts related to your simulations.



### Panels

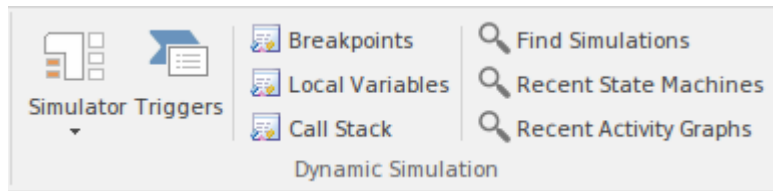
Panel	Description
Core	The 'Core' panel brings together a range of tools for working with Behavioral Model simulations. It provides access to a number of windows that allow you to control a simulation, set up simulation triggers and signals, set breakpoints, inspect local variables or view the Call Stack. It also offers a number of pre-defined model searches for retrieving recently modified StateMachines and Activity Graphs.
Run	The 'Run' panel provides a number of buttons to control execution of an active simulation, such as Start, Pause, Step Over, Step In, Step Out and Stop.
Executable	<p>Executable StateMachines provide a powerful means of rapidly generating, executing and simulating complex state models. In contrast to dynamic simulation of State Charts using Enterprise Architect's Simulation engine, Executable StateMachines provide a complete language-specific implementation that can form the behavioral 'engine' for multiple software products on multiple platforms.</p> <p>The 'Executable' panel provides a number of facilities for working with Executable StateMachines. You can access facilities to configure Analyzer Scripts that determine how code is generated, compiled and executed for the Executable StateMachine. There are commands for you to generate, build and execute the code that runs the simulation, as well as a facility to view the generated code in the built-in code editor.</p>
Decision Analysis	The 'Decision Analysis' panel helps you to perform simulations of models created under Enterprise Architect's implementation of the Decision Modeling and Notation (DMN) facility, developed by the Open Modeling Group. This facility enables you to open a DMN Simulation and set up DMN Expressions, and to locate and work from DMN Configuration Artifacts.
	The 'Process Analysis' panel provides facilities to manage and run BPMN



Process Analysis	simulation models, based on the BPSim standard.
System Behavior	The 'System Behavior' panel provides access to the 'SysML Simulation Configuration Manager' view, where you can configure and manage SysML based simulations as well as access a pre-defined search to retrieve SysML configuration artifacts.

## Core Panel

The 'Core' panel brings together a number of tools for working with Behavioral Model simulations. It provides access to a range of windows that allow you to control a simulation, set up simulation triggers and signals, set breakpoints, inspect local variables or view the Call Stack. It also offers a number of pre-defined model searches for retrieving recently modified StateMachines and Activity Graphs.

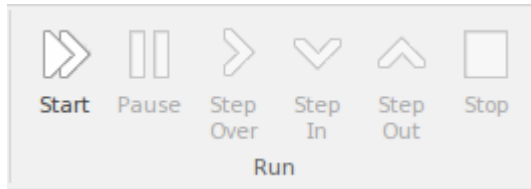


### Available Facilities

Facility	Description
Dynamic Simulation	<p>Click on this icon to display a short menu providing these options:</p> <ul style="list-style-type: none"> <li>Open Simulation Window - display the Simulator control window, from which you can manage, activate and control simulations</li> <li>Apply Simulator Layout - apply a workspace layout that contains the most commonly used simulator windows in a convenient arrangement</li> </ul> <p>You can also execute searches to find Activities, StateMachines, Interactions and other objects related to running simulations, or StateMachines and Activity Graphs that have been recently modified. You can specify the time period (number of days) from which to draw the results.</p>
Events	Click on this icon to open the Simulation Events window, to work with signals and triggers that are used as input to the currently active simulation.
Breakpoints	Click on this icon to display the Breakpoints window for the Simulator. Breakpoints can be set on model elements to halt simulation and inspect variables.
Local Variables	Click on this icon to display a list of Local Variables and their values from the current simulation. The simulation must be halted at a break point in order to display variables.
Call Stack	Click on this icon to display the Call Stack for the current simulation.

## Run Panel

The 'Run' panel provides a number of buttons to control execution of the active simulation.



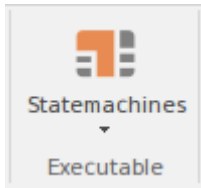
### Available Facilities

Facility	Description
Start	Begin or continue execution of the currently active simulation.
Pause	Pause execution of the current simulation
Step Over	Step over a transition or a control path that enters a different process or StateMachine space
Step In	Step into a sub-process in the current simulation
Step Out	Step out of a sub-process or sub-machine state and return to the parent process or StateMachine
Stop	Halt execution of the current simulation at the current execution point.

## Executable Panel

Executable StateMachines provide a powerful means of rapidly generating, executing and simulating complex State models. In contrast to dynamic simulation of State Charts using Enterprise Architect's Simulation engine, Executable StateMachines provide a complete language-specific implementation that can form the behavioral 'engine' for multiple software products on multiple platforms.

The 'Executable' panel provides a number of facilities for working with Executable StateMachines. You can access facilities to configure Analyzer Scripts that determine how code is generated, compiled and executed for the Executable StateMachine. There are commands for you to generate, build and execute the code that runs the simulation, as well as a facility to view the generated code in the built-in code editor.



### Available Facilities

Facility	Description
Statemachines	<p>Click on the drop-down arrow to display a list of options for working with Executable StateMachine Artifacts to configure, generate and run code-based simulations.</p> <ul style="list-style-type: none"> <li>• Generate, Build and Run - generate, build and run the current Executable StateMachine Artifact, according to the Analyzer Script configuration</li> <li>• Apply Perspective - apply the Perspective for Executable StateMachines to your modeling environment; the Model Wizard displays, presenting the Executable StateMachine Patterns</li> <li>• Generate - generate the current Executable StateMachine Artifact, according to the Analyzer Script configuration</li> <li>• Build - build the current Executable StateMachine Artifact, according to the Analyzer Script configuration</li> <li>• Run - start a simulation of the current Executable StateMachine Artifact, according to the Analyzer Script configuration</li> <li>• Find Executable StateMachines - run a pre-defined search to locate all Executable Statemachine Artifacts in the model</li> <li>• Analyzer Scripts - display the 'Execution Analyzer' dialog, where you can configure Analyzer Script options for the current Executable StateMachine Artifact</li> <li>• View Source - view the source code generated for the current Executable StateMachine Artifact</li> <li>• Help - display Help information about Executable StateMachines; this opens in your default web browser</li> </ul>

## Decision Analysis Panel

The 'Decision Analysis' panel helps you to perform simulations of models created under Enterprise Architect's implementation of the Decision Modeling and Notation (DMN) facility, developed by the Open Modeling Group. This facility enables you to open a DMN Simulation, set up DMN Expressions and locate and work from DMN Configuration Artifacts.



### Available Facilities

Facility	Description
Open DMN Simulation	Select this option to open the DMN Simulation window, through which you can create and edit DMNSimConfiguration Artifacts, run a DMN simulation and generate and test a DMN Server.
DMN Expression	Select this option to display the DMN Expression window. The content of this window depends on the DMN component you select in a diagram or the Project Browser. If you have not selected any component, the window is blank.
Apply Perspective	Select this option to apply the Perspective for DMN to your modeling environment. The Model Wizard displays, presenting the DMN Patterns.
Find DMN Configuration Artifacts	Select this option to immediately execute a search for DMNSimConfiguration Artifacts in the model. The results of the search are listed on the Find in Project window.

## Process Analysis Panel

The 'Process Analysis' panel provides access to the Configure BPSim window, and also a pre-defined search to retrieve BPSim configuration artifacts.



### Available Facilities

Facility	Description
BPSIM	<p>Click on the drop-down arrow to display a short menu providing these options:</p> <ul style="list-style-type: none"><li>• Open BPSim Manager - display the Configure BPSim window, through which you can configure, execute and analyze simulations of BPSim models</li><li>• Apply Perspective - apply the Perspective for BPSim to your modeling environment; the Model Wizard displays, presenting the BPSim Patterns</li><li>• Find BPSim Configuration Artifacts - open the Model Search window and load a pre-defined set of search parameters to find Business Process Simulation configuration Artifacts containing simulation parameters for executing BPMN 2.0 simulations</li></ul>

## System Behavior Panel

The 'System Behavior' panel provides access to the Configure SysML Simulation view, where you can configure and manage SysML based simulations as well as access a pre-defined search to retrieve SysML configuration artifacts.

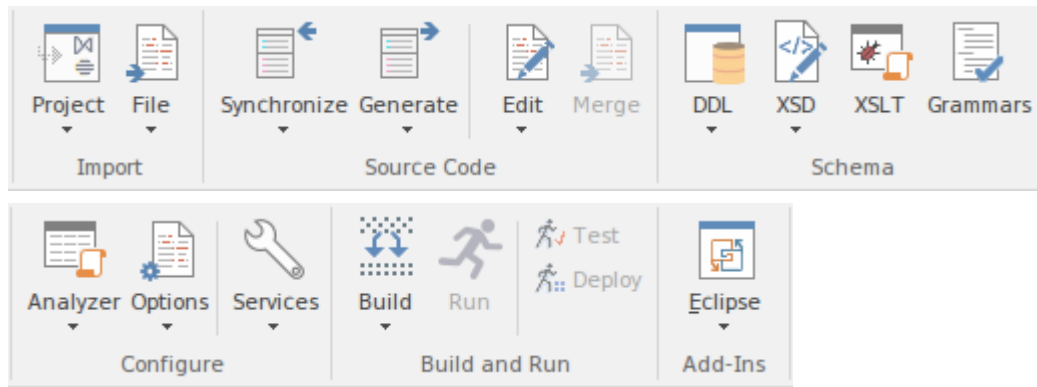


### Available Facilities

Facility	Description
Modelica	<p>Click on the drop-down arrow to access the SysML Simulation configuration and management view, or to access a pre-defined model search that retrieves SysML configuration Artifacts.</p> <ul style="list-style-type: none"><li>• SysMLSim Configuration Manager - display the Configure SysML Simulation view to build and run simulations using SysML and Open Modelica</li><li>• Apply Perspective - apply the Modelica Sim Perspective to your modeling environment; the Model Wizard displays, presenting the SysML 1.5 Patterns</li><li>• Find SysMLSim Configuration Artifacts - open the Model Search window and load a pre-defined set of search parameters to find SysMLSim configuration artifacts</li></ul>

## Code Ribbon

The 'Code' ribbon collects together all the tools for working with programming and database languages, including powerful tools to reverse engineer, forward engineer and synchronize code and models. A system can be designed from requirements down to visual models of the components and code elements, and then generated to programming or database code.



### Panels

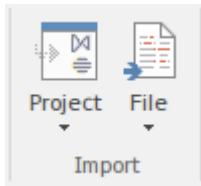
Panel	Description
Import	The 'Import' panel provides facilities for importing existing projects from other tools, to create or add to an Enterprise Architect project, and for importing code files in a range of programming languages into your model, creating new model elements that represent the classes in those files.
Source Code	The 'Source Code' panel brings together a number of facilities for working with source code. Here, you can generate source code from the model and synchronize the model from the source code. You can also edit and merge source code files.
Schema	From the 'Schema' panel, you can access facilities for importing XSD files, WSDL files and DB Schema, and for generating XSD and WSDL files from your model. You can also edit XSL Transformations, and edit and debug language grammars.
Configure	Within the powerful Execution Analyzer you can specify how the model is used to generate a built product, including how an application will be compiled, debugged and simulated. Source code files can be located and opened. The 'Services' icon provides options to start, stop and test Satellite and Agent services.
Build and Run	The 'Build and Run' Panel provides tools to create software products directly from models. The panel also provides commands to Run, Test and, Deploy an application.
Add-Ins	If any Integrated Development Environment applications such as Eclipse or Visual Studio have been installed on your system and made available through the MDG bridge technologies for the products, access icons would probably be assigned to the 'Add-Ins' panel of the 'Code' ribbon, as illustrated at the start of this topic.





# Import Panel

The 'Import' panel provides facilities for importing existing projects from other tools, to create or add to an Enterprise Architect project, and for importing code files in a range of programming languages.



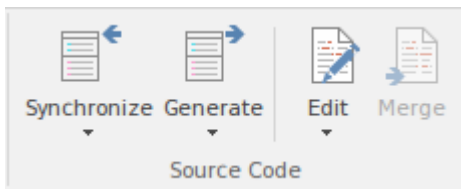
## Available Facilities

Facility	Description
Project	<p>Click on the drop-down arrow to display a list of options for importing project code from certain popular development products into the current project. For example:</p> <ul style="list-style-type: none"> <li>• Import a Visual Studio Solution</li> <li>• Import a Mono Solution</li> <li>• Import an Eclipse Project</li> <li>• Import a Netbeans Project</li> </ul> <p>Having imported the material, you can perform a comparison between the external project source code and the Enterprise Architect model to check for Class differences, using the 'Compare with Model' option, and you can refresh the Enterprise Architect model to update it with any changes to the source.</p>
File	<p>Click on the drop-down arrow to display a list of options for importing code files from a variety of sources, selecting from a range of popular coding languages.</p> <ul style="list-style-type: none"> <li>• Import Directory - display the 'Import Source Directory' dialog from which you import a complete directory tree in one pass; language and other options can be specified within the dialog</li> <li>• ActionScript Files - import ActionScript files into the current model</li> <li>• C Files - import C files into the current model</li> <li>• C# Files - import C# files into the current model</li> <li>• C++ Files - import C++ files into the current model</li> <li>• Delphi Files - import Delphi files into the current model</li> <li>• Java Files - import Java files into the current model</li> <li>• PHP Files - import PHP files into the current model</li> <li>• Python Files - import Python files into the current model</li> <li>• Visual Basic Files - import Visual Basic files into the current model</li> <li>• VB .Net Files - import VB.Net files into the current model</li> <li>• Binary File - import a binary file; supported file types are: Java JAR files and .NET PE or IL format (exe, dll)</li> <li>• Windows .RC File - import a Windows C/C++ .RC file into the model, as a series of screen definitions</li> </ul> <p>If you have developed model structures for any customized programming language, those languages are also included in the list.</p>



## Source Code Panel

The 'Source Code' panel brings together a number of facilities for working with source code. Here you can import existing source code files into your model, creating new model elements that represent the classes in those files. You can select a Class in your model, then click a button to open the code editor window and automatically load the source code file associated with that Class. Facilities for editing Code Generation Templates and Language Grammars are also accessed from this panel, as are the commands to generate source code from the model and synchronize the model from the source code.



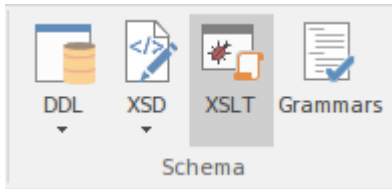
### Available Facilities

Facility	Description
Synchronize	Click on this icon to display options to synchronize the currently selected model elements with their associated source code files, or to synchronize the whole Package containing the selected elements.
Generate	<p>Click on this icon to display options to generate source code for:</p> <ul style="list-style-type: none"> <li>• The currently selected model element(s), or</li> <li>• A single element, with options, or</li> <li>• All elements in the current context</li> </ul> <p>Source code is generated into the file that is associated with each individual element. Code is generated only for elements that are of type Class or Interface.</p>
Edit	<p>This icon provides a collection of tools for viewing and editing source code files associated with elements in the current model. Also provided are tools that generate source code for a particular element or synchronize an element to reflect changes in its associated source code file.</p> <ul style="list-style-type: none"> <li>• Open Source File - display a 'File Chooser' dialog to browse for a source code file to open in the code editor window</li> <li>• Search in Files - display the 'Find in Files' window, to locate files of a selected type containing a specified code string</li> <li>• Edit Element Source - open the code editor window and load the source code file associated with the currently selected element</li> <li>• Browse Element Source - open a docked source code window and load the source code file associated with the currently selected element, for browsing through</li> <li>• Edit New Source File - create and populate a new source code file</li> <li>• Open in External Editor - launch the configured External Editor and load the source code file associated with the currently selected element</li> </ul>
Merge	This option is enabled when there is a user-defined Merge command defined in the currently active Analyzer script. Select it to execute the command and perform the

	defined operation.
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## Schema Panel

From the 'Schema' panel, you can access facilities for importing XSD files, WSDL files and DB Schema, and for generating XSD and WSDL files from your model.



### Available Facilities

Facility	Description
DDL	<p>Click on this icon to display a short menu providing access to tools used for designing, importing and creating data models.</p> <ul style="list-style-type: none"> <li>• Import a DB Schema - display the 'Import DB Schema' dialog, through which you can specify a database schema to import from a target DBMS</li> <li>• Export a Database Schema (DDL) - display the 'Generate DDL' dialog, from which you can export the current model selection as DDL script, targeting a particular DBMS</li> <li>• Edit the DB Schema (DDL) Templates - display the 'DDL Template Editor', in which you can edit the templates used to create DDL scripts for each DBMS</li> <li>• Open the Database Builder - display the Database Builder view, in which you can add, edit and manage database models, targeting a wide range of supported DBMS products</li> </ul>
XSD	<p>The XSD (XML Schema) icon provides access to a collection of tools for importing, exporting and viewing both XSD files and WSDL files.</p> <ul style="list-style-type: none"> <li>• Import an XML Schema (XSD) File - display the 'Import XML Schema' dialog for importing an XSD file to a model Package; choose a file to import and specify a range of options to apply when importing the file</li> <li>• Export an XML Schema (XSD) File - display the 'Generate XML Schema' dialog for generating the current Package to an XSD file; specify a path for the export file and specify a range of options to apply when exporting the Package</li> <li>• Edit an XML/XSD File - choose a file to be opened in the code editor window</li> <li>• Import a Web Services (WSDL) File - display the 'Import WSDL' dialog, where you can choose a file to import into the selected Package</li> <li>• Export a Web Services (WSDL) File - generate either a «WSDLnamespace» stereotyped Package or a «WSDL» stereotyped Component (Document) to WSDL files</li> <li>• Open the Schema Composer</li> </ul>
XSLT	Opens the XSLT Debugger, to debug an XSL Transformation.
Grammars	Display the Grammar Editor window, an advanced facility that allows you to view, add, edit and manage language grammars, used for importing source code.



## Configure Panel

The 'Configure' panel provides facilities for performing code analysis, structuring models of code and setting up VEA Satellite and Agent Services. The panel also provides access to tools such as the Debugger, Profiler, Execution Recorder and the Testpoints Window.

### Available Facilities

Facility	Description
Analyzer	<p>Click the drop-down arrow to access a menu of Analyzer tools.</p> <ul style="list-style-type: none"> <li>• Edit Analyzer Scripts - display the Execution Analyzer window, where you can create and manage scripts that define the build, run, test, deploy and simulate functions for the current Package</li> <li>• Edit Active Script - display the Execution Analyzer window to edit the currently-active Analyzer script</li> <li>• Show Testpoints Window - display the Analyzer Test Points window, to configure, execute and work with dynamic test suits and test cases</li> <li>• Find Test Suites and Test Sets - search the model for Test Suites and Test Sets</li> <li>• Open Debugger - display the Analyzer Debug window to facilitate debugging and testing of the current application</li> <li>• Open Profiler - display the Analyzer Profiler window, from which you can perform application performance profiling and execution inspection of the current application</li> <li>• Open Recorder - display the Analyzer Recording window, from which you can set recording points, record program execution and create diagrams based on recordings</li> <li>• Open Object Workbench - open a simple Object Testing window, from which you can make ad hoc calls on Object methods; available for Java and .NET objects</li> </ul>
Options	<p>Click on the drop-down arrow to display a list of options for managing templates, which determine the way source code is imported into and generated from your model.</p> <ul style="list-style-type: none"> <li>• Edit Code Templates - display the Code Template Editor window, where you can review and edit the templates used for generating source code from your model</li> <li>• Configure Local Paths - display the 'Local Paths' dialog, where you can set up and manage a list of Local Path definitions, used for path substitutions in collaborative environments</li> <li>• Set as Namespace Root - set the selected Package as the Namespace root, for code generation</li> <li>• Suppress Namespace - ignore the current subordinate Package when generating Namespaces and showing Package paths</li> <li>• Define Preprocessor Macros - manage a list of preprocessor macros that will be used when C and C++ code is imported into the model</li> <li>• Configure Code Engineering Datatypes - manage the list of Datatypes that are used in Code Engineering</li> </ul>
Services	These options enable you to control local supporting VEA services. Those services

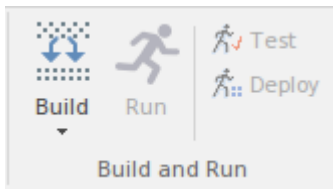


	<p>might run a native Linux program, for example, or build a project.</p> <ul style="list-style-type: none"><li>• Start the Satellite Service running</li><li>• Stop the Satellite Service running</li><li>• Test if the Satellite Service is running</li><li>• Start the Agent Service running</li><li>• Stop the Agent Service running</li><li>• Test if the Agent Service is running</li></ul>
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## Build and Run Panel

Enterprise Architect's Analyzer Scripts are used to define the behavior of various commands, such as Build, Run and Deploy, which are available in the Execution Analyzer. Any number of scripts can be defined in a model and each user can set their own active script, independent of other users of the same model. The active script governs the behavior of the Execution Analyzer's commands.

The 'Build and Run' panel provides facilities for executing Execution Analyzer commands such as Build, Run, Test and Deploy, so you can easily build, run and test a project's source code, all from the one place.

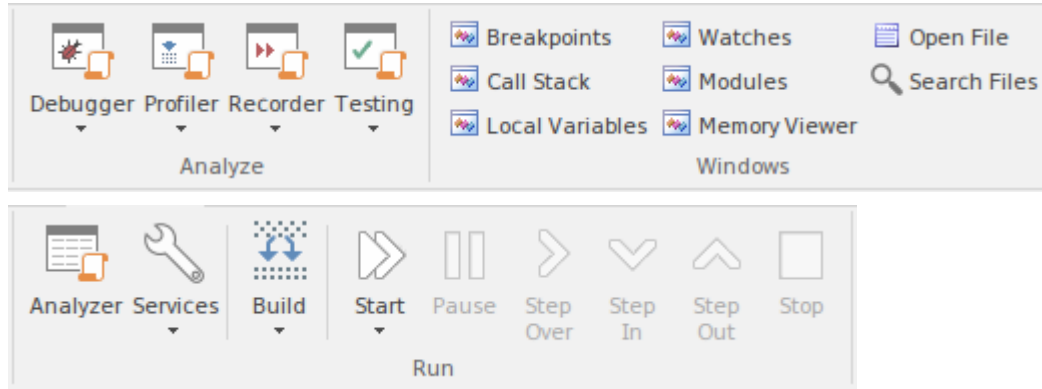


### Available Facilities

Facility	Description
Build	<p>Click the drop-down arrow to display a short menu of commands for building application source code</p> <ul style="list-style-type: none"><li>• Build - build the current application, according to the currently active Analyzer script</li><li>• Clean - run the Analyzer Clean command to delete intermediate files from the current application</li><li>• Rebuild - run the Analyzer Clean and Build commands as defined in the currently active Analyzer script</li><li>• Cancel Build - cancel the currently executing build</li></ul>
Run	<p>Execute the Analyzer 'Run' command defined by the currently active Analyzer script.</p>
Test	<p>Execute the Analyzer 'Test' command defined by the currently active Analyzer script.</p>
Deploy	<p>Execute the Analyzer 'Deploy' command defined by the currently active Analyzer script.</p>

## Execute Ribbon

The 'Execute' ribbon provides a comprehensive set of facilities for running units of code and analyzing how the code executes, checking system use and data use and whether there are errors. If there are errors in the code, you can isolate them and correct them, testing those corrections as well.

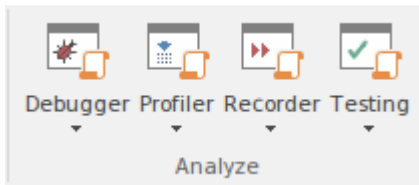


### Panels

Panel	Description
Analyze	The 'Analyze' panel brings together a collection of powerful tools for analyzing the execution of an application. The tools available are a fully featured Debugger, an execution Profiler and a stack trace Recorder. There are also facilities for running the application and recording Test Point output, for subsequent analysis.
Windows	The 'Windows' panel provides access to a suite of windows associated with the debugging process, each of which provides information on an aspect of the application being debugged, particularly at a breakpoint.
Run	The 'Run' panel provides a set of buttons for building and running an application that is being analyzed. The active Analyzer Script defines the behavior of the Analyze tools, by specifying the commands that are executed and the settings and parameters for those commands. After making modifications to the code base, you can simply click on 'Build', then click on buttons to begin execution of the updated application, pausing or stepping through code as required.

## Analyze Panel

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### Available Facilities

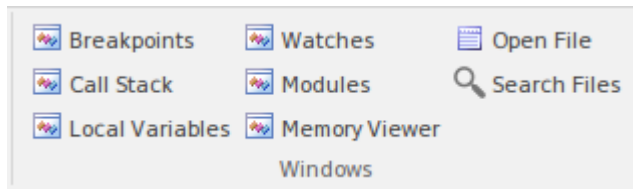
Facility	Description
Debugger	<p>Click on the drop-down arrow to display a list of options for starting and using the Debugger.</p> <ul style="list-style-type: none"> <li>• Open Debugger - open the Debug window; this window provides a toolbar for controlling Debugger operations such as run, step-into, step-over, pause and also displays debug output messages</li> <li>• Start Debugging - start the application, according to the debug options of the active analyzer script</li> <li>• Attach to Process - display a list of executing processes - select and attach to a process for debugging purposes</li> <li>• Apply Debug Layout - apply a workspace layout containing windows useful for debugging, set out in a convenient arrangement</li> <li>• Create Stack Diagram - create an Interaction diagram based on the current execution stack; available only when execution is halted at a breakpoint</li> <li>• Set as JIT Debugger - set Enterprise Architect as the default Just In Time debugger; for Windows systems only</li> <li>• Process First Chance Exceptions - enable processing of First Chance Exceptions</li> <li>• Switch to Profiler - switch dynamically from the Debugger to the Profiler, allowing performance monitoring and execution tracing</li> </ul>
Profiler	<p>The Profiler is used to record stack trace information for an application that is being analyzed, at pre-determined sampling intervals.</p> <p>Click on the drop-down arrow to display a list of commands for starting and working with the application Profiler.</p> <ul style="list-style-type: none"> <li>• Open Profiler - open the Profiler window; this window provides a toolbar for controlling Profiler operations and displays a summary of the collected sample data</li> <li>• Attach to Process - display a list of executing processes - select and attach to a process to enable execution profiling and activity monitoring of that process</li> <li>• Apply Profiler Layout - apply a workspace layout containing windows useful for application profiling, set out in a convenient arrangement</li> <li>• Start - reattach the Profiler to the last profiled application process (where available), <b>otherwise</b> start the application specified in the debug options of the</li> </ul>

	<p>active analyzer script and attach the Profiler to that application process</p> <ul style="list-style-type: none"> <li>• Resume - begin or resume collection of profiling data</li> <li>• Stop - detach the Profiler from the application process; the application process will continue to run - click on the Start button to re-attach to that process</li> <li>• Create Report from Current Data - create a detailed execution call graph and overall summary, showing functions called and number of times a function was active when the Profiler inspected execution</li> <li>• Load Report from File - load a profiler report from a saved file</li> <li>• Save Report to File - save the collected profile data to a file</li> <li>• Stop Process on Exit - an option to stop the application process when the Profiler is detached from that process</li> <li>• Show Debug Output - optionally show debug output as the Profiler executes</li> <li>• Discard Current Data - discard all collected sample data in preparation for a new run</li> <li>• Switch to Debugger - dynamically switch from Profiling to Debugging to allow finer grained inspection of application behavior</li> </ul>
Recorder	<p>The Recorder is used to record information about function calls made by an application that is being analyzed.</p> <p>Click on the drop-down arrow to display a list of commands for starting and working with the Recorder.</p> <ul style="list-style-type: none"> <li>• Open Recorder - open the Record &amp; Analyze window; this window provides a toolbar for controlling Recorder operations such as run (the application), manual record, auto record, stop recording and also displays the recorded function call information</li> <li>• Apply Recording Layout - apply a workspace layout optimized for use of the Recorder</li> <li>• Synchronize Model to Source Code - synchronize the source code of the current application with the model, to ensure correct recording and creation of diagrams</li> <li>• Attach to Process - attach the Recorder to an executing process</li> <li>• Start Recorder - start the application specified the debug options of the active analyzer script and attach the Recorder to that application process; recording will begin when execution hits a recording marker that has been set in the source code</li> <li>• Manual Record - use the manual record functions to start and stop recording while stepping through source code in the Debugger</li> <li>• Auto Record - automatically begin recording an execution trace, without manual intervention, once execution hits a recording marker that has been set in the source code</li> <li>• Step Thru - step through executing code while recording an execution trace</li> <li>• Stop Recording - stop recording the execution trace of the application process; the application process will continue to run</li> <li>• Save Recording to Model (Artifact) - save the recorded execution trace to a model artifact</li> <li>• Save Recording to File - save the recorded execution trace to a file in the local file system</li> <li>• Load Recording - load a recorded execution trace from a previously saved file</li> <li>• Clear Recording Data - discard any recorded execution trace in preparation for recording a new trace</li> <li>• Create Sequence Diagram - create a Sequence (Interaction) diagram from the</li> </ul>

	<p>current execution trace; requires that model and code are synchronized</p> <ul style="list-style-type: none"><li>• Create Call Graph - create a Call Graph from the current execution trace; requires that model and code are synchronized</li><li>• Create Class Diagram - create a Class diagram using the elements that are instantiated and accessed in the current recording</li><li>• Create Test Point Diagram - create a Test Point diagram and Test Sets based on the elements and their active members that were hit during the recorded session</li><li>• Show/Hide Execution Point - show or hide the current execution point during the recording process; hiding this results in a faster recording time</li></ul>
Testing	<p>Test Points are a scheme by which rules and constraints governing the behavior of objects can be taken from the model to create Test Cases to verify the application. Click on the drop-down arrow to display a list of options for working with Test Points and Test Cases.</p> <ul style="list-style-type: none"><li>• Show Testpoints Window - open the Test Points window to manage, configure and run Test Points and associated Test Cases, Sets and Suites</li><li>• Find Test Suites and Test Sets - search the current model for Test Suites, Test Sets and related elements used in managing Test Point based verification</li><li>• Open Object Workbench - open a simple Object testing environment for Java and .Net; instantiate objects and dynamically call their methods</li></ul>

# Windows Panel

The 'Windows' panel provides access to a suite of windows associated with the debugging process, each of which provides information on an aspect of the application being debugged, particularly at a breakpoint.

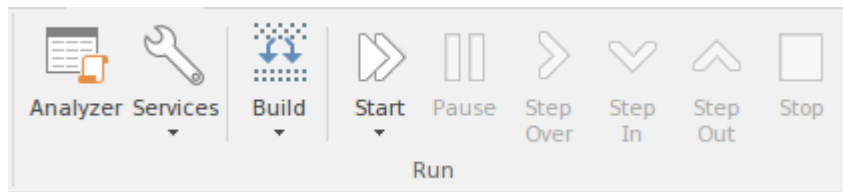


## Available Facilities

Facility	Description
Breakpoints	Click on this icon to open the Breakpoints & Markers window, which you use to manage and configure source code breakpoints and other markers.
Call Stack	Click on this icon to open the Call Stack window, which displays all the currently-running threads in a process, at a breakpoint.
Local Variables	Click on this icon to open the Locals window, which displays the local application variables at a breakpoint.
Watches	Click on this icon to open the Watches window, which lists the customer variables by name when the application is at a breakpoint.
Modules	Click on this icon to open the Modules window, which lists the modules an application has loaded and is using at run time.
Memory Viewer	Click on this icon to open the Memory Viewer window to view a piece of memory when the application is paused at a breakpoint.
Open File	Display a browser dialog from which you can select a file to be opened in the internal code editor.
Search Files	Open the Find in Files window to search the local file system for source files that contain particular text.

## Run Panel

The 'Run' panel provides a set of buttons for building and running an application that is being analyzed. After making modifications to the code base, you can simply click on 'Build', then click on buttons to begin execution of the updated application, pausing or stepping through code as required. The active Analyzer Script will determine the behavior of the debugger tools, by specifying the commands that are executed as well as the settings and parameters for those commands.



### Available Facilities

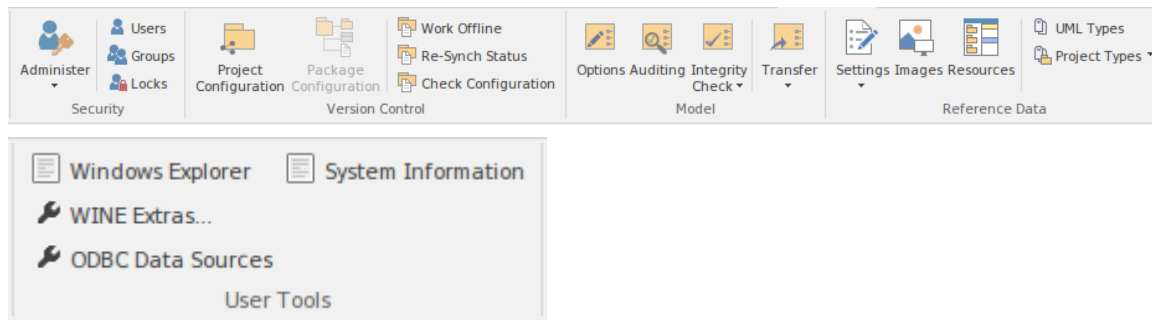
Facility	Description
Analyzer	Display the Execution Analyzer window, which lists - by Package - all Analyzer Scripts defined in the model. From this window, you can create, edit and manage scripts that specify the commands and parameters required to build, test, run, debug, deploy and simulate your applications. The window's toolbar buttons provide for control of script tasks such as build, run, test and deploy, and also provide access to a range of debugging facilities.
Services	<p>These options enable you to start, stop and test local supporting VEA services. Those services might run a native Linux program, for example, or build a project.</p> <ul style="list-style-type: none"> <li>• Start Satellite Service</li> <li>• Stop Satellite Service</li> <li>• Test Satellite Service Status</li> <li>• Start Agent Service</li> <li>• Stop Agent Service</li> <li>• Test Agent Service Status</li> </ul>
Build	<p>Click on the drop-down arrow to display a short menu of commands for building application source code:</p> <ul style="list-style-type: none"> <li>• Build - build the current application, according to the currently active Analyzer script</li> <li>• Clean - run the Analyzer Clean command to delete intermediate files from the current application</li> <li>• Rebuild - run the Analyzer Clean and Build commands as defined in the currently active Analyzer script</li> <li>• Cancel Build - cancel the currently executing build</li> </ul>
Start	<p>Click on the drop-down arrow to display a short menu of commands:</p> <ul style="list-style-type: none"> <li>• Run - resume execution of the application process that is currently being debugged - if no process is currently being debugged, then start the application specified in the debug options of the active analyzer script and attach the Debugger to that application process</li> <li>• Attach to Process - display a list of executing processes, select and attach to a</li> </ul>



	<p>process for the purpose of debugging</p> <ul style="list-style-type: none"><li>• Show Execution Point - display and highlight the line of source code that corresponds to the current execution point</li></ul>
Pause	Pause execution of the application being debugged.
Step Over	Execute the next line of source code, <b>without</b> pausing inside any methods called by that line. The execution point will move to the next source line in the current context.
Step In	Execute the next line of source code, stepping into any method that is called. Execution is paused <b>before</b> executing the first executable line in the called method. If source code for the called method is not available, the debugger will return immediately to the calling code.
Step Out	Automatically run to the end of the current context/method and return to the calling context. Execution will pause again, upon return to the calling context.
Stop	Terminate execution of the application being debugged.

## Configure Ribbon

The 'Configure' ribbon is used for managing the way a repository is used, from the setup of reference data, security and version control to audits and integrity checks. Enterprise Architect is a powerful and flexible platform and can be configured to suit any enterprise, business or technical team.



## Panels

Panel	Description
Security	The 'Security' panel collects together a set of facilities for using and managing security in the model. Security helps teams collaborate by allowing individuals to intentionally signal that they are working on a part of the model.
Version Control	The 'Version Control' panel is used for working with the powerful version control facility in the tool, allowing you to manage changes and versions of model content for individual Packages or the entire model. Version Control Configurations can be defined using the 'Project Configuration' or 'Package Configuration' options, and checked for all versioned Packages using the 'Check Configuration' option. There is a range of options to view the history of changes and to revert the model to a previous version if desired. There are also options to work offline and to compare the status reported by the model and the version control provider.
Model	The 'Model' panel provides facilities to configure options for the current model, to check and repair the integrity of the model database, to transfer project data from one database to another and to configure auditing settings for recording changes to the model database.
Reference Data	The 'Reference Data' panel is used to set up and manage the metadata for a model. Reference Data is typically created when the model is initiated, but some of this data such as Resources and Images will be added to as the model evolves. There is a wide range of options, from setting up auto naming counters for elements, creating Stereotypes, Tagged Value Types and Cardinalities, to setting up people, Status, Priority and much more. Resources store a wide range of additional model content such as Templates, Profiles, Patterns and Relationship Matrices. Images can be saved in the model and used to replace the conventional geometric representations with descriptive and compelling images that resonate with non-technical audiences.
User Tools	The 'User Tools' panel provides access to a series of external tools useful to you while working on the model. Windows Explorer can be useful when working with importing and exporting content from the model, including CSV files for exchange with a spreadsheet tool, XML Schema files, Database and Source code files and the

	generation of Documentation. Open Database Connectivity (ODBC) settings can be accessed to assist when working with live databases, and system information can be viewed.
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## Security Panel

When Security is enabled on a project, users are required to provide a User ID and password to login to that project. Project Security helps teams to collaborate by allowing individuals or groups to intentionally signal that they are working on specific parts of the model.



### Available Facilities

The 'Security' panel collects together a set of facilities for managing security in the model, such as enabling Project Security, specifying which security mode to use, defining the lists of authorized users and user groups, and assigning permissions to users and groups to grant access to various aspects of Enterprise Architect's functionality.

Facility	Description
Administer	<p>Click on the drop-down arrow to display a selection of commands for configuring security in the model.</p> <ul style="list-style-type: none"> <li>Require User Lock to Edit - enable pessimistic locking on the current project; in this mode, users must apply a personal lock to model elements and diagrams before any modifications can be made</li> <li>Apply Locks to Connectors - set a global lock on all connectors with a locked source element, so that those connectors cannot be deleted and their properties cannot be edited</li> <li>Manage My Locks - display a dialog that lists all locks applied by the current user; locks can be reviewed and also released using this dialog</li> <li>Login as Another User - log in to the Enterprise Architect project as another user</li> <li>User Settings - display a short menu of options to: <ul style="list-style-type: none"> <li>Change Password - display the 'Change Password' dialog for your own, currently logged in, user ID</li> <li>Set Avatar - assign an avatar image (in an Image Asset Artifact) to your user ID</li> <li>Show user avatars - display (or, if unselected, hide) all user avatars in Chat and Discussion entries, in your work sessions</li> <li>Set User Default Diagram - set the currently open, in-focus diagram as your default user diagram</li> <li>Set User Default Kanban - set the currently open, in-focus Kanban diagram as your default user Kanban diagram</li> </ul> </li> <li>Encrypt Password - provides legacy support for older models hosted on Oracle and SQL Server database systems; administrators can create an encrypted password that is distributed to modelers, thus avoiding the need to distribute the DB connection password</li> <li>Enable Security - toggle (either enable or disable) the state of Project Security for the current project; you are prompted to supply an Authorization Key before the security state is changed</li> </ul>
Users	This command displays the 'Security Users' dialog, where new users can be defined

	and permissions can be granted to those users. Users can be added to existing User Groups. The dialog also provides for import of user definitions from Windows Active Directory lists.
Groups	This command displays the 'Security Groups' dialog, where new User Groups can be created and users can be added to those groups. Permissions can be granted to User Groups using this dialog.
Locks	This command displays the 'Manage Locks' dialog. The dialog shows a list of all elements and diagrams within the model that have active locks. You can also filter to show only items with User Locks or Group Locks. The list of items can be sorted by lock type, item name, locking user, locking group, or the time of lock application. The dialog can be used to select some or all of the locked items, and then to unlock the selected items.

## Set User Avatar

When you are contributing to element discussions or Chats, your contributions are indicated by your user ID. You can also define an icon that represents your User ID - that is, an Avatar - to display in front of your ID, so that your statements can be more easily recognized in the conversation. This avatar is defined for your user ID within the model.

User security must be enabled in order to identify each user and hence display their avatars in the discussions.

If you do not want to show users' avatars in the discussions that you are reviewing, you can hide them.

### Define an Avatar

1. Create and/or locate a suitable image to use as your avatar.
2. In Enterprise Architect, drag the 'Image Asset' icon from the 'Artifact' page of the Diagram Toolbox onto a diagram.
3. The 'Select an Image' dialog automatically displays; browse for and select the image you have identified to use as your avatar.
4. Save the diagram.

### Assign the Avatar

1. Select the ribbon option 'Configure > Security > Administer > User Settings > Set Avatar'.
2. The 'Select image for avatar' dialog displays. Browse for and select the Image Asset Artifact you created earlier.
3. Click on the OK button. The image is associated with your user ID.
4. Open the Collaborate window ('Start > Collaborate > Discussions > Discuss') and create a discussion item, then click away from it. Your avatar should now display against the message you have created.

You can repeat the process with a different image if you decide to change your avatar.

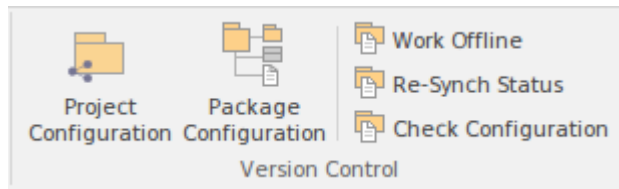
### Hide all avatars

If you do not want to show avatars in the Discussions or Chats in your own work sessions, deselect the 'Configure > Security > Administer > User Settings > Show user avatars' option.

To display avatars again, re-select the option.

## Version Control Panel

The 'Version Control' panel provides facilities for configuring and managing the powerful version control facility in the tool. Version Control Configurations can be defined using the 'Project Configuration' option and validated for all versioned Packages using the 'Check Configuration' option. There are options to work offline and also to compare the status recorded in the model against that reported by the version control provider.

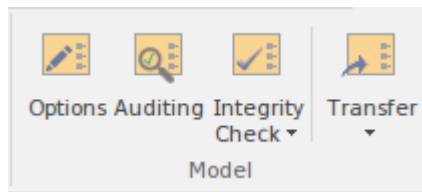


### Available Facilities

Facility	Description
Project Configuration	Displays the 'Version Control Settings' dialog, in which you can define new Version Control Configurations, or re-specify the Working Copy Folder of an existing Version Control Configuration.
Package Configuration	Configure a single Package for version control. Display the 'Package Control Options' dialog to specify the Version Control Configuration and the name of the file to use in controlling the selected Package.
Work Offline	Toggles version control in and out of 'Offline' mode. The 'Offline' mode allows modelers to work with version controlled Packages, even when there is no connection to the version control server. Packages can be 'checked-out' offline and modified, but can only be 'checked-in' once a connection to the version control server has been re-established.
Re-Synch Status	Query the version control server to retrieve the check-out status of the file associated with each of the version controlled Packages in the current project. Where it is necessary and appropriate to do so, the status of the Package is updated in the project database to match the status reported by the version control system. For example, if a Package is marked in the project database as checked-out to the current user, but the version control server reports the associated file as not checked-out, then the Package flags will be updated to show 'not checked-out'.
Check Configuration	This command scans all version controlled Packages within a project, checking the validity of the version control settings for each Package. The validation process scans the model database and verifies that the version control configuration associated with each version controlled Package is fully specified in the current model. It also queries the corresponding version control provider to find the status of the Package file associated with each version controlled Package. The results of the validation process are sent to the System Output window.

## Model Panel

The 'Model' panel provides facilities to configure options for the current model, to check and repair the integrity of the model database, to transfer project data from one database to another and to configure auditing settings for recording changes to the model database.



### Available Facilities

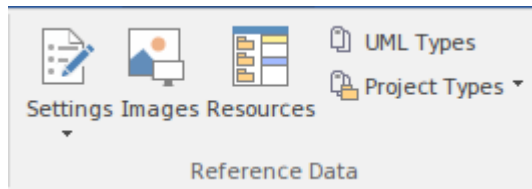
Facility	Description
Options	Displays the 'Manage Project Options' dialog, through which you configure options for the current model, including required and banned MDG Technologies, code generation and general options.
Auditing	Open the Audit View to configure and view audit management information for the current model.
Integrity Check	<p>Occurrences such as network crashes or failed XMI imports can sometimes compromise the integrity of information in the model database. Clicking on the 'Integrity Check' drop-down arrow displays a list of commands for addressing these kinds of issue and for general database maintenance.</p> <ul style="list-style-type: none"> <li>Project Integrity - displays the 'Project Integrity Check' dialog; used for examining database records to check for 'orphaned' records or inaccurate or unset identifiers</li> <li>Reset IDs - displays the 'Reset Auto Increment Columns' dialog; used to re-sequence Auto ID numbers, eliminating gaps that occur from repeated import/export of Packages, thereby avoiding the maximum value allowed by the database</li> <li>Project Compare - displays the 'Project Compare' dialog, with which you can compare one model database against another, at a table record level</li> <li>Run Patch - displays the 'Run Patch' dialog, which provides a means to run patches that could be provided by Sparx Systems, to update the database structure of the current model</li> <li>Manage .EAPX/.EAP File - clicking on this item displays a pop-up menu with these options: <ul style="list-style-type: none"> <li>Repair .EAPX/.EAP File - use this option to repair a .EAPX or .EAP file that has become damaged due to system or network outages</li> <li>Compact .EAPX/.EAP File - removes deleted records from the database tables</li> <li>Update .EAPX/.EAP File Indexes - updates the selected .EAPX or .EAP file to the latest set of indexes (schema 1220)</li> <li>Make Design Master - prepare a .EAPX/.EAP file for the creation of database replicas</li> </ul> </li> </ul>



	<ul style="list-style-type: none"><li>- Create New Replica - create database replicas from the Design Master file</li><li>- Synchronize Replicas - merge the changes made to each replica with the Design Master</li><li>- Remove Replication - remove from the database the additional information that is required for managing database replication</li><li>- Resolve Replication Conflicts - where two users have made conflicting changes to the model database, manually decide which change will override the other</li><li>• Manage Firebird<ul style="list-style-type: none"><li>- Update Index Statistics - optimize indexes on Firebird databases</li></ul></li></ul>
Transfer	<p>Clicking on the drop-down arrow displays a short menu of facilities for copying or sharing project data between one project and another.</p> <ul style="list-style-type: none"><li>• Project Transfer - display the 'Project Transfer' dialog; use this dialog to copy the tables and records of one project database to another</li><li>• Shared Repository - set up a shared repository for basic reference data to be shared between multiple implementation models</li><li>• Export Reference Data - display the 'Export Reference Data' dialog; used to select specific types of Reference Data, for export to an XML file</li><li>• Import Reference Data - display the 'Import Reference Data' dialog; used to import Reference Data from an XML file into the current model</li></ul>

## Reference Data Panel

The 'Reference Data' panel is used to set up and manage the metadata for a model. Reference data such as Resources and Images is generally added as the model evolves. A wide range of additional model content such as Templates, Profiles, Patterns and Relationship Matrices can be stored as Resources. Images can be saved in the model and used as alternatives to the conventional geometric representations of elements, to appeal to non-technical audiences.



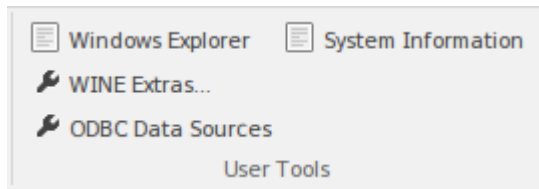
### Available Facilities

Facility	Description
Settings	<p>Click on the drop down arrow to display a menu of options for setting a wide range of project-level parameters.</p> <ul style="list-style-type: none"> <li>• Auto Names and Counters - set up and manage the use of automatic name generation</li> <li>• Namespace Roots - manage a list of Namespace roots for the current model; used mainly for code generation</li> <li>• Project Template Package - specify a Package that holds diagrams and elements that will be used as templates for all new elements</li> <li>• Preprocessor Macros - manage a list of preprocessor macros that will be used when C and C++ code is imported into the model</li> <li>• Code Engineering Datatypes - manage the list of Datatypes that are used in Code Engineering</li> <li>• Database Datatypes - manage the list of Datatypes that are used in Database Engineering</li> <li>• Colors - provides options to define and manage a set of standard colors for use in the current project               <ul style="list-style-type: none"> <li>- Get Project Custom Colors</li> <li>- Set Project Custom Colors</li> </ul> </li> </ul>
Images	<p>Click on this icon to display the 'Image Manager' dialog. The Image Manager provides facilities for storing images in the current model, that can then be used as alternatives to the standard geometric shapes normally used to represent elements on your model diagrams. Stored images can be previewed, renamed and updated using this facility.</p>
Resources	<p>Click on this icon to display the Resources window, from which you can manage a variety of custom resources, model Patterns, templates and technologies.</p>
UML Types	<p>Displays the 'UML Types' dialog, from which you can manage basic model information, such as Stereotypes, Tagged Value types and Cardinality settings.</p>
Project Types	<p>Provides a range of facilities for managing various Types of reference data used in a project.</p>

	<ul style="list-style-type: none"><li>• People - manage the list of people associated with the model, including authors, resources, roles and clients</li><li>• General Types - manage project factors, such as Status types, Constraints, Difficulty and Priority</li><li>• Project Indicators - configure indicators such as Metric, Risk and Effort types</li><li>• Maintenance - define and manage Test types</li><li>• Estimation Factors - set up and manage a list of estimation factors used for Use Case Estimation</li></ul>
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## User Tools Panel

The 'User Tools' panel provides access to external tools. A pre-defined selection of tools includes Windows Explorer, ODBC Data Sources and System Information. You can extend this list with any other tools of your choice.



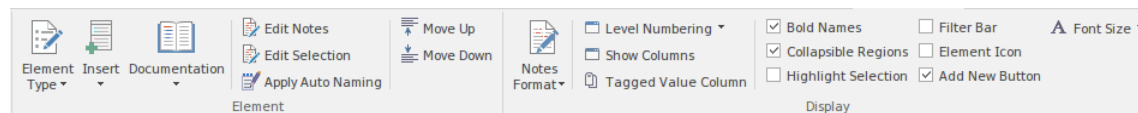
### Available Facilities

Which user tools appear in the list depends on what has been configured on your workstation. For example, you might add 'WINE Console' for the purpose of setting up Subversion clients for Enterprise Architect under WINE.

Facility	Description
Windows Explorer	Launches 'Windows Explorer'.
System Information	Displays System Information pertaining to your personal workstation.
ODBC Data Sources	Launches the 'ODBC Data Source Administrator' dialog, from which you can set up ODBC drivers for various DBMS, thereby enabling Enterprise Architect to connect to repositories hosted in that DBMS.

## Specification - Specify Ribbon

The 'Specification - Specify' ribbon provides a selection of facilities that you might use when creating and editing model elements as a text-based specification, using the Specification Manager. The ribbon becomes available when the Specification Manager is open.

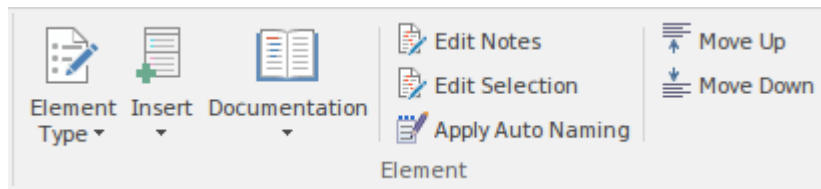


### Panels

Panel	Description
Element	The 'Element' panel offers a range of facilities for working with the elements that are displayed in the Specification Manager view. There are facilities for adding new elements and viewing and editing element properties.
Display	The 'Display' panel provides a range of options that make it possible to tailor the appearance of the Specification Manager view, to better display the information you want to examine. There are options providing visual cues, such as highlighting the selected element and using bold fonts to emphasize element names, as well as options to filter the list of elements that are displayed.

## Element Panel

The 'Element' panel brings together a range of facilities for working with the elements that are displayed in the Specification Manager view. There are facilities for adding new elements, and for viewing and editing the Properties of elements, as well as generating documentation in a number of formats.



### Available Facilities

Facility	Description
Element Type	<p>Click on the drop-down arrow to display a range of options for filtering the type of element created when you select to add a new element using the Specification Manager Add New button (not the drop-down arrow):</p> <ul style="list-style-type: none"> <li>• &lt;Any&gt; - when selected, and when you click on the Add New button, the 'New Element' dialog displays from which you select the type of element to create</li> <li>• Other - displays the full list of work sets from which you select a specific element to add to the list in the &lt;element types&gt; section of the drop-down</li> <li>• &lt;element types&gt; - a list of element types that you have selected to create, using the 'Other' option; click on one of these, and every time you click on the Add New button an element of that type is created, until you specifically select a different type</li> <li>• Clear Recent Items - clears the &lt;element types&gt; list; a prompt displays to confirm the operation, as it can be a lengthy job to reconstruct the list of selected element types Note that if you have a specific element type selected, that type is not cleared from the list; selecting the &lt;Any&gt; option allows you to clear the final element type from the list</li> <li>• Use Last Created Type - sets the type of element created to the type of the last-created element</li> <li>• Limit Display to Selected Type - filters the Specification Manager display to only show elements of the selected type</li> </ul>
Insert	<p>Click on the drop-down arrow to display a short menu of options for adding elements:</p> <ul style="list-style-type: none"> <li>• Add Default - add a new element of the default element type, which is the currently-selected type of those set using the 'Element Type &gt; Other' option. Alternatively, if no element type is selected, the 'New Element' dialog displays; use this to create an element, the type of which becomes the default type</li> <li>• Add Child - add a new element as a child of the currently selected element; if a default element type has been specified, an element of that type is created, otherwise the 'New Element' dialog is displayed, prompting you to choose a type</li> <li>• Repeat Previous - repeat the previous element insertion action, creating a new element of the same type, as a sibling to the previously inserted element</li> </ul>

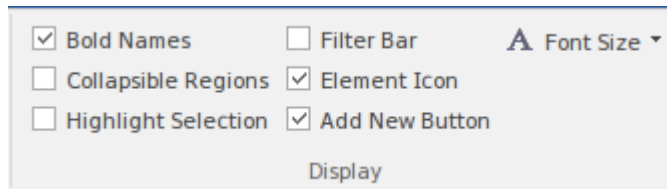
	<ul style="list-style-type: none"> <li>• Show Toolbox - open and display the Diagram Toolbox showing the Common, Artifact and other 'pinned' pages, or switch focus to the currently opened Toolbox; you can drag element icons from the Toolbox to create elements in the Specification Manager, switching to other Toolbox pages if necessary</li> <li>• Add Other - display the 'New Element' dialog, prompting you to choose an element type and create an element of that type</li> <li>• Add Multiple Elements - display the 'Create Multiple Elements' dialog, through which you can add several elements to the Specification Manager in one operation</li> </ul>
Documentation	<p>Clicking on the drop-down arrow displays a list of commands for generating documentation and reports based on the current Package, in a range of different formats. Also available is a facility for spell-checking the notes of elements belonging to the current Package.</p> <ul style="list-style-type: none"> <li>• Generate Documentation (RTF/PDF/DOCX) - displays the 'Generate Document' dialog, where you can specify a range of parameters and options that control generation of a report document; you can select document templates that control which elements are included in the report, choose from a range of cover pages and style sheets, and specify the file output path and file format</li> <li>• Publish as HTML - displays the 'Publish as HTML' dialog, from which you can create a report on the current Package for display as a web page; the dialog allows you to specify a range of parameters and options to control the report generation, such as style templates, diagram themes, image formats and the output file path name</li> <li>• Publish as Joomla! Article - opens the 'Publish as Joomla! Article' dialog; use this dialog to specify connection details for the Joomla! database, the content template and diagram theme to use, as well as which element information to include, then initiate the generation</li> <li>• CSV Import/Export - opens the 'CSV Import/Export' dialog from which you can import and export element data from Enterprise Architect, using CSV files for exchange with spreadsheet tools; the 'CSV Import/Export' dialog allows you to define file specifications that control which element properties are exported and imported, as well as specifying the actual file to use for the export or import</li> <li>• QA Reports and Metrics - open the QA Reports window, which provides a number of pages, each of which provides facilities for reporting on a particular aspect of the elements in the current Package, namely Testing, Maintenance, Dependency Details, Implementation Details and Use Case Metrics; each page provides a particular set of parameters and options to control that type of report generation</li> <li>• Spell Check Current Package - display the 'Spell Check' dialog, which is used to run the spell checker to review the notes of all elements within the current Package</li> </ul>
Edit Notes	<p>Click on this button to begin editing the element's Notes. If the Notes are hidden, or displayed in Preview mode, the Notes window will be used for editing, otherwise the Notes field or column within the Specification Manager will be used. With the element selected, the Space bar can be used as a keyboard shortcut to begin editing.</p>
Edit Selection	<p>Click on this button to begin editing the current element's Name. With the element selected, the Enter key can be used as a keyboard shortcut to begin editing.</p>
Apply Auto Naming	<p>Display the dialog 'Apply Auto Naming to Elements'. If you have set up auto-naming conventions for the names and/or Aliases of specific types of elements, you can apply those naming conventions to all of the elements of those</p>

	types in the currently selected Package, in one operation. The dialog groups by type those elements that have defined auto-naming conventions, and shows the effects of applying the conventions to the element names and/or Aliases. You can update the names of all the elements in the Package, or select only certain elements to update. The facility for configuring auto-naming conventions can be accessed via this dialog.
Move Up	Click on this button to move the selected element up in the Specification Manager list. The element's position is also reflected in the Project Browser.
Move Down	Click on this button to move the selected element down one place in the Specification Manager list. The element's position is also reflected in the Project Browser.



## Display Panel

The 'Display' panel provides a range of options that make it possible to tailor the appearance of the Specification Manager view, to better display the information you want to examine. There are options providing visual cues, such as highlighting the selected element and using bold fonts to emphasize element names, as well as options to filter the list of elements that is displayed.



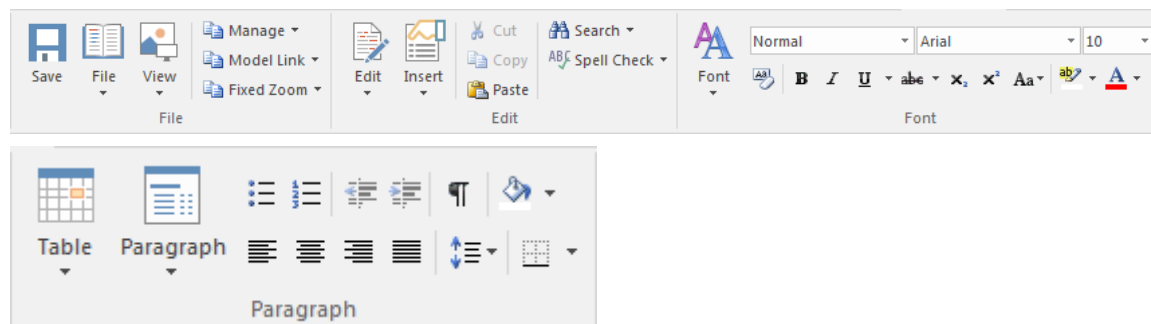
## Available Facilities

Facility	Description
Notes Format	<p>Click on the drop-down arrow, to a display a brief menu of commands for customizing the visibility and style of displayed element notes:</p> <ul style="list-style-type: none"> <li>Preview - show the Notes in Preview mode; this limits the Notes displayed to a maximum size and uses the Notes window for editing</li> <li>Full Notes Inlined - show the complete Notes text for each element underneath the element name; in this mode you can create, edit and delete Notes text in the Specification Manager and perform the same operations as are available in the Notes window context menu</li> <li>Full Notes in Column - show the complete Notes text for each element in a new column next to the element names; you have the same freedom to edit the text as for 'Full Notes Inline'</li> <li>Document View - columns are hidden and Notes are displayed inline; use the Enter key as a keyboard shortcut to begin editing.</li> <li>Hide - show no Notes at all; to edit or view the Notes, open the Properties window or docked Notes window</li> </ul>
Level Numbering	<p>Clicking the drop-down arrow displays options for applying level numbering and indenting notes for elements contained within the current Package.</p> <ul style="list-style-type: none"> <li>Enable - toggle the display of automatically applied level numbering within the Specification Manager and the Project Browser, for elements within the currently displayed Package</li> <li>Indent Description - if you have enabled level numbering, this option is available to indent the element description under each element name, to align with the element name</li> </ul>
Show Columns	<p>The Specification Manager can display a wide range of properties for the elements in the selected Specification Package, with each property being shown in a separate column. This command opens the 'Field Chooser' dialog, allowing you to customize the display of the columns so that you show as many or as few as you need, in an appropriate sequence.</p>
Tagged Value Column	<p>Display the 'Add Tag Value Column' dialog. This dialog allows you to add a specific Tagged Value to the list of columns displayed by the Specification</p>

	Manager. If the current element already has the named Tagged Value, the value can be edited, otherwise the Tagged Value must first be added to that element.
Bold Names	<p>Use this option to turn on or off, the use of Bold element names in the Specification Manager view.</p> <p>When on, all element names, including the names of child elements, are displayed using bold font.</p>
Collapsible Regions	<p>Use this option to enable the use of Expansion boxes on parent elements.</p> <p>If an element has child elements, you can configure the Specification Manager to either:</p> <ul style="list-style-type: none"> <li>• Hide the child elements but provide an expansion box that you can click on to open and collapse the element hierarchy (select the 'Collapsible Regions' option), or</li> <li>• Automatically display the child elements indented underneath the parent element (deselect the 'Collapsible Regions' option)</li> </ul>
Highlight Selection	<p>Use this option to actively highlight the currently selected row. When you click on an element name or property, the Specification Manager defaults to indicating the selection with side bars and/or underlines. You can, if you prefer, also highlight the entire row of data for the element, by selecting the 'Highlight Selected Row' option. This is only relevant when columns are visible.</p>
Filter Bar	<p>Use this option to show or hide the Filter Bar, which allows filtering of the visible items in the Specification Manager view.</p> <p>The Filter Bar displays underneath the column headings and consists of a row of fields, one field per column. As you type a value into one of these filter fields, element rows in the Specification Manager list are hidden unless the value in the corresponding column contains the value in the filter field.</p>
Element Icon	<p>This option defaults to selected, to display an element icon in front of each element name in the Specification Manager. The icon is a pictorial representation of the element type, and matches the element type icon shown against the element in the Project Browser. Deselect the checkbox to hide the element icons.</p>
Add New Button	<p>This option defaults to selected, to display the Add New button and its associated drop-down menu at the bottom of the Specification Manager display. Deselect the option to hide the button.</p>
Font Size	<p>Across the Specification Manager view, the various display components such as parent element names, child element names, Notes/property values and column headings each have their own font size. You can select to increase or decrease the font sizes as a set across the display, relative to the current sizes.</p> <p>Specify the default font size based on preference:</p> <ul style="list-style-type: none"> <li>• Small</li> <li>• Medium</li> <li>• Large</li> </ul>

## Document Edit Ribbon

The Document Edit ribbon provides a set of tools and facilities for working with documents such as imported document files and linked documents. It becomes available when you open an editable document within Enterprise Architect.

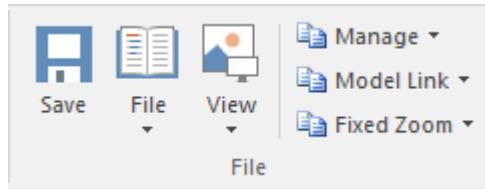


### Panels

Panel	Description
File	The 'File' panel helps you to manage internal document files, the way the content displays, file security and objects you can add to the content (such as hyperlinks).
Edit	The 'Edit' panel provides a wide range of facilities for manipulating and checking the text within a document, and searching the content for specific text strings.
Font	The 'Font' panel helps you to completely control the Fonts in a document, including setting Bold, Italics and font types and size. The color of text and background can be altered to create visually attractive documents.
Paragraph	The 'Paragraph' panel helps you to format all aspects of paragraphs in a document including left, right and center alignment and justification. Text indentation, bullets and numbered lists can be added to create well formatted documents. Line spacing, document styles and table borders can be set to facilitate reading.

## File Panel

The 'File' panel helps you to manage internal document files, the way the content displays, file security and objects you can add to the content (such as hyperlinks).



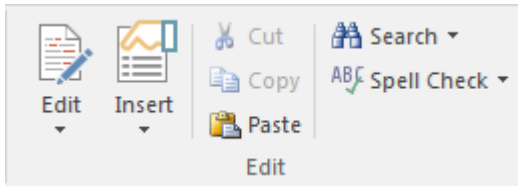
### Available Facilities

Facility	Description
Save	Click on this icon to save any changes you have made to the document file. (The icon is not available if no changes are pending).
File	<p>Click on the drop-down arrow and select from a number of options for manipulating the file contents as a whole.</p> <ul style="list-style-type: none"> <li>• Import File - import the contents of an existing document into the current file</li> <li>• Save As (Export to File) - save your document to a different document file</li> <li>• New (Clear Document) - clear the current contents of the document for redesign</li> <li>• Reload from Repository - reload the file contents from the previously-saved version</li> <li>• Page Layout - display the 'Page Setup' dialog and set the page margins for the file</li> <li>• Printer Setup - display the 'Print Setup' dialog and confirm or reselect the core parameters such as page size, or click on the Properties button to define more advanced settings</li> <li>• Print - display the 'Print' dialog to define the print job for the document</li> <li>• Print Preview - display the document as it would appear when printed</li> </ul>
View	<p>Click on the drop-down arrow to display options for displaying the document content on the screen.</p> <ul style="list-style-type: none"> <li>• Page Layout Mode - toggle the text display between page layout and window layout</li> <li>• Borderless Mode - toggle between the setting of the 'Page Layout Mode' option and a full-screen view of the document with no margins</li> <li>• Horizontal Ruler - display or hide the ruler at the top of the page, showing tab stops and paragraph indentation marks</li> <li>• Vertical Ruler - display or hide the ruler against the left edge of the page, indicating the depth of the top and bottom margins of the page</li> <li>• Status Ribbon - display or hide the status ribbon at the bottom of the editing panel, showing the current page number, line number and column number</li> <li>• Hidden Text - show text marked as 'Hidden' using the 'Font   Hidden Text' option</li> <li>• Field Names - toggle between displaying field names in the text and displaying</li> </ul>

	<p>the field values</p> <ul style="list-style-type: none"> <li>• Hyperlink Cursor - toggle the cursor icon when you 'mouse over' a hyperlink, between the default image (a line or arrow) and a pointing hand</li> <li>• Page Header/Footer - display or hide the text of page headers and footers</li> </ul>
Manage	<p>Click on this icon to select from a set of options for protecting the document from being edited or deleted, so that it is safe from accidental change. The Document Editor defaults to locking against protection, so you first turn off the lock and then protect either the whole document or a selected block of text.</p> <ul style="list-style-type: none"> <li>• Protect Document - toggle between setting a lock to prevent any editing or deletion of the entire document, and removing protection so that changes can be made</li> <li>• Text Selection Lock - remove the lock against setting protection on the text of the document</li> <li>• Snap to Grid - (defaults to on) applies a grid to the tab markers and paragraph indents, so that they snap to the nearest sixteenth of an inch</li> <li>• Watermark Picture - display an image file browser and select an image to use as a watermark in the document</li> <li>• Remove Unused Lists - clear unused list formats from the file when you save it, to reduce file size</li> </ul>
Model Link	<p>Click on this icon to select from options to create a link between a text string that you highlight in the document and a new or existing object in the model.</p> <ul style="list-style-type: none"> <li>• Glossary Definition - display the 'Glossary Detail' dialog, to create a Project Glossary entry for the highlighted text string</li> <li>• New Model Element - display a short list of types of object to create (or select the 'Other' option to access a wider range of object types) to generate an object of that type from the highlighted text string, in the current Package; the object is linked to the highlighted text in the document</li> <li>• Link to Existing Element - display the 'Select Classifier' dialog, through which you browse for and select an element to link to a highlighted text string</li> <li>• Hyperlink - create a hyperlink from the highlighted text to an existing object in the model; the 'Hyperlink Details' dialog displays, through which you specify the type of object to link to, and its location</li> </ul>
Fixed Zoom	<p>Click on this icon to display a list of page magnification options between 75% and 200%, and an option to set a custom magnification of the page anywhere between 10% and 500%.</p>

## Edit Panel

The 'Edit' panel provides a wide range of facilities for manipulating and checking the text within a document, and searching the content for specific text strings.



### Available Facilities

Edit	<p>Click on this icon to display and select from a list of editing operations you can perform within your document. This list includes facilities for tracking changes, setting the direction of text flow, and setting up list overrides.</p> <ul style="list-style-type: none"> <li>• Cut - remove a highlighted text string and hold it in the clipboard</li> <li>• Copy - copy a highlighted text string and hold it in the clipboard</li> <li>• Paste - paste a text string from the clipboard into the document at the cursor position</li> <li>• Paste Special - paste a specially-formatted object from the clipboard into the document, such as formatted text or an OLE object</li> <li>• Edit Picture - open the appropriate graphics editor for the selected image, to edit the image</li> <li>• Undo - roll back the last unsaved change made; you can undo a succession of unsaved changes</li> <li>• Redo - re-establish the last unsaved change that has been undone; you can redo a succession of undone changes</li> <li>• Select All - highlight the text of the whole document for performing an operation on it</li> <li>• Repaginate - repaginate the document, and update the 'Page Number' and 'Page Count' fields and the Table of Contents</li> <li>• Edit Section - display the 'Section Parameters' dialog, on which you set up the document properties to apply to the text between two section breaks</li> <li>• Edit Style - display the 'Edit Stylesheet' dialog, through which you create and edit styles to apply to either paragraphs of text or characters</li> <li>• Edit Input Field - display the 'Input Field Parameters' dialog, through which you create or edit a field at the cursor position in the document, for the document users to enter data in</li> <li>• Edit Frame/Drawing Object - display a short list of options for editing or re-positioning a frame or drawing object, including setting the direction of text flow within the object</li> <li>• List and Overrides - display a list of options for setting up paragraph numbering list items, overrides and levels</li> <li>• Page Header/Footer - display a hierarchy of menus for creating, editing and deleting the page headers and footers of the document</li> <li>• Edit Footnote/Endnote - select to add or edit either an end-note or the footnotes of the current page</li> </ul>

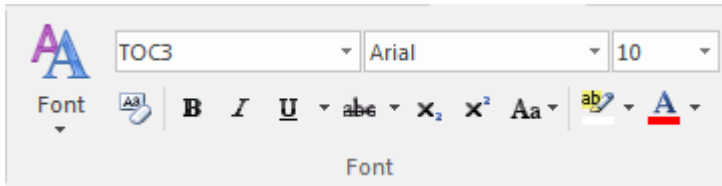
	<ul style="list-style-type: none"> <li>• Track Changes - display a menu of options for enabling and using Change Tracking in the document</li> <li>• Apply Comment - create a comment of the selected text, which displays in the outside page margin</li> <li>• Edit OLE Object - open the appropriate editor to edit the embedded OLE object</li> <li>• Inline IME - set the document to accept both single-byte characters and double-byte characters, without having to switch to an external Input Method Editor (IME) application (double-byte characters are complex characters used in languages such as Japanese and Cyrillic)</li> <li>• Document Text Flow - display the 'Document Text Flow' dialog, on which you set the text flow for the whole document to left-to-right, right-to-left, or the default for the system</li> </ul>
Insert	<p>Click on this icon to display and select from a list of text breaks, objects, special text structures and special characters to insert in the document at the cursor position.</p> <ul style="list-style-type: none"> <li>• Insert Break - display a short menu from which you select to insert a page break, section break or column break</li> <li>• Embed Picture - insert an image file as a picture in the document</li> <li>• Link Picture - insert a link to an image file in the document</li> <li>• OLE Object - display the 'Insert Object' dialog, from which you can select the appropriate application to create the OLE object in the document</li> <li>• Insert RTF File - insert the complete contents of another document file</li> <li>• Frame - inserts a small frame at the cursor position, which you can then drag to the appropriate size</li> <li>• Drawing Object - display the 'Select Drawing Object' dialog and select to insert a text box, rectangle or line, which you can then drag to the appropriate size</li> <li>• Page Number - insert a page number field at the cursor position</li> <li>• Page Count - insert a page count field at the cursor position</li> <li>• Date and Time - display the 'Insert Current Date and Time' dialog, which you use to create data and/or time fields in the page layout, in one of a selection of formats</li> <li>• Footnote/Endnote - select to insert a footnote or an endnote linked to a marker in the text; a dialog displays in which you enter the marker character and the note text</li> <li>• Bookmark - display the 'Bookmark' dialog, which you can use to create, locate and delete bookmarks in your document</li> <li>• Table of Contents - display a short dialog in which you define the highest and lowest heading levels to reflect in the Table of Contents (you must define the appropriate Table of Contents level styles before doing this); when you click on the OK button, the Table of Contents generates</li> <li>• Data Field - display the 'Data Field Parameters' dialog, in which you enter the field name and the data value of your own data field to insert in the document</li> <li>• Text Input Field - display the 'Input Field Parameters' dialog, in which you enter the field name and characteristics of a field in which the document users can enter their own information</li> <li>• Checkbox Field - display the 'Checkbox Field Parameters' dialog, in which you define a checkbox that the document users can select or clear</li> <li>• Selection Field - display the 'Selection Field Parameters' dialog in which you define a drop-down list field for which the document users can select one of a set of values to display</li> </ul>

	<ul style="list-style-type: none"> <li>• Hyperlink - display the 'Insert Hyperlink' dialog, on which you enter the hyperlink text and the identifier for the object being linked to, either within the model or external to it</li> <li>• Non-breaking Space - insert a non-breaking space at the cursor position, so that if the document text flows to a new page at that point, the words linked by the space are kept together</li> <li>• Non-breaking Dash - insert a non-breaking dash at the cursor position, so that if the document text flows to a new page at that point, the words linked by the dash are kept together</li> <li>• Optional Hyphen - insert a hyphen at the cursor position</li> </ul>
Cut	Click on this option to remove a highlighted text string and hold it in the clipboard.
Copy	Click on this option to copy a highlighted text string and hold it in the clipboard.
Paste	Click on this option to paste a text string from the clipboard into the document at the cursor position.
Search	<p>Click on this icon to display a short menu of options for locating a text string in the document.</p> <ul style="list-style-type: none"> <li>• Search - open the 'Search Text' dialog, to specify the text string to locate and the initial search parameters</li> <li>• Search Forward - continue the search forwards towards the end of the document, to the next occurrence of the defined text string</li> <li>• Search Backward - continue the search back towards the start of the document, to the next occurrence of the defined text string</li> <li>• Replace - open the 'Replace Text' dialog to search for a text string and replace it with another, in selected text or throughout the document</li> <li>• Go to Line - display a short dialog in which you specify the number of a line in the document to 'jump' the cursor to</li> </ul>
Spell Check	<p>Click on this icon to display a set of simple options for checking the spelling in the document.</p> <ul style="list-style-type: none"> <li>• Spell Check - start a spell check on the document, and respond to all apparent spelling errors</li> <li>• Auto Spell Checking - set the system to automatically check all existing text and new text as it is typed or imported into the document, underlining apparent errors in red</li> <li>• Thesaurus - display the 'Thesaurus' dialog in which you can check for alternative or opposite terms for the selected text string</li> <li>• Spelling Options - display the 'Spelling Options' dialog, on which you identify the text features to include or ignore in the check, the language dictionary to apply, what speed and accuracy of check to accept</li> </ul>



## Font Panel











The 'Font' panel helps you to completely control the Fonts in a document, including setting Bold, Italics and font types and size. You can alter the color of the text and highlighting to create visually compelling documents.



### Available Facilities

For many of these facilities, you can either select an icon from the panel or an equivalent option from the 'Font' drop-down menu.

Font	<p>Click on this icon to display a list of options for changing the appearance of a selected string of characters. These options include:</p> <ul style="list-style-type: none"> <li>• Normal - return changed text to the Normal, unformatted style</li> <li>• Bold - display and print the selected text in bold</li> <li>• Underline - underline the selected text with a single line</li> <li>• Double Underline - underline the selected text with a double line</li> <li>• Italic - italicize the selected text</li> <li>• Subscript - make the selected text a subscript</li> <li>• Strike - run a single line through the selected text</li> <li>• Double Strike - run a double line through the selected text</li> <li>• All Caps - change all selected characters to upper case</li> <li>• Small Caps - change all selected characters to small capitals</li> <li>• Fonts - display the 'Font Selection' dialog, from which you select the typeface and point size to apply to the selected characters</li> <li>• Style - display the 'Select a Style' dialog, from which you select a defined style to apply to the selected characters</li> <li>• Spacing - display the 'Character Spacing' dialog, on which you select to expand or compress the spacing between characters to a number of Twips that you define, or return the spacing to Normal</li> <li>• Horizontal Scaling - display the 'Horizontal Character Scaling' dialog, on which you set the width of the selected characters to less than or greater than 100%</li> <li>• Hidden - hide the selected text and close up the remaining text; you can reveal the hidden text using the 'View &gt; Hidden Text' option on the 'File' panel</li> <li>• Boxed - place a simple rectangular frame around the selected text</li> <li>• Protect - prevent any changes to the selected text; available if the 'Manage &gt; Protection Lock' option is deselected on the 'File' panel</li> <li>• Hyperlink - make the selected text into a hyperlink</li> </ul>
<style> field	<p>Click on the drop-down arrow and click on the text style to apply to the selected text.</p>

<typeface> field	Click on the drop-down arrow and click on the name of the typeface to apply to the selected text.
<point size> field	Click on the drop-down arrow and click on the point size to apply to the selected text. You can also type a point size into the field.
Clear Formatting 	Click on this icon to clear any formatting you have applied to the selected text using the other facilities of the 'Font' panel.
Bold 	Toggle the selected text between bold and normal type.
Italic 	Toggle the selected text between italics and normal type.
Underline 	Click on the icon to underline the selected text with a single line, or to remove the underline. Click on the drop-down arrow and select: <ul style="list-style-type: none"> <li>Double Underline - underline the selected text with two lines, or to remove the double underline</li> <li>Underline Color - display a color palette from which you can select a color for the <i>existing</i> underlines, or define a color not presented in the palette</li> </ul>
Strikethrough 	Click on the icon to put a single strike-through line across the selected text, or to remove the line. Click on the drop-down arrow and select the 'Double Strikethrough' option to do the same with a double line through the text.
Subscript 	Click on this icon to toggle the selected text between a subscript (below the level of the adjacent text) and normal.
Superscript 	Click on this icon to toggle the selected text between a superscript (above the level of the adjacent text) and normal.
Character Case 	Click on the drop-down arrow and select an option for changing the case of the selected text: <ul style="list-style-type: none"> <li>lowercase - convert all characters of the selected text to lower case</li> <li>UPPER CASE - convert all characters of the selected text to upper case</li> </ul>
Highlight Text 	Click on the drop-down arrow to display the 'Color Palette', and select or define a color to show behind the selected text as a highlight.
Text Color 	Click on the drop-down arrow to display the 'Color Palette', and select or define a color in which to display the selected text.

## Paragraph Panel

The 'Paragraph' panel helps you to format all aspects of paragraphs in a document including left, right and center alignment and justification. Text indentation, bullets and numbered lists can be added to create well formatted documents. Line spacing, document styles and table borders can be set to facilitate reading the text.
















### Available Facilities

For many of these facilities, you can either select an icon from the panel or an equivalent option from the 'Paragraph' drop-down menu.

Table	<p>Click on this icon to display a list of facilities for setting up and formatting a table in your document. For options that apply to cells, you can apply the settings to the whole table, just the selected cells, just the column(s) containing the selected cells, or just the rows(s) containing the selected cells.</p> <ul style="list-style-type: none"> <li>• Insert Table - display the 'New Table' dialog and specify how many rows and columns to create; the table defaults to showing the gridlines</li> <li>• Insert Row - add a row above the current row, with the same row properties</li> <li>• Insert Column - add a column to the left of the current column, with the same column properties</li> <li>• Merge Cells - merge the selected cells into one cell, across or down the table, or both</li> <li>• Split Cell Horizontally - split the selected cell into two columns within the row</li> <li>• Split Cell Vertically - split the selected cell into two rows within the column</li> <li>• Delete Cells - display the 'Delete Table Cells' dialog, in which you specify whether to delete just the selected cells, the rows containing the selected cells, or the columns containing the selected cells</li> <li>• Row Position - display the 'Table Row Alignment' dialog, in which you align the row borders with the left margin, the page center or the right margin, either just for the selected row or for the whole table</li> <li>• Row Height - display the 'Row Height' dialog, in which you set the row height to automatically adjust to the row contents, or to only adjust above a minimum height or to always be an exact height (which you specify, in Twips), for just the selected row or for all rows in the table; content that exceeds a fixed row height is not visible in the table</li> <li>• Header Row - set the first row of the table as a header row, which will be duplicated at the top of each section of the table flowing onto a new page</li> <li>• Keep Row Together - set the selected rows to stay together if the table would be split by an automatic page break at those rows</li> <li>• Row Text Flow - display the 'Table Text Flow' dialog, on which you specify whether the text should flow left-to-right or right-to-left, or the direction of the system default; you can apply the setting to selected rows or to the whole table, and the rows are aligned with the left or right margins of the page to match the text flow</li> </ul>

	<ul style="list-style-type: none"> <li>• Cell Width - display the 'Set Cell Width' dialog, on which you specify the width of the selected cells and the indent of text within the cells, in Twips</li> <li>• Cell Border Width - display the 'Set Cell Border' dialog on which you set the width of the lines at any or all of the top, bottom, left and right of the selected cells, with the border around either the selected cells as a block or around each individual cell</li> <li>• Cell Border Color - display the 'Set Cell Border Color' dialog, on which you select one color for all the lines of the cell borders or a color for each or any of the border lines, clicking on the border-name button to select the color to apply</li> <li>• Cell Shading - display the 'Cell Shading' dialog, on which you select a shading of the background of the selected cells, from 0% (no shading) darkening to 100% (black)</li> <li>• Cell Color - display the 'Cell Color Selection' dialog, on which you click on the Set Color button and on a background color for the selected cells</li> <li>• Cell Vertical Align - display the 'Cell Vertical Alignment' dialog, on which you align the text in the cells to the top, center or bottom of the cell, or the baseline of the lowest top line of text (if you have applied special formatting to a cell within the selection)</li> <li>• Cell Rotate Text - display the 'Cell Text Rotation' dialog, in which you set the text to display horizontally (as normal), rotated by 90 degrees anticlockwise to flow from the bottom of the cell to the top and left to right, or rotated by 90 degrees clockwise to flow from the top of the cell to the bottom and right to left; this is especially useful when the cells are in the outside columns and act as labels for the content of the body of the table</li> <li>• Select Current Column - select the whole column containing the currently-active cell</li> <li>• Show Gridlines - display or hide the pale blue table and cell borders on the screen, so that you can visualize the layout of the table; the grid is not printable - if you intend to print the table, you must define the borders as having at least minimum width</li> </ul>
Paragraph	<p>Click on this icon to display a list of facilities for formatting the selected paragraphs of text in your document.</p> <ul style="list-style-type: none"> <li>• Normal - align the text so that new lines begin parallel with the left margin of the page and flow to the right</li> <li>• Center - align the text so that new lines begin at the center of the page and flow equally towards the left and right margins of the page</li> <li>• Right Justify - align the text so that new lines begin parallel with the right margin of the page and flow to the left</li> <li>• Justify Both - align the text so that lines begin and end parallel with the left and right margins respectively</li> <li>• Double Space - separate the lines within the selected paragraph with double line spacing</li> <li>• Indent Left - indent the selected paragraph one tab space in from the left margin; each selection indents the text one more tab space</li> <li>• Indent Right - indent the selected paragraph one tab space in from the right margin; each selection indents the text one more tab space</li> <li>• Hanging Indent - indent the paragraph except for the first line one tab space</li> <li>• Keep Together - if there is a possibility that the selected text will be split by a page break, set the text to be moved to the top of the next page as a single unit</li> <li>• Keep With Next - if there is a possibility that the selected paragraph will be separated from the next by a page break, set the paragraph to move onto the same page as the next paragraph</li> </ul>

	<ul style="list-style-type: none"> <li>• Widow/Orphan Control - prevent the first and last lines of the selected paragraph from being separated from the rest of the text by a page break; at least one other line will stay with or move with the separated text</li> <li>• Page Break Before - set the selected paragraph to print at the top of a new page</li> <li>• Border and Shading - display the 'Paragraph Box' dialog, on which you select to add borders above, below, to the sides and - for multiple-column text - between the columns of the selected text, to format the borders as a single or double thin line or thick line, to set the color of the borders, and to add a shaded background to the selected text; as you increase the percentage shading, the text color changes to contrast with the background</li> <li>• Paragraph Spacing - display the 'Paragraph Spacing' dialog, on which you set the line spacing within the paragraph to one of three standard spacings, or to a point-spacing that you define, or to a multiple line spacing that you define; you can also set extra spacing to apply before and/or after the paragraph</li> <li>• Background Color - displays the 'Color' dialog, on which you select a color as the background of the selected text; note that the text color does not automatically change to contrast with the background, and if this option is used with the 'Border and Shading' option it blocks that text change</li> <li>• Bullet - convert the selected lines of text to a bullet list, or to convert a bulleted list to unbulleted paragraphs</li> <li>• Numbering - convert the selected lines of text to a numbered list, or to convert a numbered list to un-numbered paragraphs</li> <li>• Increase Level - increase the indent of the selected text and move it further in from the left margin</li> <li>• Decrease Level - if the selected text is indented from the left margin, reduce the indent and draw the text closer to the margin</li> <li>• List Numbering - display the 'Apply paragraph numbering using Lists' dialog, which you use to apply a hierarchical numbering system to the paragraphs in the document</li> <li>• Set Tab - display the 'Set a Tab Position' dialog, on which you set the interval for tab points, the type of tab point, and what kind of lead-in line the tab has, if any</li> <li>• Clear Tab - display the 'Clear a Tab Position' dialog and select a single tab from the list to clear</li> <li>• Clear All Tabs - clear all tab settings from the document</li> <li>• Style - display the 'Select a Style' dialog, on which you select a pre-set style to apply to the selected text</li> <li>• Text Flow - display the 'Paragraph Text Flow' dialog, on which you select the direction in which text flows from the opening words - Left-To-Right, Right-To-Left, or the system default direction</li> </ul>
<b>Bullets</b> 	Click on this icon to convert the selected lines of text to a bullet list, or to convert a bulleted list to unbulleted paragraphs.
<b>Numbers</b> 	Click on this icon to convert the selected lines of text to a numbered list, or to convert a numbered list to un-numbered paragraphs.
<b>Decrease Indent</b> 	If the selected text is indented from the left margin, click on this icon to reduce the indent and draw the text closer to the margin.
<b>Increase Indent</b> 	Click on this icon to increase the indent of the selected text and move it further in from the left margin.
<b>Show Paragraph Markers</b>	

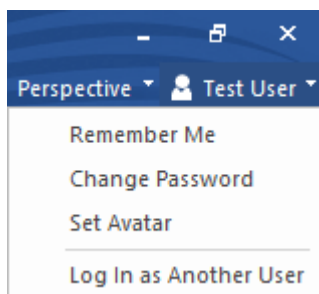
	Click on this icon to toggle the display of paragraph markers (  ) throughout the document.
<b>Fill</b> 	Click on this icon to display a selection of colors, and select one to use as the background color for the selected block of text. If you want to clear the background color, select the 'No Color' option. If you want to use a color that is not offered in the selection, click on the 'More Colors' option and select or define the color you require.
<b>Left Alignment</b> 	Click on this icon to align the left ends of the selected lines of text with the left margin of the page.
<b>Center Alignment</b> 	Click on this icon to align the centers of the selected lines of text with the vertical center of the page.
<b>Right Alignment</b> 	Click on this icon to align the right ends of the selected lines of text with the right margin of the page.
<b>Left and Right Alignment</b> 	Click on this icon to align the ends of the selected lines of text with the left and right margins of the page.
<b>Line Spacing</b> 	<p>Click on this icon to display a list of conventional line spacings, and options to customize line spacing and paragraph spacing.</p> <ul style="list-style-type: none"> <li>• 1.0 )</li> <li>• 1.5 )      set the line spacing in the highlighted text to the selected value</li> <li>• 2.0 )</li> <li>• 3.0 )</li> <li>• Line Spacing Options - display the 'Paragraph Spacing' dialog, on which you set the line spacing within the paragraph to one of three standard spacings, or to a point-spacing that you define, or to a multiple line spacing that you define; you can also set extra spacing to apply before and/or after the paragraph</li> </ul>
<b>Borders and Shading</b> 	<p>Click on this icon to display a list of options for adding borders to the table cells you have selected - individual cells, groups of cells, rows, columns or the whole table. Other table-formatting options are available from the 'Table' option.</p> <ul style="list-style-type: none"> <li>• Bottom Border - convert the gridline to a black border along the bottom of the selected cell(s)</li> <li>• Top Border - convert the gridline to a black border along the top of the selected cell(s)</li> <li>• Left Border - convert the gridline to a black border along the left edge of the selected cell(s)</li> <li>• Right Border - convert the gridline to a black border along the right edge of the selected cell(s)</li> <li>• No Border - remove any borders around and between the selected cells</li> <li>• All Borders - convert the gridline to a black border around the selected cell(s) and - for multiple cells - between the selected cells</li> <li>• Outside Borders - convert the gridline to a black border around but not between the selected cells</li> <li>• Inside Borders - convert the gridline to a black border between but not around the selected cells</li> <li>• Insert Table - display the 'New Table' dialog and specify how many rows and columns to create in a new table starting at the cursor position; the table</li> </ul>

	<p>defaults to showing the gridlines</p> <ul style="list-style-type: none"><li>• View Gridlines - toggle between showing and hiding the pale blue table outlines on the screen display; the gridlines are not printable, so if you want to show borders on the table in the printed document, add cell borders</li><li>• Borders and Shading - display the 'Cell Shading' dialog, through which you identify which grouping of table cells to shade and the depth of shading to apply</li></ul>
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## User Button

*This feature was introduced in version 14.1.*

For models with user security enabled, once logged in, the current user's name will display in the ribbon button in the top right of the screen.



Clicking on the user's name will drop down a menu with various user actions.

### User Button Menu

Menu Item	Description
Remember Me	<p>Click this to securely store the current user's login credentials for the current model. When enabled, the next time the user attempts to open this model the stored credentials will be used instead of prompting the user for credentials.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"><li>this requires the option 'Allow Users to Remember Credentials' to be enabled in <a href="#">Maintain Users</a></li><li>the credentials are stored on the current computer and can not be transferred between computers, users or models</li></ul>
Change Password	Change the password for the logged in user.
Set Avatar	Set an image to be used as an avatar for the logged in user.
Log In as Another User	Log into the model as another user.



# Toolbars


Enterprise Architect provides a set of toolbars containing convenient shortcuts to a wide range of common functions that you can perform on your project as a whole through to the individual modeling units. You can also customize the toolbars by deleting and reordering the default button set.

The toolbars are initially displayed in the toolbar banner at the top of the work area, but you can display them at the foot of the work area, drag and dock them within the work area, or float them over the application; this is useful when you are using a certain set of functions a lot in a particular area.

You can also dock toolbars to the edge of the Enterprise Architect work area by dragging them by the title bar and placing them against the appropriate edge.

## Available toolbars

- Default Tools Toolbar
- Project Toolbar
- Diagram Toolbar
- New (UML) Elements Toolbar
- (Current) Element Toolbar
- (Current) Connector Toolbar
- Code Engineering (Generation) Toolbar
- Navigator Toolbar
- Debug Toolbar
- Simulation Toolbar
- Build Toolbar
- Record (& Analyze) Toolbar
- Workspace Layouts Toolbar
- Status Bar
- Notes Toolbar

Each toolbar has a drop-down arrow at the right-hand end.  This can be enabled or hidden using the 'Visual Style' sub-menu. If you click on this drop-down arrow, the 'Add or Remove Buttons' option displays. Select this option to show a context menu listing the toolbars that are displayed on the same line as the current toolbar, and an option to customize toolbars - both your own and the system-provided toolbars.

You can select one of the toolbars identified on the context menu to list the icons available through that toolbar. Click on the icons as necessary to hide or show them in the toolbar.

## Navigator Toolbar





The Navigator toolbar identifies the location of the Package or diagram you are currently working in, and provides options to change the focus to another level of the Package's branch, perform relevant operations on the Package, and locate other Packages in the model.




### Access

Ribbon	Show > Portals > Window > Explore > Navigator Start > Explore > Browse > Navigator
--------	---

### Navigator Toolbar Options

Icon/Option	Action
	Click on this icon to move one level further up the location path, to the current Package's parent Package. The child Package is cleared from the path.
	Click on this icon to move one level further down the Package's location path, to the child Package that was previously opened in this work session. If a child of the current Package has not been opened, the icon is not available.
<< Development Model > Login States >	<p>Displays a 'breadcrumb trail' of branch nodes under which the current Package is located. You can continue to expand the 'breadcrumb' path to show a branch of the child Packages contained within the current Package.</p> <p>A double chevron (&lt;&lt;) to the left of the Package path indicates that you have explored the Package branch to several levels below the current Package, and it is out of view to the left. Click on the chevron to display the current Package again.</p> <p>As you click on the last Package in a path, a list of its child Packages and diagrams displays, from which you select the next object for the path. If you click on a diagram, the diagram opens in the Diagram View. The listed diagrams include child diagrams both of the selected Package and of elements in that Package. The names of the child diagrams of elements are preceded by the parent element name.</p> <p>If you click on an expanded path node, the child nodes are closed and cleared from the path.</p> <p>As you select a Package or diagram, that branch of the Project Browser is expanded and the Package or diagram you select is highlighted. This also sets the context for any tools and utilities you open to work on a Package.</p>
CustomerAdd 	In this field, type the name of a Package and click on the icon to locate that Package anywhere in the model, directly using the Model Search facility.
	Click on this icon to return focus to the Start Page.

	<p>Click on this icon to display a set of buttons, each of which invokes a task or process that you can perform with the current Package as the focus or target.</p> <p>These tasks include:</p> <ul style="list-style-type: none"> <li>• Highlight the Package in the condensed, Package-only hierarchy of the Find Package window</li> <li>• Display the Package contents in the Package Browser view</li> <li>• Display the Package contents in the Specification Manager</li> <li>• Add a Model Package to the current Package, using the Model Wizard</li> <li>• Add a new child Package to the current Package</li> <li>• Add a new diagram to the current Package</li> <li>• Use the Model Search to locate a text string in the Package</li> <li>• Use the File Search to locate files associated with the current Package</li> <li>• Access the Portals View through which you can perform a wide range of other operations on the Package</li> </ul>
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## Navigator Toolbar Context Menu

If you right-click on a Package in the 'breadcrumb trail' a context menu displays, providing a number of options for reviewing the selected Package.

Option	Action
Specification Manager	Open the Specification Manager to show the element hierarchies contained in the selected Package.
Show Gantt Chart	Open the Element View of the Project Gantt Chart, showing the elements in the Package that have resources allocated to them.
Show Contents	Open the Package Browser and display the contents of the selected Package
Go to Package	Open the 'Find Package' dialog and review the Package hierarchy of which the selected Package is a part.
Add Model	Open the Model Wizard and use this to create models underneath the selected Package.
Add Package	Open the 'New Package' dialog and use this to add child Packages to the selected Package.
Add Diagram	Open the 'New Diagram' dialog and create a new child diagram under the selected Package.
Copy Path	<p>Copy the Package path to the clipboard. You can then paste the path into a Model Mail, Team Library Post or other text in your model, as a reference to the Package.</p> <p>You can also capture a Package path by right-clicking on the Package in the Project Browser and selecting the 'Copy/Paste   Copy Node to Clipboard' option.</p>
Go To Path	<p>Open the 'Select Package' dialog. Type or paste into the 'Path' field a Package path you want to follow.</p> <ul style="list-style-type: none"> <li>• If typing, use a period (.) as the separator between Package names in the path;</li> </ul>

	<p>for example: BusinessProcedures.Accounting.Recoveries.Bad Debt Process</p> <ul style="list-style-type: none"><li>• If pasting, you might copy the path from a message posted through any of the communication facilities in the model, or directly from the model itself (see <i>Copy Path</i> above)</li></ul> <p>Click on the OK button. The 'Navigator' path field is updated, and any Package content display you have open is refreshed with the content of the Package at the end of the path.</p>
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## Default Tools Toolbar

The Default Tools toolbar provides instant access to the most commonly used tools in Enterprise Architect, including file management, printing and technology facilities.



### Access

Ribbon	Show > Portals > Show Toolbar > Default Tools
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### Default Tools Options

Icon/Option	Action
New Project	Click on this icon to create a new Enterprise Architect project (as a .EAP, .EAPX or .FEAP file). Shortcut: Ctrl+N
Open Project	Click on this icon to open an existing project. Shortcut: Ctrl+O
Save Current Diagram	Click on this icon to save changes to the current diagram. Shortcut: Ctrl+S
Cut	Click on this icon to cut the selected element(s) from the diagram and copy them to the Enterprise Architect clipboard. Shortcut: Ctrl+X
Copy	Click on this icon to copy the selected element(s) from the diagram to the Enterprise Architect clipboard. Shortcut: Ctrl+Space Ctrl+C
Paste	Click on this icon to paste elements from the Enterprise Architect clipboard as a reference on the current diagram. Shortcut: Shift+Insert Ctrl+V
Undo	Click on this icon to undo the last action. Shortcut: Ctrl+Z
Redo	Click on this icon to redo the last undone action.

	Shortcut: Ctrl+Y
Print Preview	Click on this icon to display the current diagram as it will appear when printed.
Page Setup for Current Diagram	Click on this icon to configure print settings for the current diagram.
Print Diagram	Click on this icon to print the current diagram. Shortcut: Ctrl+P
Package Browser	Click on this icon to display the content of the current Package as a list of editable elements.
Project Search	Click on this icon to display the Find in Project window, to define, manage and run model searches. Shortcut: Ctrl+Alt+A
Technology List	Click on the down-arrow and select the active technology, to provide the appropriate sets of Toolbox pages and the diagram Space Bar context element menu options.
Help Contents	Click on this icon to access the Enterprise Architect Help. Shortcut: F1

## Notes

- The Cut and Copy buttons are only enabled when an item is selected on the current diagram
- You can move this toolbar to any dockable position; it retains that position in subsequent sessions
- You can hide or show the toolbar by clicking on the 'Show > Portals > Show Toolbar > Default Tools' ribbon option

## Workspace Layouts Toolbar

As you perform work on your model you use various toolbars and windows; you will quite likely use the same toolbars and windows regularly, in an arrangement that suits the way in which you use the system. Rather than having to re-open and arrange these tools at the start of each work session, you can use either a predefined or a customized work environment - or workspace. Workspaces:

- Automatically open and organize all the tools appropriate to an area of work such as Requirements Management, Code Engineering or Debugging
- Help a new user by:
  - Opening the tools that are appropriate to a task so that they can immediately get started, and
  - Showing the user what tools they should become familiar with for that area of work
- Help you switch rapidly to work environments for either successive or completely different areas of work
- Re-establish a work environment that you have accidentally or deliberately changed

To select, create and maintain workspaces you can use the Workspace Layouts toolbar, which you can leave in the Toolbar ribbon, dock to any main window edge or float freely in a convenient location for quick access.



### Access

### Workspace Toolbar Options

Icon/Option	Action
Save Workspace Layout As	Click on this icon to save the current workspace layout under an existing name or a new name, using the 'Save Custom Workspace Layout' dialog.
Manage Workspaces	Click on this icon to open the 'Workspaces' tab on the 'Workspaces and Commands' dialog, to change to a different workspace layout, create or edit a layout, or delete a layout.
Select Layout	Click on the drop-down arrow and select an existing workspace layout to immediately apply.  User-defined layout names have a preceding asterisk; system-provided layouts are not marked with an asterisk.

## Project Toolbar

The Project toolbar provides tools for performing routine tasks such as creating Packages, diagrams and elements, searching the model and generating documentation.



### Access

Ribbon	Show > Portals > Show Toolbar > Project Tools
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### Project Toolbar Options

Icon/Option	Action
Reload Project	Click on this option to close and reload the current project, to bring in changes made by other users sharing the project. Shortcut: Ctrl+Shift+F11
New Diagram	Click on this option to create a new diagram under the currently selected Package, in the Project Browser. Shortcut: Ctrl+Insert
New Package	Click on this option to create a new child Package under the currently selected Package, in the Project Browser. Shortcut: Ctrl+W -
New Element	Click on this option to create a new model element under the currently selected Package or element, in the Project Browser. Shortcut: Ctrl+M
Find in Project Browser	Click on this option to run a simple search within the Project Browser. Shortcut: Ctrl+Shift+F
Find in Project	Click on this option to search the entire project or the selected Package using pre-defined and customized searches. Shortcut: Ctrl+F
Generate Documentation	Click on this option to define and generate Document reports on the currently-selected Package. Shortcut: F8
Project Issues	Click on this option to display the 'Project Issues' dialog to review and create project issues.



Project Glossary	Click on this option to display the 'Glossary' dialog to review and create glossary terms.
Set Options	Click on this option to display the 'Preferences' dialog, through which you can personalize project display and behavior options for your own login to the project. Shortcut: Ctrl+F9

## Notes

- You can move this toolbar to any dockable position; it retains that position in subsequent sessions
- You can hide or show the toolbar by selecting the 'Show > Portals > Show Toolbar > Project Tools' ribbon option

## Diagram Toolbar

The Diagram toolbar provides tools to lay out and improve the appearance of diagrams, including zoom controls to better manage large diagrams and quickly identify key areas of interest.



### Access

Ribbon	Show > Portals > Show Toolbar > Diagram
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### Diagram Toolbar Options

Icon/Option	Action
Align Left	Click on this option to align the left edges of the selected elements. Shortcut: Ctrl+Alt+Left Arrow
Align Right	Click on this option to align the right edges of the selected elements. Shortcut: Ctrl+Alt+Right Arrow
Align Tops	Click on this option to align the top edges of the selected elements. Shortcut: Ctrl+Alt+Up Arrow
Align Bottoms	Click on this option to align the bottom edges of the selected elements. Shortcut: Ctrl+Alt+Down Arrow
Bring to Top	Click on this option to bring the selected elements to the top of the Z order, in front of other elements on the diagram.
Send to Back	Click on this option to move the selected elements to the bottom of the Z order, behind other elements on the diagram.
Previous diagram	Click on this option to display the previous open diagram. Shortcut: Alt+Left Arrow
Next Diagram	Click on this option to display the next open diagram. Shortcut: Alt+Right Arrow
Home Diagram	Click on this option to display the default Model Diagram (or default User Diagram) if one has been defined.
Zoom In	Click on this option to zoom into (magnify) the diagram by 10 percent.

Zoom Out	Click on this option to zoom out of (shrink) the diagram by 10 percent.
Fit to View	Click on this option to adjust the diagram size to fit within the Diagram View screen.
Size View to Page	Click on this option to adjust the diagram size to fit within the page margins shown on the screen.
Zoom to 100%	Click on this option to display the diagram content at 100% of default size, regardless of the Diagram View screen size.
Layout Diagram	(Not applicable to Behavioral diagrams) Click on this option to automatically layout the diagram in the Digraph layout format.
Diagram Properties	Click on this option to display the diagram 'Properties' dialog, on which you can adjust the diagram display and behavior properties.
Paste Appearance	Click on this option to apply to the selected element a set of appearance style settings as defined for an element in the 'Default Appearance' dialog and loaded into the Painter.
Delete Selected	Click on this option to delete the selected element(s) from the diagram. Shortcut: Ctrl+D

## Notes

- Any actions that result in a change in diagram content and appearance (including Zoom) are saved as changes to the diagram
- The Diagram toolbar can be docked to any main window edge or floated freely in a convenient location for quick access
- You can move this toolbar to any dockable position and it retains that position in subsequent sessions
- You can hide or show the toolbar by clicking on the 'Show > Portals > Show Toolbar > Diagram' ribbon option

## UML (New) Elements Toolbar

The UML Elements toolbar provides facilities for quickly and easily inserting UML and Technology elements into a diagram, as well as notes, text, hyperlinks, diagram notes and Diagram Legends. You can also add connectors to a diagram using this toolbar.



### Access

Context Menu	On the Toolbar band, right-click and select Modeling Toolbars > New Element
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### UML Elements Toolbar Options

Icon/Option	Action
New Element	Click on this option to add a new element or connector to the current diagram. The 'Toolbox Shortcut' menu displays, from which you select the UML or Technology element or connector to insert. Shortcut: Space bar
New Boundary	Click on this option and click on the current diagram to add a simple Boundary element to the diagram.
New Note	Click on this option and click on the current diagram to add a new 'Note' element to the diagram. When you add the Note to the diagram the Notes window displays, into which you type the Note text.
New Text Element	Click on this option and click on the current diagram to add a simple text element to the diagram. When you add the Text element to the diagram the Element Notes window displays, into which you type the text.
Diagram Note Element	Click on this option and click on the current diagram to add a Diagram Properties Note to the diagram.
New Diagram Legend	Click on this option and click on the current diagram to add a Diagram Legend element to the diagram. The 'Legend' dialog displays, on which you define the appearance of the Legend element itself and the appearance of the legends it defines.
New Hyperlink	Click on this option and click on the current diagram to add a Hyperlink element to the current diagram. You can use this element as a hyperlink to, for example, a web page, file or help topic.

	The 'Hyperlink Details' dialog displays.
New Note Link	Click on this option, click on the current diagram and 'drag' between a Note element and the element it annotates, to link the Note to the element.

## Notes

- You can move this toolbar to any dockable position and it retains that position in subsequent sessions

## Current Element Toolbar

The Current Element toolbar provides a number of options for performing common operations on a selected element, such as viewing the element's properties, operations or attributes. You can also use it to specify the visibility of the element's features and compartments, and to lock that element.



### Access

Ribbon	Show > Portals > Show Toolbar > Element
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### Current Element Toolbar Options

Icon/Option	Action
Edit Properties	Click on this option to display the element 'Properties' dialog, through which you can view and edit the properties of the selected element. Shortcut: Alt+Enter
Set Parent	Click on this option to display the 'Set Parents and Interfaces' dialog, through which you can set the parent or implement interfaces for the selected element. Shortcut: Ctrl+I
Operations	Click on this option to display the 'Operations' page of the Features window, through which you can create and edit operations for the selected element. Shortcut: F10
Attributes	Click on this option to display the 'Attributes' tab of the Features window, through which you can create and edit attributes for the selected element. Shortcut: F9
Show Features	Click on this option to display the 'Compartment Visibility' dialog, through which you can specify which compartments and information to display for the selected element. Shortcut: Ctrl+Shift+Y
Set Runstate/Initialization	Click on this option to display the 'Override Attribute Initializers' dialog, through which you can set the element run state, attribute initializers or - for Parts - property value. Shortcut: Ctrl+Shift+R
Find Element Usage	Click on this option to find all other diagrams in which the selected element is used: <ul style="list-style-type: none"> <li>If the element is not used in any other diagram, there is no further action</li> </ul>

	<ul style="list-style-type: none"><li>If the element is included in other diagrams, the 'Element Usage' dialog displays, listing those diagrams, and you can choose which diagram to explore.</li></ul> <p>Shortcut: Ctrl+U</p>
Find in Project Browser	Click on this option to highlight the selected element in the Project Browser. Shortcut: Alt+G
Configure References	Click on this option to display the 'Custom References' dialog, on which you can view the properties of other elements and diagrams in the model to which the selected element has custom cross-references. Shortcut: Ctrl+J
Lock Element	Click on this option to apply or release a lock on the selected element. The element is then blocked against or made available for editing, respectively, depending on which locking policy your system is operating under.
Add Tagged Value	Click on this option to display the 'Tagged Value' dialog, through which you can add a Tagged Value to the selected element. Shortcut: Ctrl+Shift+T

## Notes

- You can move this toolbar to any dockable position and it retains that position in subsequent sessions
- You can hide or show the toolbar by selecting the 'Show > Portals > Show Toolbar > Element' ribbon option

## Current Connector Toolbar

The Current Connector toolbar provides a number of options for quickly modifying the properties, style and direction of a connector, showing and hiding a connector and/or its labels, and pinning each end of the connector.



### Access

Ribbon	Show > Portals > Show Toolbar > Connector
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### Current Connector Toolbar Options

Icon/Option	Action
Connector Properties	Click on this option to display the '<connector type> Properties' dialog, on which you can view and edit the properties of the selected connector. Shortcut: Enter key
Connector Style	Click on the drop-down arrow and select the appropriate connector line style from the list. The options are: <ul style="list-style-type: none"> <li>• Direct Route</li> <li>• Auto Routing</li> <li>• Custom Routing</li> </ul> Shortcut: Ctrl+Shift+D Ctrl+Shift+A Ctrl+Shift+C
Attach Note or Constraint	Click on this option to display the 'Link Relations' dialog, which you use to attach a note or constraint to the selected connector and to any other existing connectors in the current diagram. Double-click on the Note element to display the 'Notes' dialog on which to type in the text.
Show or Hide Connector Labels	Click on this option to display the 'Label Visibility' dialog, which you use to specify which of the eight possible label positions around the selected connector are to be displayed.
Show and Hide Relationships	Click on this option to display the 'Set Visible Relations' dialog, through which you can show or hide each of the relationships between elements within the current diagram. Shortcut: Ctrl+Shift+I
Reverse Direction	Click on this option to simply reverse the direction of the selected connector.



Pin Connector Ends	<p>Click on the down-arrow to select the end of the selected connector to pin to the source and/or target elements. The pinned end cannot be dragged off the point on the element border to which it has been fixed.</p> <p>Some connector line styles (such as the Tree styles) are not compatible with pinning the connector ends; if a pinned connector is changed to one of these styles, the connector ends will be unpinned.</p>
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## Notes

- You can move this toolbar to any dockable position and it retains that position in subsequent sessions
- You can hide or show the toolbar by clicking on the 'Show > Portals > Show Toolbar > Connector' ribbon option

## Code Generation Toolbar

The Code Generation (Engineering) toolbar provides options to import, generate, synchronize and open source code. Some of these options display convenient menus to quickly set, for example, the default language and default database type for the project.



### Access

Ribbon	Show > Portals > Show Toolbar > Code Engineering
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### Code Generation Toolbar Options

Icon/Option	Action
Default Code Language	Click on the drop-down arrow and click on a coding language in the list, to set that language as the default applied to all newly created Class elements.
Default Database Type	Click on the drop-down arrow and click on a database type in the list, to set that database type as the default applied to all newly created database elements.
Import	<p>Click on the drop-down arrow to locate and select source files to import for reverse engineering code into new Class and Interface elements in the current diagram.</p> <p>Firstly, click on a coding language in the drop-down list to identify the file types to locate; this selection overrides the project's default language for this particular import.</p> <p>When you have selected a language, a browser dialog displays through which you browse for the file location and select from files with the extensions appropriate to the coding language you selected.</p> <p>When you click on a file, the system immediately imports it and generates elements from the file, in the current diagram. The progress of the reverse engineering is shown on a 'Progress' dialog; click on the Close button when the process is complete.</p>
Generate Source Code	<p>Click on this option to generate source code for the currently selected single Class element, through the 'Generate Code' dialog.</p> <p>Shortcut: F11</p>
(Batch) Generate Source Code	<p>Click on this option to batch-generate source code for multiple selected Class elements.</p> <p>A 'Progress' dialog displays and, if no target file is specified in the element, a prompt for the location of a file to generate the code into.</p> <p>Shortcut: Shift+F11</p>

Synchronize Element with Source	<p>Click on this option to synchronize the selected Class element with its associated source code.</p> <p>The synchronization completes as a background task.</p> <p>Shortcut: F7</p>
Open Source Code	<p>Click on this option to open the source code of the selected Class, in the default code editor.</p> <p>The source code must have been generated, and the selected element must be a Class. Otherwise no action is taken.</p> <p>Shortcut: F12</p>

## Notes

- You can move this toolbar to any dockable position and it retains that position in subsequent sessions
- You can hide or show the toolbar by selecting the 'Show > Portals > Show Toolbar > Code Engineering' ribbon option

## Record & Analyze Toolbar

The Record & Analyze toolbar provides access to tools for recording the execution of program source code. From this toolbar you can:

- Begin manual or automation recording of the currently active application
- Step through manual execution
- Generate Sequence diagrams from a recording session



### Access

Ribbon	Show > Portals > Show Toolbar > Record
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### Record & Analyze Toolbar Options

Icon/Option	Action
Recorder Command List	Click on the drop-down arrow to show a menu of commands for recording the execution of Analyzer scripts.
Recording	Click on this icon to begin or resume recording of the current program.
Manual Record	Click on this icon to manually step-record the current thread.
Auto Record Selected Thread	Click on this icon to auto-record an execution trace for the current thread.
Step Through	Click on this icon to step into a function, record the function call in the History window, and step back out. The option is enabled for manual recording only. Shortcut: Alt+;
Stop Recording	Click on this icon to end the recording of program execution.

### Notes

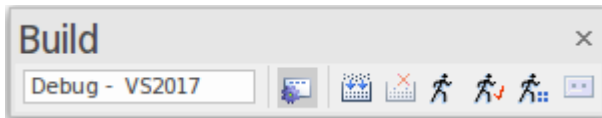
- The toolbar can be docked to any main window edge or floated freely in a convenient location for quick access
- You can move this toolbar to any dockable position and it retains that position in subsequent sessions
- You can hide or show the toolbar by clicking on the 'Show > Portals > Show Toolbar > Record' ribbon option



## Build Toolbar

The Build toolbar provides access to tools for building program source code. From this toolbar you can:

- Build the currently active application
- Run the compiled application
- Run your Test and Deployment scripts



### Access

Ribbon	Show > Portals > Show Toolbar > Build
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### Build Toolbar Options

Icon/Option	Action
Active Analyzer Script	Display the name of the currently active analyzer script.
Execution Analyzer	Click on this icon to display the Execution Analyzer window, which you use to manage the Analyzer scripts for your model. Shortcut: Shift+F12
Build Current Package	Click on this icon to execute the Build script for the selected Package. Shortcut: Ctrl+Shift+F12
Cancel Build	Click on this icon to cancel execution of the Build script currently in progress.
Run Executable	Click on this icon to execute the Run script for the selected Package. Shortcut: Ctrl+Alt+N
Run Test Script	Click on this icon to execute the Test script for the selected Package. Shortcut: Ctrl+Alt+T
Run Deployment Script	Click on this icon to execute the Deploy script for the selected Package. Shortcut: Ctrl+Shift+Alt+F12
Run Merge Script	Click on this icon to execute the Merge script for the selected Package. Shortcut: Ctrl+Alt+M

## Notes

- The toolbar can be docked to any main window edge or floated freely in a convenient location for quick access
- You can move this toolbar to any dockable position and it retains that position in subsequent sessions
- You can hide or show the toolbar by clicking on the 'Show > Portals > Show Toolbar > Build' ribbon option

## Debug Toolbar

The Debug toolbar provides access to tools for debugging program source code. From this toolbar you can:

- Attach to running processes
- Open a number of debugger windows
- Run, pause or terminate program execution
- Step over, step into or step out of program statements



### Access

Ribbon	Show > Portals > Show Toolbar > Debug
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### Debug Toolbar Options

Icon/Option	Action
Drop-down Command List	Click on the drop-down arrow and select options from the menu for attaching to a running process and accessing a range of debugging windows.
Debug	Click on this option to begin or continue execution of the current program. Shortcut: F6
Pause-Resume	Click on this option to pause or resume execution of the current program.
Step Over	Click on this option to step over the next statement in the program. Shortcut: Alt+F6
Step In	Click on this option to step into the next function call in the program. Shortcut: Shift+F6
Step Out	Click on this option to step out of the current function call. Shortcut: Ctrl+F6
Debug Stop	Click on this option to stop debugging the current program. Shortcut: Ctrl+Alt+F6

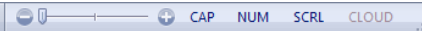
### Notes



- The toolbar can be docked to any main window edge or floated freely in a convenient location for quick access
- You can move this toolbar to any dockable position and it retains that position in subsequent sessions
- You can hide or show the toolbar by clicking on the 'Show > Portals > Show Toolbar > Debug' ribbon option

## Status Bar

The Status bar displays at the bottom of the Enterprise Architect work area. It shows information on the current operation and certain key settings, and provides a 'zoom bar' for adjusting the scale of the diagrams you view.

Class Diagram:Domain Model: created: 4/10/2013 9:34:03 AM modified: 17/01/2014 12:19:44 PM 100% 827 x 1169 

You can hide the Status bar itself by selecting the 'Hide Status Bar' option on the 'General' page of the 'Preferences' dialog ('Start > View > Preferences > General > Window Behavior') and hide sections of the information that the Status bar shows by right-clicking on it and de-selecting either or both of the options:

- Zoom Slider
- Status Indicators

## Access

### Status Bar Sections

Section	Information
Object Type/Name	Shows the type and name of the currently-selected diagram, or of the currently selected element in the diagram, or the status of the currently-displayed Model Search.
Creation data	Shows the date and time at which the current diagram was created and last modified, the percentage zoom of the current display, and the normal page size of the diagram.
Element/Feature Name	Shows the name of the currently-selected element, attribute or operation.
Position and Size	Shows the coordinates of the top left corner of the selected element, and the width and height of the element.
Zoom Control	Allows a zoom to be applied to all diagrams, regardless of existing zoom levels and without impacting other users. Values range from 100% to 150%.
Status Indicators	Indicates the status of the Caps Lock, Num Lock and Scrl Lock keyboard keys, and the Connect to Cloud facility (bold indicates 'in use', pale indicates 'off').
Display Maximized	A triangle in the bottom right corner indicates that the screen is not maximized; you can drag the screen corner to increase the size of the window.

## Notes

- The zoom facility has the same function as the 'Scale view by' field on the 'Diagram Appearance' page of the 'Preferences' dialog; changes in the 'zoomed' display scale of a diagram update this field and are applied to any other diagrams that you open



# Introducing the Enterprise Architect Windows

As you work on your project, creating and reviewing model structures, you can make use of a wide range of system windows that help you locate and focus on particular types of object or object properties. To make your modeling tasks even easier, you can fix these windows in a convenient place on your screen, move them around, set them as callable tabs or autohide them.

Using Workspace Layouts, accessible from the Ribbon bar or from the Portal bar, you can also quickly load different sets of windows that target particular tasks. You can also save your favorite layouts and recall them when required.

You can access these windows through the ribbon options, especially those under the 'Start > Explore > Browse' and 'Start > Explore > Properties' ribbon options.

## Which are the Standard windows?

Window
Project Browser - The Project Browser is the primary mechanism for navigating through and exploring your model and is the starting point for many of the most important features in Enterprise Architect. It lists the model Packages, diagrams, elements and element features in a hierarchical structure, reflecting the arrangement of Packages and elements within your model.
Properties window - The Properties window provides an immediate method of viewing and editing the range of properties of a selected object - element, diagram, connector, attribute or operation.
Notes window - Notes are the main documentation feature you use to describe an element, diagram, feature or connector; in the documentation that Enterprise Architect generates, notes feature prominently. You can record and view notes on a modeling object using the Notes window.
Responsibilities window - the Responsibilities window is a three-tabbed window through which you can quickly add, view, edit and delete rules applied to the selected element. The entities that impose such rules are requirements, scenarios, and constraints applied to the element.
Model Views - The Model Views window provides a mechanism for representing areas of your model in any of a number of different ways, to capture a particular aspect of the structure or purpose of the model.
Traceability window - Using the Traceability window you can quickly see what elements are immediately linked to the selected element and in what relationships, and what elements are indirectly linked via a chain of relationships. You can also select a diagram and explore the relationships of all elements in that diagram.
Tagged Values window - Tagged Values are a convenient method of adding additional information to an element or connector, beyond what is directly supported by UML. A Tagged Value is the value of a property of a modeling item, the property being called a tag.  You can create, view and edit Tagged Values for the currently-selected modeling object using the Tagged Values window.
Relationships window - The Relationships window lists all the relationships of the currently-selected element, and shows the properties of each relationship.
Element Browser - You can use the Element Browser to summarize, review and manage a wide range of added-on properties of the selected element. These added-on properties include methods, attributes, Tagged Values, relationships and responsibilities.
Team Library - The Team Library window provides a structured internal forum that your team can use to discuss

aspects of the model content and development.
Diagram Toolbox - The Diagram Toolbox is a panel of icons that you drag onto a diagram to create elements and connectors. Related elements and connectors are organized into Toolbox pages, each page containing the elements or connectors used for a particular type of diagram.
Diagram Filters - You use the Diagram Filters window to modify the display of diagram components so that relevant items are immediately identified for the reader's attention, without damaging the structure and integrity of the model.
Layout Diagrams - The Layout Diagrams window provides a set of diagram layout formats that you can apply to a diagram you have created, to automatically reorganize the layout to make it more readable.
Pan and Zoom window - The Pan and Zoom window enlarges the current diagram by a percentage you define, and displays a thumbnail view of it with a shaded rectangle. As you move the shaded rectangle with the mouse, the diagram shows the magnified items of the structure underneath the rectangle.
Resources window - The Resources window provides useful shortcuts and re-use functions for creating and applying stock components in the current model. The window contains a tree structure of Document templates, Relationship Matrix profiles, Stylesheets, Patterns and commonly-used model elements. The window can also provide access to UML Profiles and MDG Technologies, although this is not the recommended route to these facilities.
Source Code Viewer - The viewer displays the generated source code for a selected Class element, and provides a number of facilities for editing that source code.
Scripting window - The Scripting window hosts a flexible and easy to use scripting capability to create scripts in JavaScript, Microsoft JScript or VBScript. Using a built in 'Repository' object, you can programmatically inspect and/or modify elements within the currently open model. The window provides tools to edit, run, debug and manage your scripts.
Debug window - The Debug window provides a set of facilities for starting, managing and halting a debug session on the code generated from elements of your model.
Maintenance window - The Maintenance window, or workspace, lists the maintenance records (defects, changes, issues and tasks) for a selected element, ready for modification or addition. The window provides several facilities for managing the maintenance records.
Testing window - The Testing window, or workspace, lists the test records for a selected element, ready for modification or addition. The window provides several facilities for managing the test records.
Learning Center - The Learning Center provides quick access to a range of context-specific task guides in a number of work areas of the system, such as Getting Started, Modeling or Testing.
Project Management window - There are four versions of the Project Management window, to record and manage the resources, effort, risk and metrics associated with the work in developing the area of the model represented by the selected element.

## Notes

- On the Testing, Maintenance and Project Management windows, any descriptive text, history, input or results for a selected item are also displayed in the Notes window; you cannot edit this text in the Notes window



## Dock Windows

When you are doing work using one or more of the Enterprise Architect windows, you can re-position and/or group the windows to make them easier to use. You can easily move any window around the application workspace and either dock (anchor) it against the top, bottom, left or right edge of the workspace for long-term use, or just drop it where it is most convenient for the moment (that is, leave it floating).

All the windows are resizable, so you can also drag the window margins to make the window a convenient size and shape to display either just a column or row, or a large section of the information it contains.

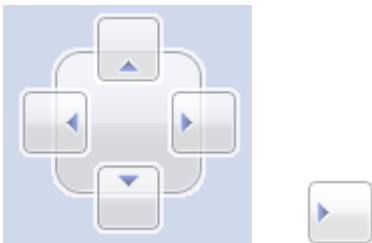
### Dock a Window Against an Edge

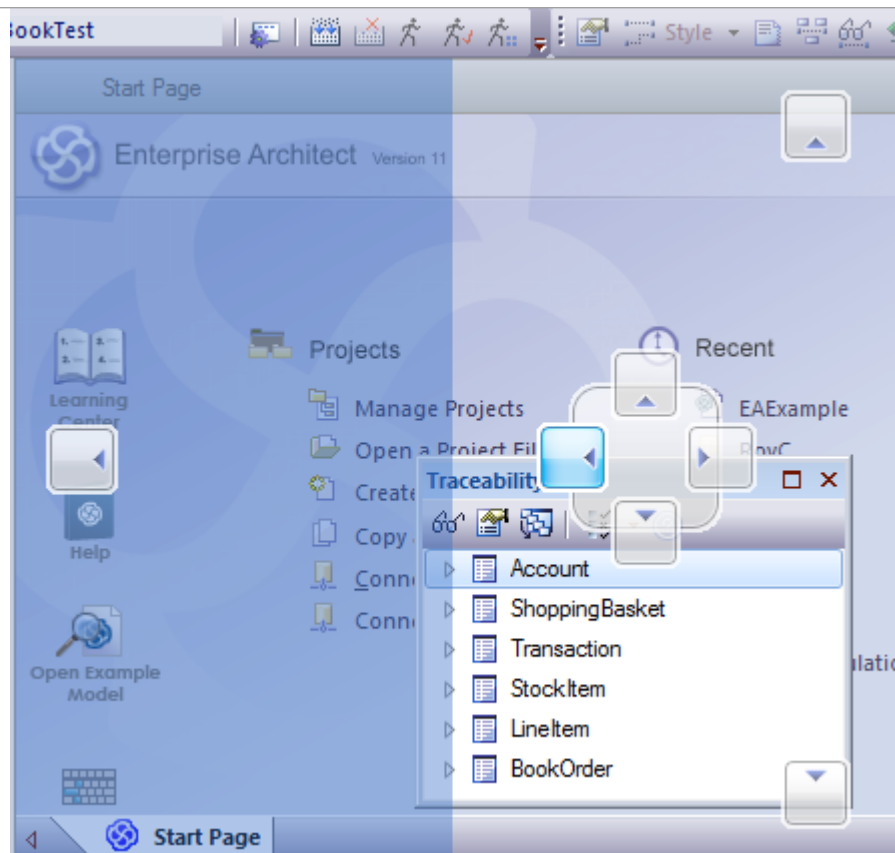
Notice that the window docking is an insert, not an overlay; in the illustration (step 3), the left border of the Start Page is **moved** to sit just under the 'ticked man' icon in the toolbar.

The docking behavior varies depending on whether you have already docked other windows on the screen, whether you use the navigation compass or the compass point icons, and where you drag the docked window before you release the mouse button. If you drag and release the window over:

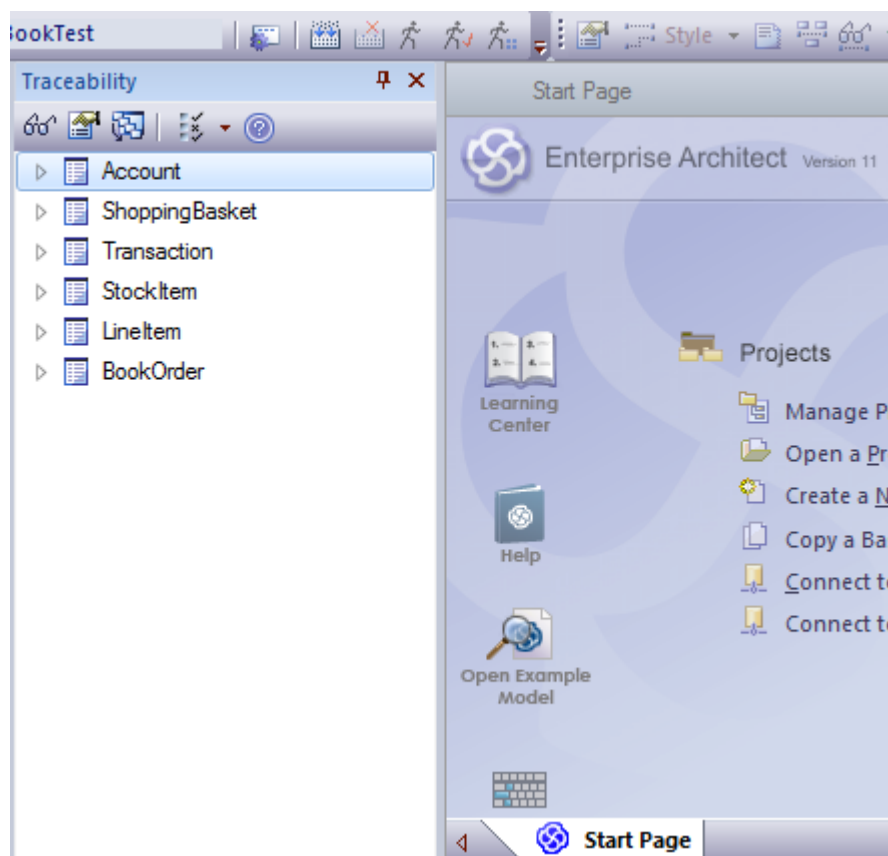
- A point of the navigation compass in the center of the screen, the window sits inside existing docked windows (for example, in the illustration a window released on the bottom, top or left icons of the navigation compass would be docked to the **right** of the Traceability window)
- A separate compass point icon on the edge of the screen, the window is docked on the outside edge of the screen and existing docked windows are pushed inwards
- A point of the navigation compass at the edge of the screen (only when there is already a docked window there) the window is docked within the area occupied by the previously docked window (for example, in the illustration you could dock your new window as the left, right, top or bottom segment of the Traceability window space; the Traceability window itself is reduced in size to accommodate the new docked window, but you can then adjust the margins of the two docked windows to improve readability)
- The center of the navigation compass at the edge of the screen (only when there is already a docked window there) the window is docked as a tab of a window frame; see *Dock Windows into a Frame*

The highlighted area always indicates exactly where the moved window will be docked, so you have an indication of the effect before you release the window.

Step	Action
1	<p>Click on the title bar of the window and start to drag it towards the appropriate edge of the workspace. A set of positioning icons display, consisting of a navigation compass in the body of the application workspace and a compass pointer in the middle of each edge.</p> 
2	<p>Drag the window onto a compass point.</p> <p>The screen display shades the area that the window will fill, once you release the mouse button.</p>



- 3 Release the mouse button to dock the window.



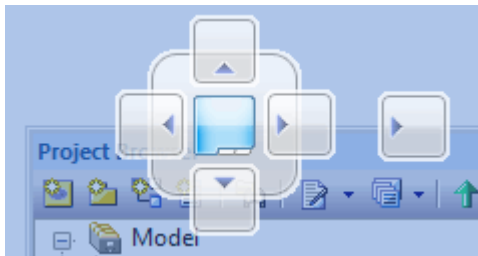


	The docked window initially fills the previously-highlighted space, but you can drag the margins to resize the window, if required.
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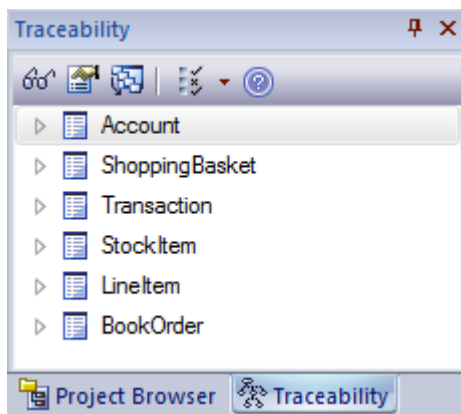
## Dock Windows into a Frame

A docked window does not overlap any other window, so if you are docking several windows you progressively fill up the workspace; however, you can avoid this by combining the docked windows in a single tabbed frame by either:

- Dragging the title bar of each window up to the title bar of the first docked window, or
- Dragging each window over the 'tabbed frame' icon in the middle of the navigation compass, when the compass is over the previously-docked window that you want to combine the dragged window with; when you release the mouse button, the window becomes a tab of the frame



The Project Browser becomes a tab.



You can move and re-dock a frame of windows as if they were a single window.

To separate a window from a tabbed frame, click on the window's tab at the bottom of the frame and drag it away.

## Close Docked Windows

If you do not want to have a docked window open any longer, click on the window header and press Ctrl+F4. This just closes the selected window; if the window is in a tabbed frame, the other windows in the frame remain open.

## Floating Windows

To float a window anywhere on the screen, click on its title bar and drag it to where you want it to sit. The navigation compass displays, but you ignore it in this situation. Floating windows can overlay each other, which is convenient if you want to compare information displayed in two windows. You can drag one window under or over another so that the relevant pieces of information are adjacent, do your check, then move the windows apart again.

## Autohide Windows



If you are using docked windows, you can have them available for use but kept minimized or hidden until you actually need to use them. The windows are represented by tabs in the top, bottom, left or right margins of the work area.



When you move the cursor over the tab, the window displays and you can work within it. As soon as you move the cursor out of the window, it automatically contracts into the margin tab again. This means that you have the maximum work area for performing your main task, with the convenience of still being able to immediately use any of a wide range of other windows.

If you have 'hidden' a tabbed frame of docked windows, the 'open' hidden window is represented by the tab, whilst the others are indicated by an icon. In the illustration, the Project Browser is the open hidden window in the frame containing (continuing downwards) the Tagged Values window, Package Browser and Model Views window. You move the cursor over an icon to expand both the tab and the associated window.

### Autohide a Window or Set of Windows

- To set the displayed window to 'autohide', click on the  button in the top right corner of the window; any other windows in the same frame as the open window are set to 'autohide' as well
- To turn off 'autohide' for a particular window, or set of windows within a frame, click on the  button

### Notes

- You can only autohide docked windows; if you want to autohide a floating window, dock it against a margin first
- When you select an autohidden window, it immediately displays against the nearest work area margin; you can make the autohidden window slide out of and into the margin by selecting the 'Animate Autohide Windows' checkbox on the 'Window Behavior' page of the 'Preferences' dialog ('Start > View > Preferences > General > Window Behavior')

## Code Editors

Enterprise Architect provides a number of editors that you can use across the development environment to maintain scripts, code and templates. Each editor has its own features, but they are all based on a common Code Editor control.

You can have several code editors (or files within a code editor) open at the same time, as separate tabs in the Enterprise Architect central work area (the 'Diagram View'). You can also close the editors individually or all together, leaving views of other types (such as diagrams or Document reports) still open.

### Code Editors

Editor	Detail
Shape Script Editor	When you create a Shape Script to alter the appearance of an element or connector through the use of a stereotype, you create and edit the script using the Shape Script Editor, which provides a number of facilities including Intelli-sense for Shape Script attributes and functions.
Code Generation Template Editor	You use the Code Generation Template Editor to create and edit templates that control the generation of code from your model elements. The facilities include Intelli-sense for a wide range of macros.
Transformation Template Editor	You use the Transformation Template Editor to create and edit templates that control the transformation of model structures from one domain to another (typically a generic domain to a code language specific domain).
Custom SQL Search Filter Editor	The Custom SQL Search Filter Editor is available through the Model Search facility, to define your own SQL searches for locating information in your model.
Database View Editor	The 'Database View editor' is available within the 'View definition' field of a database View element 'Properties' dialog. You create the View definition in SQL, using Intelli-sense for basic SQL keywords and functions.
HTML and CSS Style Editor	You use the HTML and CSS Style Editor to create web style templates from which to generate HTML reports. These templates incorporate a large number of HTML Template Fragments, which you edit to customize the reports for your specific purposes.
Source Code Viewer	You use the Source Code Viewer to both display and edit the source code files that you have generated or imported for an element. The Viewer/Editor is quite adaptable, and you can access it and use it in different ways for different types of source code file.
Script Editor	Enterprise Architect provides a flexible and easy to use scripting capability to create scripts in JavaScript, Microsoft JScript or VBScript for programmatically inspecting and/or modifying elements within the currently open model. You use the Script Editor to create and edit scripts, and to run, debug and stop an open script.

## Other Windows

Most of the standard windows you use in Enterprise Architect have a specific, task-oriented purpose. However, two windows have broader functions.

### Broad-function windows

Window	Detail
System Output Window	This window displays the data that Enterprise Architect generates during each of a range of processes. The data from each type of operation generally has its own window tab.
Web Browser	This view, or window, provides access to internet facilities within your Enterprise Architect work area.

# The System Output Window

The System Output window is used to display information generated by internal Enterprise Architect processes, or by Add-Ins and other third-party tools. The output from each type of operation is generally displayed on its own tab within the window. The System Output window can provide useful information during long-running processes and batch operations; through this window you can, for example:

- Validate information - many validation processes within Enterprise Architect write out their results to this window
- Review progress information during the launch of external processes
- Review command line output from Build and Test scripts
- Check parse errors generated during import of various types of files
- Check Audit information
- Re-dock the Model Search results into a System Output window tab for more convenient reference during various operations

## Access

Ribbon	Start > Explore > Browse > System Output
Keyboard Shortcuts	Ctrl+Shift+8

## Options available on output data

Right-click on an item and select the appropriate context menu option to:

- Copy the selected item to the clipboard
- Copy all items to the clipboard
- Save the output to an external file
- Clear the output from the window
- Rollback selected 'Get All Latest' updates to a version controlled Package

You can also:

- Drag the selected items or text out of the System Output window and onto a diagram to quickly create a named element
- Double-click on model validation errors or parsing errors to display the source of the error
- Switch between tabs to view different categories of information from different tools

## Notes

- (Corporate, Unified and Ultimate editions of Enterprise Architect, with Auditing turned on) the 'Audit History' tab of the System Output window shows a history of changes to any element or connector selected from the:
  - Audit View
  - Package Browser
  - Diagram List
  - Project Browser, or
  - Current diagram



# The Web Browser




The Web Browser provides access within Enterprise Architect to internet facilities such as email, websites and search engines; you define the default home website, search engine and email exchange address on the 'General' page of the 'Preferences' dialog. The Web Browser displays as a tabbed view in the application work area, where the Start Page and Diagram View display.

## Access

Keyboard Shortcuts	Ctrl+Alt+W
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## Options

To access the:

- Email exchange server, click on the  icon in the toolbar; the appropriate email login window displays
- Web search engine (such as Google), click on the  icon in the toolbar; the search engine screen displays
- Home web site, after displaying other web pages, click on the  icon in the toolbar


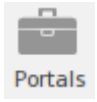
To go directly to another website or email server (your internet security permitting), in the 'Address' field type or select the website http address and click on the Go button.



## Portals

The Portals provide a high level, logical grouping of Enterprise Architect's tools and facilities, to form an entry point into specific features that you might need to apply. They provide access to common tools, custom searches, window layouts and Perspectives. For example, if you want to run searches for particular information in the model, or access the windows that are appropriate to a particular set of actions, you can select a Portal to identify and provide access to those facilities. This makes it easier to set up a work environment within the system, and carry out your tasks in a smooth sequence.

### Access

Ribbon	Show > Portals > <select Portal>
Keyboard Shortcuts	Shift+Alt+P
Other	Start Page : Open a Portal   <select Portal>  Navigator Toolbar :  : 

### The Portals window

The Portals window displays on either the left- or right-hand side of the Enterprise Architect work area. It contains the currently-selected Portal and, under the title bar, a Portal selection button for changing the selected Portal.

Once the Portals window is displayed, it remains visible until you specifically select to hide it, or to auto-hide it as a tab on the side of the display, using the Portals window context menu options (see the *Portals Window Context Menu* table later in this topic).

### Portals

The system currently provides nine Portals, each consisting of a collapsible hierarchy of option groups and options. If a Portal is too long to display the entire contents at once, a scroll button displays at the top and/or bottom of the Portal. Click on these buttons to scroll the Portal contents up or down (or use the scroll wheel on your mouse, or the keyboard arrow keys).



Portal	Description
Perspective	Provides a range of model Patterns from which you can generate model structures for particular areas of work. The Patterns are organized into groups within Perspectives, and presented for selection through the 'Model Patterns' tab of the Model Wizard, and through the 'New Diagram' dialog. The Portal also includes a category for Perspectives that you have created yourself, which provide the Patterns from MDG Technologies you have specified in the Perspective.
Workspace	Provides links to the system-provided workspaces and working sets that you might

	<p>use to lay out the Enterprise Architect work area, and to any working sets and workspaces that you have created yourself. The categories provided are:</p> <ul style="list-style-type: none"> <li>• Customised ('My Workspaces')</li> <li>• Core</li> <li>• Design</li> <li>• Software</li> <li>• Simulation</li> <li>• Construction</li> <li>• BABOK</li> </ul>
Window	<p>Provides links to the Enterprise Architect windows that you might use. The windows are grouped under the areas of:</p> <ul style="list-style-type: none"> <li>• Exploring the model</li> <li>• Properties</li> <li>• Diagrams</li> <li>• Specialized Tools</li> <li>• Trace</li> <li>• Collaborate</li> <li>• Test</li> <li>• Task</li> <li>• Maintenance</li> <li>• Templates</li> </ul>
Status	<p>Provides links to run searches that locate recent activities of various types across the model. The searches are grouped to identify:</p> <ul style="list-style-type: none"> <li>• Recently changed elements, documents and discussions</li> <li>• Recent formal reviews</li> <li>• Recent informal Discussions</li> <li>• Recently active Tasks</li> <li>• Results of recently-run tests</li> <li>• Recently reported and investigated Changes</li> <li>• Recently reported and investigated Defects</li> <li>• Recently reported and investigated Issues</li> </ul>
Extend	<p>Lists the MDG Technologies currently active in your model - such as ArcGIS, NEIM and Eclipse - and for each one provides links to the facilities for working with those technologies within Enterprise Architect.</p>
Execute	<p>Provides a wide range of options that help you to:</p> <ul style="list-style-type: none"> <li>• Perform Execution Analysis on your model - building and running the Analyzer scripts</li> <li>• Record, Profile, Debug and Simulate the execution of your modeled application</li> <li>• Access various windows that display specific aspects of debugging and simulating an application</li> <li>• Create and edit code for your application</li> </ul>
Revisit	<p>Provides links to the working sets, diagrams, files, documents and system windows</p>

	that you recently had in use, and the diagrams that you have open currently.
Guidebook	Provides links to the library of Enterprise Architect User Guides in PDF format. The Portal initially displays with ten categories of document, each of which can be expanded to a list of the PDF documents in that category.
Learning	Provides links to either the web version of the <i>Enterprise Architect User Guide</i> , or the locally-installed Help if you have downloaded that. The Portal also provides links to a number of useful web pages on the Sparx Systems website, such as the Resources, Tutorials, Webinars and Video Demos pages.

## Portals Window Context Menu

Right-click on the Portals Window title bar to display the context menu. You can select the options in this table:

Portal	Description
Dock Left	Docks the Portals window on the left hand side of the work area.
Dock Right	Docks the Portals window on the right hand side of the work area.
Auto Hide	Condenses the Portals window to a tab on the edge of the work area. Mouse-over the tab to re-open the Portals window, move the cursor off the window to return it to a tab.
Hide	Hides - and effectively closes - the Portals window. To re-open the window, select the appropriate option under the 'Show > Portals' ribbon icon or the appropriate icon on the Start page.
Auto Collapse Groups	Automatically collapses the currently-selected group of options when you expand another group.
<list of portals>	If you right-click anywhere in the Portals window other than the window title, the list of Portals displays. Click on a Portal name to change to that one in the window.





## Perspective Portal

The Perspective Portal provides a number of work Perspectives grouped by general work area. Each Perspective filters the modeling windows and dialogs to present only the modeling Patterns you might use in the work defined by the Perspective. When you select a Perspective the Model Wizard displays, showing the 'Model Patterns' tab and providing the model templates that you might use to initially create a model supporting the type of work.

For example, if you select the 'Construction > Kanban' Perspective the Model Wizard presents three Kanban Patterns for one-stage, two-stage and three-stage workflows. As you open or refresh other windows, such as the 'New Diagram' dialog, the objects you can initially select are filtered to provide - in this example - only Patterns for developing Kanban diagrams.

The Perspectives you can select from the Portal, the Patterns they provide, and the facilities for managing Perspectives are described in the *Perspectives* section under 'Modeling Tools | Building Models' in the Help.


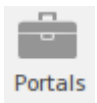

### Access

Ribbon	Show > Portals   Perspective
Keyboard Shortcuts	Shift+Alt+P :  Perspective   Perspective
Other	<p>Start Page   Open a Portal   Perspective</p> <p>Navigator Toolbar :  :  :  Perspective  </p>

# Workspace Portal

The Workspace Portal provides links to apply defined workspaces to your Enterprise Architect user interface.

## Access

Ribbon	Show > Portals > Workspace
Keyboard Shortcuts	Shift+Alt+P : Select Portal   Workspace
Other	<p>Start Page   Open a Portal   Workspace</p> <p>Navigator Toolbar :  :  :  Perspective  </p> <p>Workspace</p>

## Facilities





Category	Options
My Workspaces	This section provides the Workspaces that you have customized for your particular use.
Core	<p>The options in this category apply some of the basic workspaces to your work area. These include:</p> <ul style="list-style-type: none"> <li>• Basic Diagramming</li> <li>• Collaborate</li> <li>• Core Modeling</li> <li>• Default</li> <li>• Explore</li> <li>• Wide View</li> </ul>
Design	<p>The options in this category apply some of the model design workspaces to your work area. These include:</p> <ul style="list-style-type: none"> <li>• Database Modeling</li> <li>• Gap Analysis</li> <li>• Requirements</li> <li>• Schema Design</li> <li>• Trace by Matrix</li> <li>• Use Case Modeling</li> </ul>
Software	<p>The options in this category apply some of the software development workspaces to your work area. These include:</p> <ul style="list-style-type: none"> <li>• Code Editing</li> </ul>

	<ul style="list-style-type: none"><li>• Debug</li><li>• Profile</li><li>• Record</li><li>• Software Engineering</li></ul>
Simulation	<p>The options in this category apply some of the simulation workspaces to your work area. These include:</p> <ul style="list-style-type: none"><li>• BPSim</li><li>• DMN-Sim</li><li>• Simulation</li><li>• SysML-Sim</li></ul>
Construction	<p>The options in this category apply some of the project construction workspaces to your work area. These include:</p> <ul style="list-style-type: none"><li>• Change</li><li>• Maintenance</li><li>• Resource Management</li><li>• Support</li><li>• Task Management</li><li>• Testing</li><li>• Work Items</li></ul>
BABOK Guide	<p>The BABOK Reader option applies the BABOK workspace to your work area.</p>

# Window Portal

Provides links to the Enterprise Architect windows you use to navigate through, develop and manage your models.

## Access

Ribbon	Show > Portals > Window
Keyboard Shortcuts	Shift+Alt+P :  Perspective   Window
Other	Start Page   Open a Portal   Window Navigator Toolbar :  :  :  Perspective   Window

## Facilities

Type	Facilities
Explore	<p>Provides links to display the:</p> <ul style="list-style-type: none"> <li>• Project Browser - if the Project Browser is not currently open, this option opens it on the left of the workspace</li> <li>• Context Browser</li> <li>• Element Browser</li> <li>• Navigator</li> <li>• Resources window</li> <li>• Model Views</li> <li>• Model Search</li> <li>• File Search</li> <li>• System Output window</li> </ul>
Properties	<p>Provides access to these facilities:</p> <ul style="list-style-type: none"> <li>• Properties Window</li> <li>• Notes dialog</li> <li>• Tagged Values window</li> <li>• Summary screen</li> <li>• Document window</li> <li>• Features dialog</li> <li>• Requirements window</li> <li>• Construct screen</li> </ul>
Specialized Tools	Provides access to these facilities:

	<ul style="list-style-type: none"> <li>• Specification Manager</li> <li>• Scenario Builder</li> <li>• Constraints, through the Responsibilities window</li> <li>• Decision Table Editor</li> <li>• Database Builder</li> <li>• Schema Composer</li> </ul>
Diagram	<p>Provides access to these facilities:</p> <ul style="list-style-type: none"> <li>• Diagram Filters</li> <li>• Pan and Zoom window</li> <li>• Diagram Layout tools</li> </ul>
Trace	<p>Provides access to these facilities:</p> <ul style="list-style-type: none"> <li>• The Traceability window</li> <li>• Relationships window</li> <li>• Relationship Matrix</li> <li>• Gap Analysis Matrix</li> </ul>
Collaborate	<p>Provides access to the team communication facilities of:</p> <ul style="list-style-type: none"> <li>• Finding All Reviews</li> <li>• Finding All Discussions</li> <li>• Conducting Reviews</li> <li>• Conduction Discussions</li> <li>• Model Mail</li> <li>• Calendar</li> <li>• Chat</li> <li>• Team Library</li> </ul>
Test	<p>Provides the facilities to create and review Tests of all types supported by Enterprise Architect.</p>
Task	<p>Provides access to these facilities:</p> <ul style="list-style-type: none"> <li>• Project Gantt Chart</li> <li>• Personal Gantt Chart</li> <li>• Resource List</li> </ul>
Maintenance	<p>Provides access to the facilities for recording and managing:</p> <ul style="list-style-type: none"> <li>• Changes</li> <li>• Defects</li> <li>• Issues</li> <li>• Tasks</li> <li>• Events</li> <li>• Decisions</li> <li>• Effort</li> <li>• Risks</li> <li>• Metrics</li> </ul>







Templates	<p>Provides access to the facilities for maintaining:</p> <ul style="list-style-type: none"><li>• Code Engineering Templates</li><li>• DDL Templates</li><li>• Document Templates</li></ul>
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## Status Portal

The Status Portal provides links to searches that extract information on the current status of objects in the model. The searches are grouped to identify:

- Recently created elements, documents and discussions
- Recent posts, discussions and formal reviews
- Results of recently-run tests
- Recently reported and investigated Defects
- Recently reported and investigated Issues
- Recently started, finished or active tasks

### Access

Ribbon	Show > Portals > Status
Keyboard Shortcuts	Shift+Alt+P :  Perspective   Status
Other	Start Page   Open a Portal   Status  :  :  Perspective > Status

### Facilities





Recent Changes	<p>These options execute searches for recent changes to:</p> <ul style="list-style-type: none"> <li>• Elements</li> <li>• Discussions</li> <li>• Linked Documents</li> <li>• Diagrams</li> </ul>
Reviews	<p>These options help you to:</p> <ul style="list-style-type: none"> <li>• Take part in a review</li> <li>• Manage the current reviews</li> <li>• Run a report to find open reviews</li> <li>• Run a report to find active reviews</li> </ul>
Discussions	<p>These options help you to</p> <ul style="list-style-type: none"> <li>• Take part in a discussion</li> <li>• Manage the current discussions</li> </ul>

	<ul style="list-style-type: none"><li>• Run a report to find recently active discussions</li><li>• Take part in a Chat</li><li>• Review previously active chats</li></ul>
Tasks	<p>These options help you to search for tasks that have a specific status:</p> <ul style="list-style-type: none"><li>• Recently Finished</li><li>• Starting Today</li><li>• Overdue</li><li>• Ending Today</li><li>• Active</li><li>• 30 Day Summary</li></ul>
Tests	<p>These options help you to search for tests that have a specific status:</p> <ul style="list-style-type: none"><li>• Recent Results</li><li>• Recent Failures</li><li>• Recent Passes</li><li>• Recent Deferrals</li><li>• Recent Modified Elements</li><li>• Not Run</li><li>• Not Checked</li></ul>
Changes	<p>These options help you to search for changes that have a specific status:</p> <ul style="list-style-type: none"><li>• New</li><li>• Verified</li><li>• Recently Reported</li><li>• Recently Resolved</li><li>• Unresolved Issues</li></ul>
Defects	<p>These options help you to search for defects that have a specific status:</p> <ul style="list-style-type: none"><li>• New</li><li>• Verified</li><li>• Recently Reported</li><li>• Recently Resolved</li><li>• Unresolved Issues</li></ul>
Issues	<p>These options help you to search for issues that have a specific status:</p> <ul style="list-style-type: none"><li>• New</li><li>• Verified</li><li>• Recently Reported</li><li>• Recently Resolved</li><li>• Unresolved Issues</li></ul>

## Extend Portal

The Extend Portal lists the MDG Technologies currently active in your model, and for each one provides links to the facilities for working with those technologies within Enterprise Architect.

### Access

Ribbon	Show > Portals > Extend
Keyboard Shortcuts	Shift+Alt+P :  Perspective   Extend
Other	Start Page   Open a Portal   Extend Navigator Toolbar :  :  Portals :  Perspective   Extend

### Facilities

The options provided in this Portal depend on what Add-Ins and MDG Technologies are loaded and active for the model, and what operations are supported between the technologies and Enterprise Architect.





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## Execute Portal

The Execute Portal provides links to the facilities of the system that help you to:

- Perform Execution Analysis on your model - building and running the Analyzer scripts
- Record, Profile, Debug and Simulate the execution of your modeled application
- Access various windows that display specific aspects of debugging an application
- Run a number of searches for information on recent Simulations

### Access

Ribbon	Show > Portals > Execute
Keyboard Shortcuts	Shift+Alt+P :  Perspective > Execute
Other	Start Page   Open a Portal   Execute  :  :  Perspective > Execute

### Facilities

Category	Options
Execution Analyzer	<p>These options provide the facilities to create and execute scripts for building, running and testing an application. Select:</p> <ul style="list-style-type: none"> <li>• Open Source File - to display the 'Open Source File' browser from which you select a source file to view, and then display the file content in the Code Editor</li> <li>• Edit Build Scripts - to display the Execution Analyzer window, from which you can select a Build Script to edit</li> <li>• Merge - to run the Merge script associated with the selected Package</li> <li>• Build - to build the selected Package according to the active Build Script</li> <li>• Deploy - to run the deployment script associated with the selected Package</li> <li>• Run - to run the executable script associated with the selected Package</li> <li>• Test - to run the testing script associated with the selected Package</li> </ul>
Analyzer	<p>Select from these options to open the windows from which an Analysis session starts. Select:</p> <ul style="list-style-type: none"> <li>• Debugger - to open the Debug window</li> <li>• Profiler - to open the Profiler window</li> <li>• Recorder to open the Record &amp; Analyze window</li> <li>• Testpoints to open the Testpoints window</li> </ul>




Simulator	<p>The options in this section open a number of windows that you might use in a Simulation session. Select:</p> <ul style="list-style-type: none"> <li>• Simulator to open the Simulation window</li> <li>• Triggers and Events to open the Simulation Events window</li> <li>• Breakpoints - to open the Breakpoints &amp; Markers window</li> <li>• Local Variables - to open the Locals window</li> <li>• Call Stack - to open the Call Stack window</li> <li>• BPSim to open the Configure BPSim window</li> <li>• SysMLSim to open the Configure SysML Simulation window</li> </ul>
Simulator Control	<p>The options in this section help you to quickly control a simulation process. Select:</p> <ul style="list-style-type: none"> <li>• Start Simulation - to start debugging</li> <li>• Step - to step over the next line of code after a break</li> <li>• Step In - to step into a function call in the code</li> <li>• Step Out - to step out of a function call</li> <li>• Pause - to pause simulation</li> <li>• Stop - to stop the simulation altogether</li> </ul>
Coding	<p>The options provided in this section help you to create, edit and debug code.</p> <ul style="list-style-type: none"> <li>• Language Grammar Editor - displays the Grammar Editor for writing and editing a grammar for code imported in a new programming language</li> <li>• Scripting - displays the Scripting window at the 'Scripts' tab, for creating scripts within script groups</li> <li>• Source Code Editor - displays the Source Code Editor, which helps you to view, edit and maintain your source code directly inside Enterprise Architect</li> <li>• XSLT Editor/Debugger - displays both the XSLT Debugger screen and the System Output window at the XSLT Transformation tab, for converting an input document into XML or other document types using an XSLT Stylesheet; the transformation is modeled in an XML Transform diagram, from which you can debug and/or execute the stylesheet</li> </ul>
Debugger	<p>The options in this section open a number of windows that you might use in a debugging session. Select:</p> <ul style="list-style-type: none"> <li>• Breakpoints - to open the Breakpoints &amp; Markers window</li> <li>• Call Stack - to open the Call Stack window</li> <li>• Local Variables - to open the Locals window</li> <li>• Memory - to open the Memory Viewer window</li> <li>• Modules - to open the Modules window</li> <li>• Watches - to open the Watches window</li> <li>• Object Workbench - to display the 'Object Workbench' dialog</li> <li>• Debugging Perspective - to display the set of debug windows, dialogs, toolbars and menus that you might use in a debugging session</li> </ul>
Debug Control	<p>The options in this section help you to quickly debug a running process or application (through a debug script). Select:</p> <ul style="list-style-type: none"> <li>• Debug Run - to start debugging</li> <li>• Step - to step over the next line of code after a break</li> <li>• Step In - to step into a function call in the code</li> </ul>

	<ul style="list-style-type: none"><li>• Step Out - to step out of a function call</li><li>• Pause - to pause debugging</li><li>• Stop - to stop the debugging session altogether</li></ul>
Record	<p>The options in this section help you to set up, start, record and analyze the execution of the application code developed from your model. Select:</p> <ul style="list-style-type: none"><li>• 'Apply Record Layout' - to open the windows and dialogs that you would use in performing Execution Analysis on your model</li><li>• 'Recording Window' - to open the Record &amp; Analyze window to record the analysis of an application</li><li>• 'Start Recording' - to start a manual recording of the current thread during a debug session, managing it using the 'Step...' functions</li><li>• 'Stop Recording' - to stop the current recording session</li><li>• 'Auto Record Thread' - to begin recording and not stop until either the program ends, you stop the debugger or you click on the 'Stop' icon</li><li>• 'Toggle Display of Execution Point' - to toggle between highlighting the execution point and not doing so</li><li>• 'Create Sequence Diagram' - to generate a Sequence diagram from the recording trace</li></ul>
Profile	<p>The two options in this section are to quickly set up a Profiling session on your application. Select:</p> <ul style="list-style-type: none"><li>• Apply Profile Layout - to display all windows and dialogs that you might use in profiling the execution of your application</li><li>• Show Profiler Window - to display the Profiler window only</li></ul>

## Revisit Portal

The Revisit Portal provides links to the diagrams and system windows that you currently have open, and the documents, windows, diagrams and source files that you have recently opened and then closed again.

### Access

Ribbon	Show > Portals > Revisit
Keyboard Shortcuts	Shift+Alt+P :  Perspective > Revisit
Other	Start Page   Open a Portal   Revisit Navigator Toolbar :  :  Perspective > Revisit

### Facilities

Category	Options
Working Sets	This category lists the working sets that you have applied recently. If you click on a set name, the windows and dialogs defined in that set are reapplied to your work area.
Current Diagrams	This category lists the diagrams that you currently have open. When you click on a diagram name, the focus changes to the selected diagram.
Recent Diagrams	This category list the diagrams that you have opened and closed during the current work session. You can click on a diagram name to re-open that diagram and resume work on it.
Documents	This category lists the linked documents that you have opened recently. If you click on a document name, the document re-opens.
Recent Windows	This category lists the windows that you have opened and closed during the current work session. If you click on a window name, the window re-opens.
Recent Files	This category lists the source files that you have opened and closed during the current work session. You can click on a file name to re-open that file and resume work on it.





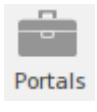

## Guidebook Portal

The Guidebook Portal provides access to a library of PDF documents held on the Sparx Systems website. These documents discuss specific areas of Enterprise Architect's functionality and use. The documents are grouped according to the area of work they support, namely:

- Basics
- Repository
- Modeling
- Domains
- Guides (for Business Analysis, Business Modeling and Enterprise Architecture)
- Project Management
- Publishing
- Simulation
- Execution
- Automation

To open a document, double-click on the document name.

### Access


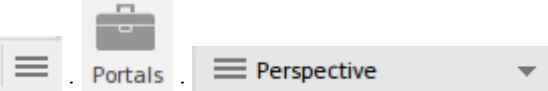



Ribbon	Show > Portals > Guidebook
Keyboard Shortcuts	Shift+Alt+P :  Perspective > Guidebook
Other	<p>Start Page   Open a Portal   Guidebook</p> <p>Navigator Toolbar :  :  Portals :  Perspective &gt;</p> <p>Guidebook</p>

## Learning Portal

The Learning Portal provides links to a number of useful Help pages or other web pages on the Sparx Systems website, to present topical information quickly. The information is displayed through the internal Web Browser, in the center of the work area.

The options are organized in a sequence, giving very specific information on a narrow subject such as keyboard shortcuts through increasingly broad discussions of facilities, features and concepts.

### Access

Ribbon	Show > Portals > Learning
Keyboard Shortcuts	Shift+Alt+P :  Perspective > Learning
Other	Start Page   Open a Portal   Learning  Navigator Toolbar :  :  :  Perspective > Learning

### Facilities

Category	Options
Quick Reference	The 'Quick Reference' option provides a set of Help topics that give immediate information on some of the collections of tools of Enterprise Architect, such as shortcut keys or the ribbons.
Help	The options in this group access the top-level topic from each chapter of the Help. Once you have displayed a top-level topic, you can select subordinate topics for more detailed information on a subject, or return to the Index to open a different chapter.
Special Topics	These topics describe specific features and facilities of Enterprise Architect, to provide a direct and focused discussion of a facility such as Kanban Diagrams or Roadmaps.
Guides	These topics discuss broader subject areas and work concepts, such as Enterprise Architecture, Business Analysis and Business Modeling.
Webinars	Select the 'Webinars' option to open the 'Webinar Registration' page of the Sparx Systems website, which: <ul style="list-style-type: none"> <li>• Describes upcoming webinars (real-time seminars hosted via the internet) scheduled by Sparx Systems, and</li> <li>• Provides links to the registration form, for you to register your participation in a webinar</li> </ul>

About	<p>The options in this section provide access to a range of useful Sparx Systems web pages, which contain information on and demonstrations of Enterprise Architect and other Sparx Systems facilities.</p> <ul style="list-style-type: none"> <li>• 'Tutorials' - to open the 'Tutorials' page of the Sparx Systems website, which provides tutorials on general UML modeling and doing work with Enterprise Architect</li> <li>• 'Resources' - to open the 'Help, Tutorials &amp; White papers' page and the 'Resources' page of the Sparx Systems website, providing access to a wide range of Enterprise Architect and UML tutorials, demonstrations, examples, base files, Add-Ins and general information</li> <li>• 'MDG Technologies' - to open the 'MDG Products' page of the Sparx Systems website, which provides a brief description of, and the download links for, each supported MDG Add-In product for a selected edition of Enterprise Architect - select your installed edition from the drop-down list Enterprise Architect editions such as Unified and Ultimate will automatically register certain Add-In products; however these Add-Ins are not included in the default Enterprise Architect installation and must be downloaded separately</li> <li>• '3rd Party Extensions' - to open the 'Third Party Extensions' page of the Sparx Systems website, which provides listings of additional Enterprise Architect Add-Ins developed by partners and other members of the Enterprise Architect community</li> <li>• 'Newsletter' - to open the 'Newsletters' page of the Sparx Systems website, which provides links to view newsletters previously released by Sparx Systems, and to subscribe to receive future newsletters as they are released</li> <li>• 'Release History' - to open the 'Recent Features' page of the Sparx Systems website, which provides a full history of changes in the most recent builds of Enterprise Architect You can also open the release history and investigate the features of earlier releases of the system, going back to version 1.1.3, the very first commercial release</li> </ul>
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## Keyboard Shortcuts

You can display the Enterprise Architect dialogs, windows and views, or initiate processes, using menu options and Toolbar icons. In many cases, you can also access these facilities by pressing individual keyboard keys or combinations of keys, as shortcuts. This table lists the default keyboard shortcut for each of the functions. You can also display the key combinations on the 'Help Keyboard' dialog.

The shortcuts described here are operations on the model. When a diagram is open, you can use special quick-keys that make navigating and editing the diagram simple and fast. These quick-keys are described in the *Diagram Shortcuts* Help topic.

### Access

Ribbon	Start > Help > Help > Open Keyboard Accelerator Map
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### Notes

- There are additional shortcuts using the keyboard and mouse in combination
- If necessary, you can change the keyboard shortcuts using the 'Keyboard' tab of the 'Customize' dialog

### Opening Projects

Shortcut	Operation
Ctrl+N	Create a new Enterprise Architect project.
Ctrl+O	Open an Enterprise Architect project.
Ctrl+Shift+F11	Reload the current project.

### Adding Objects to the Project

Shortcut	Operation
Ctrl+Shift+M	Add a new model to the project, using the Model Wizard.
Ctrl+Insert	Add a new diagram to a Package.
Ctrl+M	Add a new element to a Package.
Shift+F3 or Ctrl+click	Create a new element of the same type as the last.

Ctrl+Shift+T	Add a Tagged Value to an element.
Ctrl+Shift+F9	Add an attribute to an element.
Ctrl+Shift+F10	Add an operation to an element.
Ctrl+F11	Add other types of feature to an element.
Insert key	Insert a new feature after the current selection.

## Locating Information

Shortcut	Operation
Ctrl+F, Ctrl+Alt+A	Search for items in the project (search in the model).
Ctrl+Shift+F	Opens the Find in Files window at the 'Find File' tab, which you use as a File System Explorer to quickly locate specific files.
Ctrl+Shift+Alt+F	Search files for data names and structures.
Alt+G	Locate the selected element in the Project Browser.
Shift+Alt+G	Locate a selected object in the Project Browser.
Ctrl+U	Locate diagrams in which the element is used.

## Copying and Pasting

Ctrl+Space	Add a single element to the clipboard list.
Ctrl+C	Copy text, or element ID for pasting an element on a diagram as a link.
Ctrl+Shift+C	Copy an element, multiple elements or a Package plus any underlying structure to the clipboard for duplication in a target Package.
Ctrl+X	Cut the selected text.
Ctrl+V	Paste text.

## Viewing Information in Windows

Shortcut	Operation
Alt+0	Display the Project Browser.
Alt+1 or Ctrl+2	View the Properties window.
Alt+2	View the Project Glossary.
Alt+4	View the Maintenance window, in Default mode.
Alt+5	Display the Diagram Toolbox.
Alt+6	Open the Resources window.
Alt+9	View the Element Browser.
Alt+Enter	Display the element 'Properties' dialog at the 'General' tab.
Alt+\	Move focus to the Diagram View from a docked window.
Enter key	View the element 'Properties' dialog (when the element is selected).
Ctrl+Shift+1 or Ctrl+3	View the Notes window.
Ctrl+Shift+2	View the element Relationships window.
Ctrl+Shift+3	Display the Responsibilities window.
Ctrl+Shift+4	View the Traceability window.
Ctrl+Shift+5	Display Model Views.
Ctrl+Shift+6	View the Tagged Values window.
Ctrl+Shift+7	View the Resource Allocation window.
Ctrl+Shift+8	View the System Output window.
Ctrl+Alt+R	View the Package Browser (Package Contents).
Ctrl+Alt+U	Open the Team Library.
Ctrl+Alt+W	View the Web Browser.
F9	Display the Features window at the 'Attributes' tab.
F10	Display the Features window at the 'Operations' tab.
Ctrl+Shift+0	Set focus to the current window.

Shift+Alt+Enter	Make the current view occupy the full screen space.
Ctrl+F4	Close the current window.
Ctrl+Shift+F4	Autohide the current window.

## Generating Documentation

Shortcut	Operation
F8	Generate documents and reports.
Shift+F8	Generate a Web Report in HTML.
Ctrl+Shift+F8	Generate a 'Diagrams Only' report.

## Deleting Objects from the Project

Shortcut	Operation
Ctrl+Delete	Delete selected element(s) from the model (from the Project Browser and any diagram in which the element occurs).
Ctrl+Shift+Delete	Delete the selected feature from the model.

## Checking Spelling

Shortcut	Operation
Ctrl+Shift+F7	Spell check the current Package.
Ctrl+F7	Spell check the model.

## Performing Code Engineering

Shortcut	Operation
Ctrl+Shift+P	Edit code generation templates.

Alt+7	Open the Source Code window.
Ctrl+Alt+Y	Open a source directory.
Ctrl+Alt+O	Open a source file.
Ctrl+Shift+U	Import a source directory.
Ctrl+Alt+K	Generate Package source code.
Ctrl+Alt+M	Synchronize Package contents.
F11	Generate code on a selected element.
F7	Synchronize the current element.
Shift+F11	Batch generate selected elements.
Ctrl+R	Batch synchronize selected elements.
Ctrl+E or F12	View source code in the default external editor.
Ctrl+Alt+H	Edit Transformation templates.
Ctrl+H or Ctrl+Alt+F	Transform selected elements.
Ctrl+Shift+H	Transform the current Package

## Exchanging Data

Shortcut	Operation
Shift+F9	Check project data integrity.
Ctrl+Alt+V	Validate the current Package.
Ctrl+Alt+I	Import a Package from XMI.
Ctrl+Alt+E	Export a Package to XMI.
Ctrl+Alt+C	Import and export to data CSV files.

## Performing Visual Execution Analysis

Shortcut	Operation
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Ctrl+Shift+J	Create a Workbench Instance of a Class.
Shift+F12	Manage Analyzer Scripts on the Execution Analyzer window.
Ctrl+Shift+F12	Create a Build Script.
Ctrl+Alt+N	Create a Run Script.
Ctrl+Alt+T	Create a Test Script.
Ctrl+Shift+Alt+F12	Create a Deployment script.
Alt+8	Open the Debugger window.
F6	Start a Debug session.
Shift+F6	Step Into a function call.
Alt+F6	Step Over a function call.
Ctrl+F6	Step Out of a function call.
Ctrl+Alt+F6	Stop the debug session.

## Other Operations

Shortcut	Operation
Ctrl+Alt+B	Manage Baselines.
Ctrl+Alt+P	Configure Package Control.
Ctrl+Shift+L	Open a 'Lock <item>' dialog for the selected Package, diagram or element.
F5	Refresh the selected Package in the Project Browser.
Ctrl+Alt+D	Create a Linked Document on an element.
Ctrl+Shift+Y	Specify which element features are visible on a diagram.
Ctrl+Shift+B	Manage structural (embedded) elements.
Ctrl+I	Set an element's parent or implement interface(s).
Ctrl+Shift+O	Override inherited features.
Ctrl+J	Set cross references to other elements and diagrams.

Ctrl+Shift+E or F4	Configure an element's default appearance.
Ctrl+Shift+W	Select an alternative image for an element.
F2	Edit the selected property value.
Ctrl+F9	Configure system options.

# Keyboard-Mouse Shortcuts

When you work on an aspect of your model within a diagram, there are a number of operations you can perform quickly using a combination of keyboard keys and the computer mouse.

## Keyboard/mouse combinations

Action	Shortcut
Create an element of the same type as was last created on the diagram.	Ctrl+click
Display the element 'Properties' dialog for the element shown in the scenario 'Context References' tab.	Ctrl+click
Select a number of individual objects for an operation.	Ctrl+click each object
Select a range of objects for an operation.	Shift+click on the first and last object in the range
Move the selected elements along the horizontal axis or vertical axis.	Shift+hold left mouse button and drag
Create a bend in and change the direction of the connector line.	Shift+hold left mouse button and drag
Move the selected elements in any direction, including diagonally.	Alt+hold left mouse button and drag
Zoom in to or zoom out of the diagram.	Ctrl+ mouse scroll wheel
Pan the diagram horizontally or vertically.	Ctrl+Shift+hold left mouse button and drag

## Diagram Shortcuts

When you have a diagram open, you can use a set of single or combination keyboard keys to move between, select and operate on the elements and connectors within the diagram.

### Selecting and Marking Elements

Quick Key	Operation
Enter, comma (,) or period (.)	When no element is currently selected, select the element nearest the top left corner of the diagram or of the section of diagram in view.
. (period)	When an element is selected, change selection to the nearest child element closest to the top left of the selected parent element, on the diagram.
, (comma)	When an element is selected, change selection to the parent element of the selected child element, on the diagram
Arrow keys	Select the next element on the diagram above, below, to the left or to the right of the current element; when moving left or right, the selection tends to be upwards rather than downwards.
S	Keep an element selected as you move to another element (using the keyboard arrow keys), so that you can select multiple elements using the keyboard.
Q, F (element name) or F2 (property)	If no element property is selected, highlight the element name for in-place editing. If you have selected an element property, enable it for in-place editing.
F	Select the first editable feature of the item in focus. This is generally the element name but if you select a Tagged Value that has multiple system-defined values (such as the SearchName tag) you can cycle through the list of values to obtain the correct one.
Shift+Space	Bookmark the current element with a red marker.
? or /	Toggle selection between the current (source) element and its connector.

### Inserting Objects, and Cutting and Pasting

Quick Key	Operation
Shift+Insert	Paste element(s) from the clipboard as links to the original element(s).
Insert or Spacebar	Displays the 'Toolbox Shortcut' menu, from which you can select to create and add an element of one of a wide range of types.
Ctrl+Shift+V	Paste an element as new.

Ctrl+Shift+Insert	Paste an element into the diagram as a metafile image held on the clipboard.
F3	Create a new connector of the same type as the last.
W	Add a way-point to the current connector. (This does not act on every line style.)
Ctrl+Shift+I	Set the visibility of connectors.
Ctrl+X	Cut the selected element from a diagram.

## Positioning Elements

Quick Key	Operation
I	Toggle snap-to-grid on and off on the diagram.
Alt+Z	Automatically size selected elements.
Alt+-	Space elements evenly, horizontally.
Alt+=	Space elements evenly, vertically.
Shift+arrow keys	Move elements by small increments.
Ctrl+arrow keys	Resize a selected element by small increments.
Ctrl+Alt+Down	Align the bottom edges of selected elements.
Ctrl+Alt+Up	Align the top edges of selected elements.
Ctrl+Alt+Left	Align the left boundaries of selected elements.
Ctrl+Alt+Right	Align the right boundaries of selected elements.

## Saving and Undoing Changes

Quick Key	Operation
Ctrl+Z	Undo a change.
Ctrl+Y	Redo an undone change.
Ctrl+S	Save changes to a diagram.

Ctrl+T	Save an image to file.
Ctrl+B	Save an image to the clipboard.

## Deletions

Quick Key	Operation
Delete key or Ctrl+D	Delete selected element(s) in a diagram, but not from the model.
Ctrl+Delete	Delete selected element(s) in the diagram from the diagram and from the model.

## Displaying Details in Other Windows

Quick Key	Operation
N	Open and/or shift focus to the Notes window.
P	Open and/or shift focus to the Properties window.
R	Open and/or shift focus to the Relationships window.
C	Display the Construct window
E	Display the Responsibilities window
V	Display the Tagged Values window
Z	If the Inline Specification Manager window is open, set focus to that window.
O	When you have selected an operation, open the Features window at the 'Operations' tab.
A	When you have selected an attribute, open the Features window at the 'Attributes' tab.
G	Display the 'Generate Code' dialog for the selected element, to generate code from it.
Y	Synchronize the code generated from the selected element with the element content.
M	Display the 'New Element' dialog to create a new element.
Ctrl+Shift+N	View the Pan and Zoom window.

## Displaying Portals Windows

Quick Key	Operation
1	Display the <b>Perspective</b> portal
2	Display the <b>Workspace</b> portal
3	Display the <b>Window</b> portal
4	Display the <b>Status</b> portal
5	Display the <b>Extend</b> portal
6	Display the <b>Execute</b> portal
7	Display the <b>Revisit</b> portal
8	Display the <b>Guidebook</b> portal
9	Display the <b>Learning</b> portal

## Printing a Diagram

Quick Key	Operation
Ctrl+P	Print the active diagram.

## Customization

Enterprise Architect has a standard style and appearance, which you can customize to suit your own work environment. Several facilities are available for customizing:

- The means of issuing commands to the system - such as ribbons, toolbars and keyboard keys - and the commands themselves
- The visual style and color of the user interface
- The windows you want to display together on the screen, and their position on the screen (the 'Workspace Layout')

On occasion, you might want to use Enterprise Architect for two distinct types of operation at the same time. You can do this by storing registry settings - such as window layouts - to a different path in the registry, by adding this command line argument when you run Enterprise Architect:

`/regkey:<regkeyname>`

You can also configure a wide range of local options and specific settings for using Enterprise Architect on your workstation, through the 'Preferences' dialog. These options apply to all models that you work in using Enterprise Architect on your workstation.

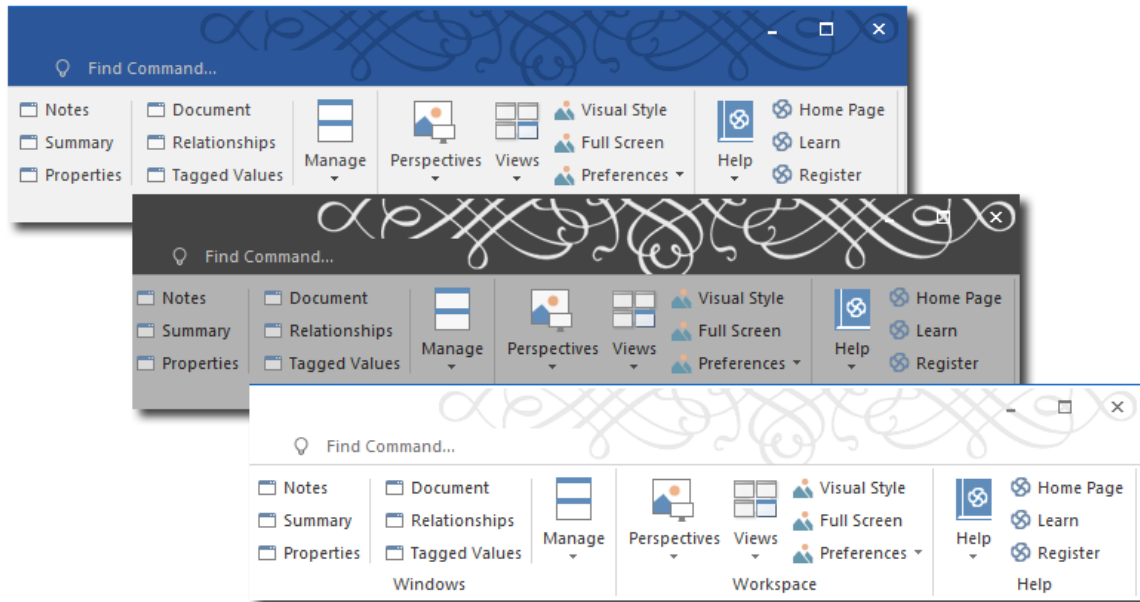


## Visual Styles

It is possible to change the overall style and color of the Enterprise Architect user interface to match the standard styles (or themes) of a number of Microsoft Office and Visual Studio product releases. The styles are applied uniformly across all displays, dialogs, windows, views and ribbons.

To test the style that you are selecting, simply click on the Apply button.

This image illustrates the 'Microsoft Office 2016'® style, using different themes and accent colors.



## Access

Ribbon	Start > View > Visual Style > Visual Style
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## Reset the style of the user interface

Define the visual style you want to use, on the 'Application Look' dialog.

Option	Action
(top field)	Click on the drop-down arrow and select the application style you want to apply.
Theme	For certain application styles, you can also apply a color theme. If this field is enabled, click on the drop-down arrow and select the required theme color or tone.
Accent Color	For certain application styles, you can also change the accent color for messages and highlights. If this field is enabled, click on the drop-down arrow and select the required accent color.

Code Editor	<p>Click on the drop-down arrow and select an option to apply, within the code editor views:</p> <ul style="list-style-type: none"> <li>• The automatic default background color of the code panel for the application style</li> <li>• A dark background for the code panel, or</li> <li>• A light background for the code panel</li> </ul> <p>You can also re-set the dark and light backgrounds on the 'Editor Language Properties' dialog.</p>
Diagram	<p>Defaults to the diagram theme currently set in the 'Preferences' dialog.</p> <p>If you want to apply a different diagram theme, click on the drop-down arrow and select the required theme.</p>
Workspace	<p>Many of the workspace layouts have a left orientation or a right orientation, most easily observable in the side of the screen that the Project Browser displays on.</p> <p>You can use this 'Workspace Orientation' field to specify the orientation you prefer - click on the drop-down arrow and select either 'Left' or 'Right' to automatically position the Project Browser and related displays in your preferred workspace on the corresponding side of the screen.</p>
Default Note Zoom	<p>Click on the drop-down arrow and select the percentage zoom or magnification (from 90% up to 150%) to apply to the text in the Element Notes window and any text field that has the Notes toolbar at the top.</p>
Show Menu Icons	<p>Select this checkbox to display icons next to the menu options (where they have been assigned).</p> <p>Deselect the checkbox to hide the icons and show simple lists of text options.</p>
Main View Tabs use Caption style	<p>Select this checkbox to display the icons and names of the main view tabs in a larger format.</p>
Main View Tabs at bottom (restart)	<p>When a main view has tabs, by default the tab names display at the top of the view.</p> <p>If you prefer to display the tab names along the bottom of the view, select this checkbox.</p> <p>The change does not take effect until you shut down and restart Enterprise Architect.</p>
Property Sheets use Tree style	<p>By default 'Properties' dialogs and various other screens present sections of data on tabs.</p> <p>If you prefer to display the sections of data on dialog pages, where you choose the pages from a tree or hierarchy on the left of the dialog, select this checkbox.</p>
Use Property List for Elements	<p>By default element 'Properties' dialogs show the main properties as a series of fields on the right of the dialog.</p> <p>If you prefer to display the properties as a simple list of names and editable values, select this checkbox.</p>
Prefer Property dialogs	<p>When this option is selected, double-clicking on the editable Features of an object in a diagram displays the 'Features' dialog. If the option is not selected, double-clicking on an object opens the Features window (if it is not already open).</p>
Increase Note Paragraph	<p>Increases the paragraph spacing from the default, in all new text in the Element</p>

Spacing	<p>Notes window and all text fields with the Notes toolbar at the top. The change is applied to all paragraph styles, including bullet and number lists.</p> <p>The paragraph spacing is increased in existing text when you open and close a dialog containing that text.</p> <p>When you deselect the option, all new Notes text reverts to the default spacing.</p>
Show Tips in Status Bar (restart)	<p>Displays the tool-tips for ribbon options, context menus, diagram objects and toolboxes in the Status Bar at the foot of the screen. This option defaults to selected.</p> <p>If you prefer to show the tooltip floating near the moused-over object, clear the checkbox. You must restart Enterprise Architect to apply the selection.</p>
OK	Click on this button to save and apply the changes, and close the dialog.
Cancel	Click on this button to cancel the changes and close the dialog.
Apply	<p>Click on this button to apply the changes but keep the dialog open for further editing.</p> <p>If a change takes immediate effect, you can see it on any open windows and then, if you prefer something different, change the setting.</p> <p>If you click on the Apply button and the Cancel button, the changes still take effect.</p>

## Customize Dialog

It is possible to customize the Enterprise Architect toolbar and keyboard commands and how they are displayed and made available to you, tailoring the user interface to suit your work methods and environment. You can also define a number of external applications that you can activate from the 'Tools' menu. You perform these tasks using the 'Customize' dialog.

### Access

Ribbon	Start > View > Visual Style > Customize
Other	At the far right of any toolbar, click on the drop-down arrow and on the 'Add or Remove buttons   Customize' option

### Notes

- If a documented toolbar icon, keyboard combination or menu facility does not appear to be available, select the appropriate tab and click on the Reset button or Reset All button to restore the toolbar, menu or key settings to the defaults; however, this also removes any customized icons, options or combinations you might have set, because it is possible that the customization itself has displaced or affected the default setting

## Customize Commands

The Enterprise Architect toolbars provide a wide range of functions, some of which are useful in several different contexts. You might find it more convenient to have a function command available either from a different toolbar to the one it is currently set in, or from more than one toolbar. You can customize which toolbar a command is available from by generating a button or icon for the command on either another existing toolbar or a new toolbar that you create for this purpose. Conversely, you might remove a command from its current toolbar, to simplify the selection of tools from that toolbar.

### Access

Ribbon	Start > View > Visual Style > Customize > Commands
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## Manage Toolbar Commands

Task	Action
Add Command To Toolbar	<p>Also display the appropriate toolbar, using:</p> <ul style="list-style-type: none"> <li>'Show &gt; Portals &gt; Show Toolbar &gt; &lt;toolbar name&gt;</li> </ul> <p>The toolbar icons are then highlighted with a dark border as you select them.</p> <p>On the 'Commands' tab:</p> <ol style="list-style-type: none"> <li>Click on the appropriate command category in the 'Categories:' panel.</li> <li>Click on the command you need from the list in the 'Commands:' panel.</li> <li>Drag the command onto the toolbar; it is immediately placed in the toolbar at the cursor position.</li> <li>Add any further commands you want.</li> <li>Put the icons in the order you prefer, by dragging each icon into position.</li> <li>Click on the Close button to close the 'Customize' dialog.</li> <li>If necessary, resize the toolbar or drag it back into the top of the screen.</li> </ol> <p>If the command has an associated icon, the icon displays in the toolbar; otherwise, the command name displays.</p>
Delete Command from Toolbar	<p>While the 'Customize' dialog is displayed, right-click on the command icon or text in the toolbar, and select the 'Delete' option. The command icon is immediately removed from the toolbar.</p> <p>The context menu does not display if the 'Customize' dialog is closed.</p>
Change or assign icon for command	<p>All commands listed in the 'Customize' dialog have a text label, and many have associated icons, either system-defined (default) or user-defined. If the command has an icon, you can select to represent the command in the toolbar by:</p> <ul style="list-style-type: none"> <li>The icon</li> <li>The text</li> <li>Both together</li> </ul> <p>You have a range of other options for changing how the command is represented in</p>

	<p>the toolbar, such as:</p> <ul style="list-style-type: none"> <li>• If the command does not have an associated icon, assign one from an image library</li> <li>• Change the icon currently assigned to the command to a different icon</li> <li>• If the command has a system default icon and you have changed it, restore that default icon to the command</li> <li>• Edit the icons in the library, and create new ones; you can also copy an existing icon and edit the copy</li> </ul> <p>These options are available through a context menu that you display by right-clicking on the icon in the toolbar while the 'Customize' dialog is displayed. The context menu does not display if the 'Customize' dialog is closed.</p> <p>The changes apply only to the selected toolbar. Any instances of the command in other toolbars or menus are not affected.</p>
Toggle command button between icon, text and both	<ol style="list-style-type: none"> <li>1. Right-click on the command icon or text in the toolbar.</li> <li>2. Select the context menu option you need - 'Image', 'Text' or 'Image and Text'.</li> </ol> <p>If the option has an icon, the selected change is made. If the command has no icon, the 'Button Appearance' dialog displays. You can also toggle between the image/text options on this dialog.</p>
Assign icon to command	<ol style="list-style-type: none"> <li>1. Right-click on the command icon or text in the toolbar.</li> <li>2. Select the 'Button Appearance' option; the 'Button Appearance' dialog displays.</li> <li>3. Select either the 'Image only' radio button or the 'Image and text' radio button.</li> <li>4. For a command with a default icon, the 'Use Default Image' radio button is followed by the default icon; if you have assigned a different image, you can restore the default by selecting this radio button. Otherwise, select the 'Select User-defined Image' radio button, and click on an appropriate image from the selection provided. You can add or edit images in this selection.</li> <li>5. Click on the OK button to apply the changes to the toolbar.</li> </ol> <p>(You can also restore the default icon by right-clicking on the current icon in the toolbar and selecting the 'Reset to default' option.)</p>
Copy a toolbar icon	<ol style="list-style-type: none"> <li>1. Right-click on the icon in the toolbar.</li> <li>2. Select the 'Copy Button Image' option; the image is copied to the clipboard.</li> </ol>
Create and edit icons	<ol style="list-style-type: none"> <li>1. Right-click on the command graphic or text in the toolbar.</li> <li>2. Select the 'Button Appearance' option; the 'Button Appearance' dialog displays.</li> <li>3. Select either the 'Image only' radio button or the 'Image and text' radio button.</li> <li>4. Select the 'Select User-defined Image' radio button.</li> <li>5. To create a new image, click on the New button; to edit an existing user-defined image, click on the image and then on the Edit button. The 'Edit Button Image' dialog displays.</li> <li>6. If you have copied another icon to edit as a new icon, click on the Paste button in the 'Tools' block.</li> <li>7. Select a color and the appropriate painting tool - the 'pencil' fills individual squares, the 'filler' fills the whole 'Picture' block, and the 'line' creates lines of two or more squares thick.</li> <li>8. Create or edit the icon, working right up to the border of the 'Picture' block if necessary.</li> <li>9. Click on the OK button to apply the changes to the toolbar.</li> </ol>

Change icon text label	<ol style="list-style-type: none"><li>1. Right-click on the command graphic or text in the toolbar.</li><li>2. Select the 'Button Appearance' option; the 'Button Appearance' dialog displays.</li><li>3. Select either the 'Text only' radio button or the 'Image and text' radio button.</li><li>4. In the 'Button text' field, highlight and delete the existing text and type in the new text.</li><li>5. Click on the OK button to apply the changes to the toolbar.</li></ol>
Group Icons	<p>If necessary, you can indicate that the command icons are arranged in groups. To do this:</p> <ol style="list-style-type: none"><li>1. While the 'Customize' dialog is displayed, right-click on the first command icon or text in the group in the toolbar, and select the 'Start Group' option.</li></ol> <p>A vertical line displays to the left of the icon. All icons to the right of the line form a group, up to any subsequent line.</p> <p>To remove the line and cancel the grouping, repeat the step.</p>

## Customize Toolbars

As well as tailoring the commands that are available through the toolbars, you can modify the toolbars themselves; for example, you can:

- Hide or show toolbars by selecting the appropriate checkbox
- Rename toolbars
- Create new toolbars
- Delete toolbars
- Modify toolbar contents by dragging commands onto a visible toolbar from the 'Commands' tab or from another toolbar
- Reset a toolbar (or all toolbars) to the default contents and position, and
- Display text labels under the toolbar icons, to indicate what the icons do



### Access

Ribbon	Start > View > Visual Style > Customize > Toolbars : New
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### Create a New Toolbar and Populate it with Commands

Step	Action
1	In the 'Toolbar Name' field, type a name for your new toolbar and click on the OK button. Your new toolbar is created. The toolbar and 'Customize' dialog are independently positioned, so you might have to drag the 'Customize' dialog to one side to expose your new toolbar.
2	If you want to display the name of each command you put into your toolbar, select the 'Show text labels' checkbox. Otherwise leave the checkbox unselected.
3	To add commands to your new toolbar from another toolbar, see step 6. To add menu commands to your toolbar, click on the 'Commands' tab. The 'Categories' list on the left of the tab represents the Enterprise Architect menu structure. The 'Commands' list contains the commands in the selected category; the list updates when you click on a different category.
4	Find and click on the command to add to your toolbar in the Commands list.
5	Drag the selected command from the list into the new toolbar. If you selected the 'Show text labels' checkbox, your toolbar should now resemble this:



	<div></div> <p>If you did not select the 'Show text labels' checkbox, your toolbar should resemble this:</p> <div></div>
6	<p>If the command you require is on another toolbar, display that toolbar and drag it to a position near your new toolbar.</p> <p>Press Ctrl and drag the required icon for the command from the existing toolbar onto your new toolbar.</p>
7	<p>Repeat steps 3 to 6 for each command that you want to make available in your new toolbar.</p> <p>When you have finished, click on the Close button on the 'Customize' dialog and drag your toolbar into the toolbar ribbon or to any other convenient position for you to use.</p>

## Notes

- You can add as many commands to your toolbar as you need; your new toolbar behaves the same way as other toolbars - you can position it next to the other toolbars at the top of the application workspace, dock it to the side of the workspace or close it
- You can also modify the display of toolbar options using the 'Options' page of the 'Customize' dialog


## Add Custom Tools

You can extend the power of the Enterprise Architect desktop by making external tools accessible from the ribbons. You can create options that hyperlink to different applications, compilers, batch scripts, automation scripts, URLs or documentation. The tools can be either commercially available or those you have configured yourself.

### Access

Ribbon	Start > View > Visual Style > Customize > Tools : 
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### Add and configure custom tools

Option	Action
Menu contents	In the boxed, blank field in the list, type in the name of the tool as it should appear in the menu.
Command	<p>Either:</p> <ul style="list-style-type: none"><li>Type the name of the tool .exe file to use, or</li><li>Click on the  button and browse to the file location</li></ul> <p>The .exe file must have a valid filename.</p>
Arguments	Type in any arguments required by the tool
Initial directory	(Optional) Type in the location of an initial directory.
Close	<p>Click on this button to close the 'Customize' dialog.</p> <p>Your tool is added to the 'Tools' menu.</p>

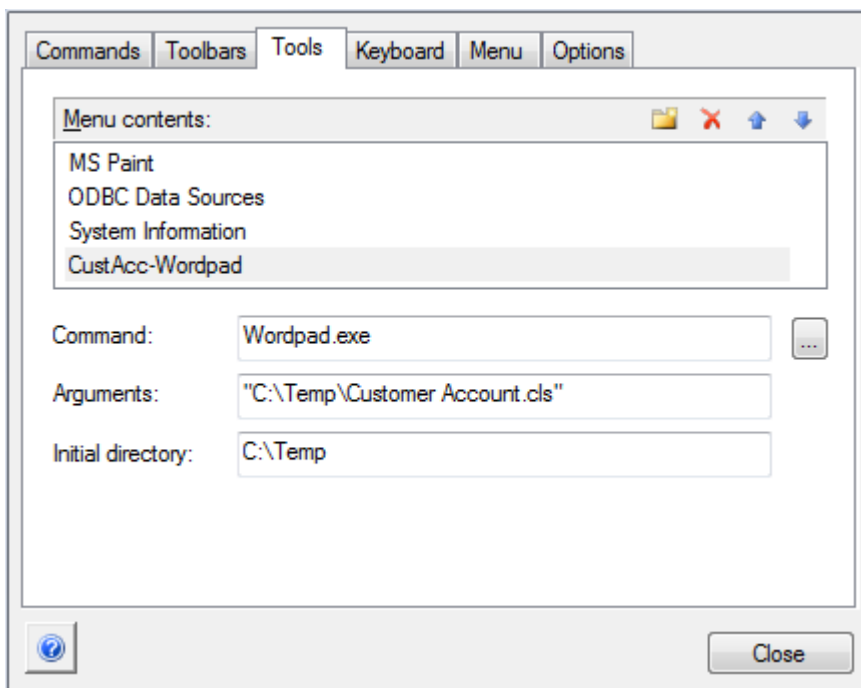
## Open External Tools

When configuring custom tools in Enterprise Architect, by selecting 'Start > View > Visual Style > Customize > Tools', you can:

- Specify the custom tool (application) using the 'Command' field
- Define a file to open using the 'Arguments' field

### Example 1


This configuration opens the file `c:\Temp\Customer Account.cls` using Wordpad. If you save from within Wordpad the initial directory is `c:\Temp`.

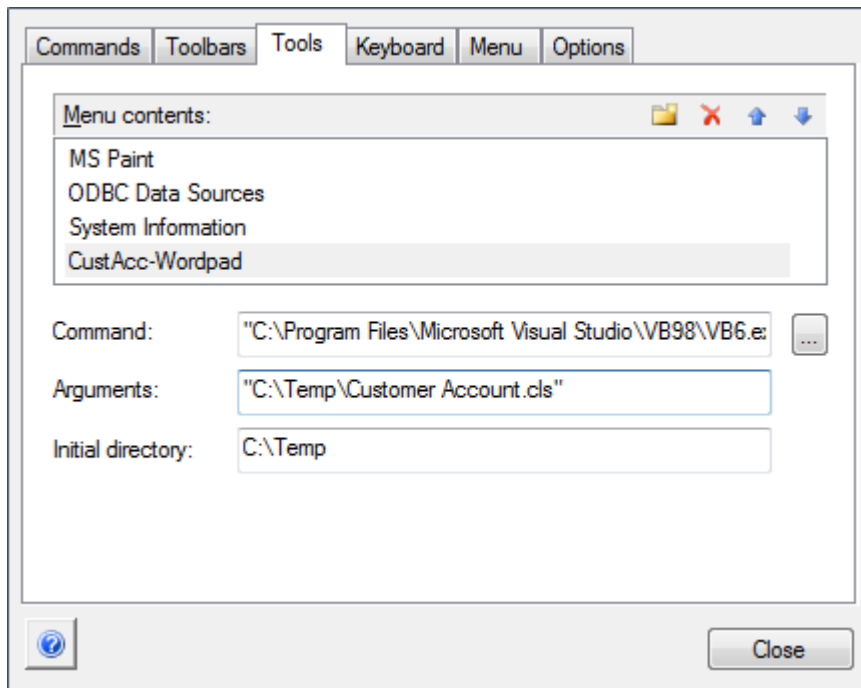


If there are any spaces in the paths in the 'Command', 'Arguments' or 'Initial directory' fields, you must enclose the whole path in double quotes. For example:

`"c:\Temp\Customer Account.cls"` must have quotes, but `c:\Temp\CustomerAccount.cls` does not have to have quotes

### Example 2

This example opens the file `c:\Temp\Customer Account.cls` using Visual Basic (VB). As VB is not installed with the operating system, the whole file path for VB must be included in the 'Command' field; you can locate and select this path using the  button. Again, if you save from within VB the initial directory is `c:\Temp`.



## Pass Parameters to Applications

When configuring custom tools in Enterprise Architect, by selecting 'Start > View > Visual Style > Customize > Tools', you can define parameters to pass to an external application using the 'Arguments' field.

### Available parameters

Parameter	Passes
\$f	A project name. Notes: For example, C:\projects\EAExample.eap
\$F	The calling application. Notes: That is, Enterprise Architect.
\$p	The current Package ID. Notes: For example, 144.
\$P	The Package GUID. Notes: A GUID for accessing this Package.
\$d	The diagram ID. Notes: An ID for accessing the associated diagram.
\$D	The diagram GUID. Notes: A GUID for accessing the associated diagram.
\$e	A comma separated list of element IDs. Notes: All elements selected in the current diagram.
\$E	A comma separated list of element GUIDs. Notes: All elements selected in the current diagram.

## Customize Keyboard Shortcuts

Various context menu options can also be invoked using a single keyboard key, or a combination of keys, referred to as shortcuts. You can assign your own shortcut keys to either the standard options or your customized options, to suit your work practices or other applications.

### Access

Ribbon	Start > View > Visual Style > Customize > Keyboard
--------	--

### Create or modify a keyboard shortcut

Option	Action
Category	Click on the drop-down arrow and select the name of the context menu containing the command to assign a shortcut to.
Commands	Scroll through the list of commands and click on the one to assign the shortcut key(s) to. If the command already has a shortcut key it is shown in the 'Current Keys' field.
Press New Shortcut Key	Click on this field and press the shortcut key(s) to assign to the command. Press the actual keys to use; for example, to assign F5 press the F5 key, do not press F and then 5.
Assign	Click on this button to assign the key to the command. The button is disabled if the selected keyboard shortcut is already used for another command; if this occurs the command it is assigned to is shown in the 'Assigned to' field, and you must select a different shortcut key.
Remove	To remove a shortcut, select it in the 'Current Keys' field and click on this button. The shortcut is immediately removed.
Reset All	Click on this button to reset all commands to the default set of shortcut keys. All keys that you have assigned are removed.
Close	Click on this button to close the dialog, saving all keys that you have assigned.

### Notes

- It is simpler to have one shortcut per command, although you can assign more than one shortcut if necessary
- Modified shortcut keys are stored in the registry, so they are available only to you and not to other users



## Customize Submenus

It is possible to customize your submenus to add or remove shadow around the outline of each menu and to apply animation to the way in which the submenus are opened.

### Access

Ribbon	Start > View > Visual Style > Customize > Menu
--------	--

### Animate Menu Display

Option	Description
Menu animations	<p>Click on the drop-down arrow and select one of the options:</p> <ul style="list-style-type: none"><li>• None - the menus are instantaneously displayed on selection</li><li>• Unfold - the menus unfold from the top left corner diagonally downwards</li><li>• Slide - the menus slide out from the top downwards</li><li>• Fade - the menus fade in</li><li>• [Default] - similar to Fade</li></ul>
Menu Shadows	<p>Select the checkbox to display a shadow along the right and lower edges of the menu.</p> <p>Clear the checkbox to display menus with no shadow on the borders.</p>
Close	<p>Click on this button to close the 'Customize' dialog.</p> <p>Your animation options take effect on the menus.</p>

### Notes

- When you perform a major upgrade of the system (such as from release 12 to 13) the menus are reset and deleted options are replaced.



## Customize Options

It is possible to customize the entire set of Toolbars to display with large icons, and/or show a Screen Tip as you mouse over each toolbar icon. The options take effect immediately, so you can see what impact they have before closing the dialog.

### Access

Ribbon	Start > View > Visual Style > Customize > Options
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### Customize Toolbar Display

Option	Description
Show Screen Tips on Toolbars	Select this checkbox to display a Screen Tip as you mouse over each toolbar icon, if a Screen Tip is defined for the icon. The screen tip is predefined in Enterprise Architect and cannot be edited.
Show shortcut keys in Screen Tips	If you have selected to show Screen Tips, select this checkbox to include any shortcut key combinations in the Screen Tip text. The shortcut keys are editable, and you can add, change or remove the keys assigned to any of the commands represented by an icon. The current shortcut key combination is added to the Screen Tip text.
Large Icons	Select this checkbox to enlarge all the Toolbox icons. This takes effect immediately, so that you can see how the display changes.
Close	Click on this button to save and commit the settings.

## Workspace Layouts

As you perform work on your model you use various toolbars and windows; you will quite likely use the same toolbars and windows regularly, in an arrangement that suits the way in which you use the system. Rather than having to re-open and arrange these tools at the start of each work session, you can use either a predefined or a customized work environment or workspace. Workspaces:

- Automatically open and organize all the tools appropriate to an area of work such as Requirements Management, Code Engineering and Debugging
- Help a new user by:
  - Opening the tools that are appropriate to a task so that they can immediately get started, and
  - Showing the user what tools they should become familiar with for that area of work
- Help you switch rapidly to work environments for either successive or completely different areas of work
- Re-establish a work environment that you have accidentally or deliberately changed

To select, create and maintain workspaces you use the 'Workspaces' page of the 'Workspace Layout' dialog, which lists the currently-available system and user-defined layouts.

### Access

Ribbon	Start > View > Workspace > Select a Workspace
--------	---

### Manage Layouts

Task	Description
Change workspace layout	<p>The 'Last Applied Workspace' field at the bottom of the 'Workspace Layout' dialog identifies the layout last selected, before any changes you might have made.</p> <p>You can change the layout to:</p> <ul style="list-style-type: none"> <li>• The original layout (as identified by the 'Last Applied Workspace' field), discarding any changes you might have made</li> <li>• One of the other named layouts, or</li> <li>• A new named, customized layout, capturing the current screen layout and including any changes you have made to the previously-applied layout</li> </ul> <p>To change the layout in use, either:</p> <ul style="list-style-type: none"> <li>• Click on the preferred layout name and on the Apply button, or</li> <li>• Double-click on the required layout name, or</li> <li>• Right-click on the layout name and select the 'Apply' option</li> </ul>
Copy workspace layout	<ul style="list-style-type: none"> <li>• Right-click on the layout name and select the 'Copy As New' option</li> </ul> <p>The 'Save Custom Workspace Layout' dialog displays.</p> <p>In the 'Custom Workspace Layout' field, type a name for the layout. By selecting an existing name you can change an existing layout to something different. Click on the Save button.</p> <p>If you already have tailored windows or views open that you want to include in</p>

	your selected layout, select the 'Include active custom views' checkbox.
Delete workspace layout	Right-click on the (custom) layout name and select the 'Delete' option. A prompt displays for you to confirm or cancel the deletion.

## Notes

- If you apply a working set that invokes floating diagrams or views, it will override the current workspace layout with the layout that was in use when the working set was defined
- If you develop a workspace layout that would be useful for your colleagues, you can share it with them by incorporating it in an MDG Technology that they can download

## Customizing Ribbon Sets

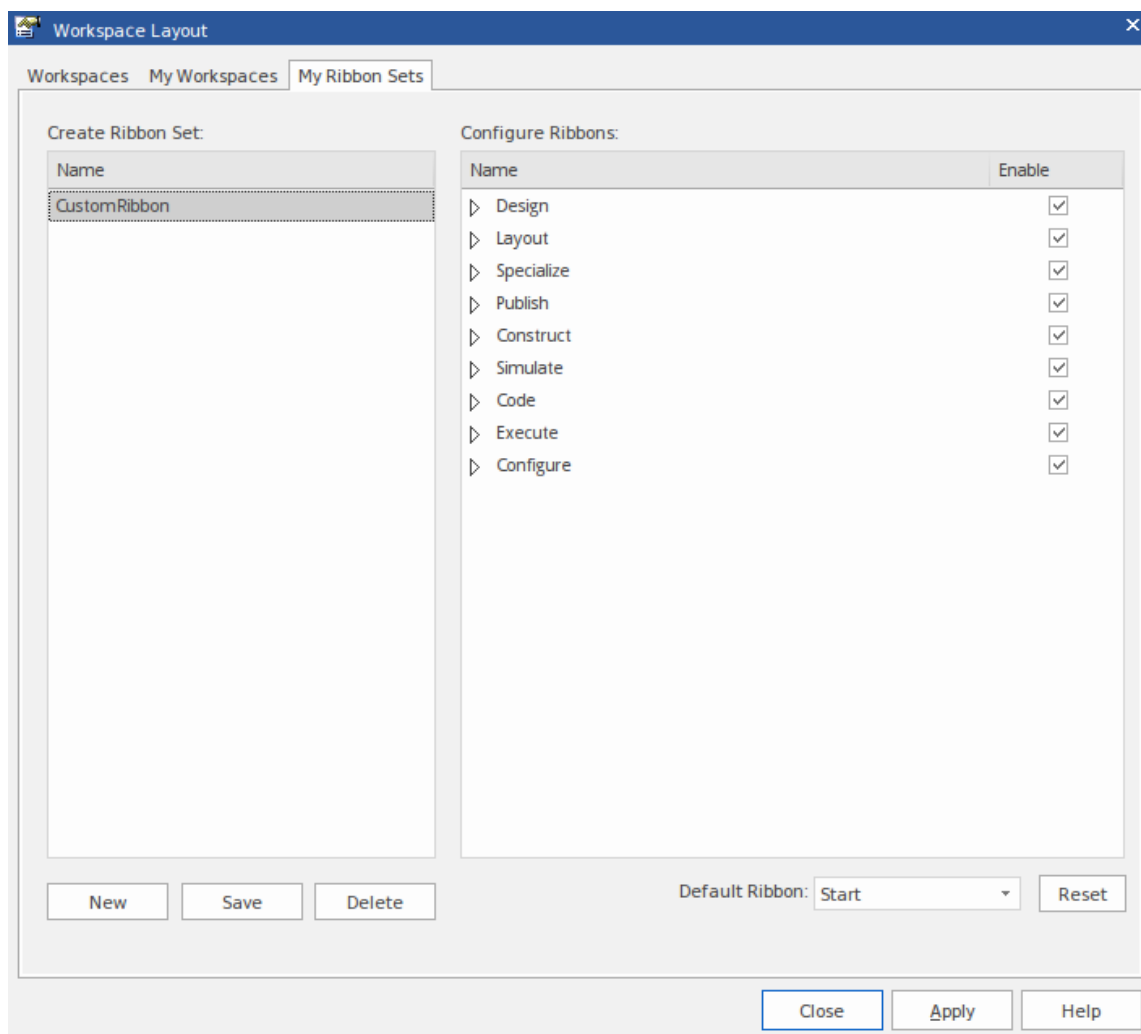
The Enterprise Architect ribbons provide access to the functions and facilities of the system, grouped according to work area. If you only work with the facilities of a certain area, such as Coding or Simulation, you can create a Ribbon Set to present just those facilities and hide other facilities that you do not use. You might hide certain panels of a ribbon, or the whole ribbon.

When you open Enterprise Architect, the Start ribbon is displayed by default. You can also set a different ribbon to be the default displayed on opening the system.

### Access

Ribbon	Start > View > Workspace > My Workspaces > My Ribbon Sets
--------	---

### Create a Ribbon Set



Step	Action

1	When you click on the 'My Ribbon Sets' tab, the 'Create Ribbon Set' and 'Configure Ribbons' panels display.
2	Click on the New button, and in the 'Create New Ribbon Set' dialog type a name for the Ribbon Set. Click on the OK button to add the new name to the 'Create Ribbon Set' panel and to make it the focus of the 'Configure Ribbons' panel.
3	To hide a complete ribbon, clear the 'Enable' checkbox against the ribbon name. To hide selected panels within a ribbon, click on the white arrowhead to the left of the ribbon name, to display a list of panels that the ribbon contains. For each panel to hide, clear the 'Enable' checkbox against the panel name. Clearing all the panel checkboxes for a ribbon also hides the complete ribbon (you cannot display an empty ribbon).
4	If you want to redisplay a panel or ribbon, select the corresponding 'Enable' checkbox. Selecting a panel within a hidden ribbon shows the ribbon again. Selecting to show a hidden ribbon selects the checkboxes against all its panels; you can then clear individual panels as required. If you have cleared a number of ribbons and/or panels, you can restore the complete set of ribbons and panels by clicking on the Reset button.
5	If you want to change the default ribbon shown on opening Enterprise Architect, click on the drop-down arrow in the 'Default Ribbon' field at the foot of the page and select the appropriate ribbon name. If you have hidden a complete ribbon in the 'Configure Ribbons' panel, that ribbon is not available for selection in the 'Default Ribbon' field. The Reset button also sets the field back to the 'Start' ribbon.
6	Click on the Save button to save your settings, and on the Close button to close the Perspectives window.

## Notes

- You cannot hide the 'Start' ribbon, 'Specification - Specify' ribbon or 'Document - Edit' ribbon, or any panels that they contain
- If you no longer want to keep a Ribbon Set, click on the name in the 'Create Ribbon Set' panel and click on the Delete button and on the OK button in the confirmation prompt; if there are no Ribbon Sets left, the system reverts to the default of a full set of ribbons with all panels

## Working Sets

As you perform work on your model, you open various windows, diagrams and views, and you will probably need to return to these same views in a later work session. At the end of your work session, you can capture your current work environment as a working set, which you use to return to that exact environment later, either when you choose to or by having the system automatically recreate it when you next log on to Enterprise Architect. You can also create a working set as an empty definition to which you add specific windows, diagrams and views, from either the 'Working Sets' tab or from a Working Set Artifact element.

You can use the working set to pick up your work from where you left off, or as a set of 'home pages' to start from each day. You can also open multiple working sets, which combines the views from each set. This can be useful to check the progression between different stages in a piece of work.



A working set is initially a personal list, not visible to or active for any other user. You can convert it into a global set to share with other users of your model; for example, if a working set shows a cross-section of an aspect of the model you want to demonstrate or have reviewed.

### Access

Ribbon	Start > View > Workspace > My Working Sets
--------	--



### Manage working sets

Option	Action
Create a working set from open diagrams or files	<p>Either:</p> <ul style="list-style-type: none"> <li>Click on the first icon in the toolbar, or</li> <li>Right-click on the body of the tab and select the 'Create Working Set' option, or</li> <li>Right-click on the body of the tab and select the 'Create Working Set From' option, and either the 'Open Diagrams' or 'Open Files' sub-option as appropriate</li> </ul> <p>The 'Create Working Set' dialog displays, listing the diagrams and views that are currently open, in the order in which they were opened. If necessary, you can change the order using the 'hand' buttons at the bottom of the dialog.</p> <p>Select the checkbox against each item that you want to retain in the working set, or click on the Include All button. If you selected the 'Create Working Set From' option, the checkboxes against the open diagrams or the open files are already selected.</p> <p>In the 'Name' field, type a name for the working set.</p> <p>You can either:</p> <ul style="list-style-type: none"> <li>Immediately click on the OK button to create the working set from the selected items, or</li> <li>Add other selections as described for <i>Create a new working set</i></li> </ul>
Create a new working set	<p>Either:</p> <ul style="list-style-type: none"> <li>Click on the first icon in the toolbar, or</li> <li>Right-click on the body of the tab and select the 'Create Working Set' option, or</li> <li>Switch to an open diagram, drag a 'Working Set' icon from the 'Artifacts' page</li> </ul>

	<p>of the Diagram Toolbox onto the diagram, right-click on the new Working Set Artifact element and select the 'Edit Working Set' option</p> <p>The 'Create Working Set' dialog displays.</p> <p>In the 'Name' field, type a name for the working set.</p> <p>To add a diagram or view, click on the Add Other button and select an option from the list:</p> <ul style="list-style-type: none"> <li>• Add Diagram</li> <li>• Add Matrix Profile</li> <li>• Add Search</li> <li>• Add Team Library</li> <li>• Add Document Template</li> <li>• Add Resource Document</li> </ul> <p>You are prompted to select the required diagram, profile, search, Team Library topic, document report template or Resource document name(s); each view is then added to the list with its checkbox selected.</p> <p>Click on the Add Other button again, to select the next item.</p> <p>When you have all the diagrams and views you need, click on the OK button to create the working set.</p>
Open an existing working set	<p>A Working Set created on the 'Working Sets' tab is indicated by this icon .</p> <p>A Working Set created as an Artifact element is indicated in the list by this icon .</p> <p>Click on a working set name and either:</p> <ul style="list-style-type: none"> <li>• Select the third icon in the toolbar or</li> <li>• Right-click and select the 'Open Working Set' context menu option</li> </ul> <p>Enterprise Architect opens all the diagrams and views listed in that set.</p> <p>If you already have a working set open, the 'new' set of views is added to the original set, with the last-listed diagram or view on top and in focus.</p> <p>You open one Model Search, Matrix profile or Team Library at a time; therefore, the last-opened Search, profile or Team Library replaces the previous instances.</p>
Automatically apply a working set when the model is opened	<p>Right-click on the working set name and select the 'Apply when model opens' option.</p> <p>This option is a toggle that turns the same option off for the previous working set on which it was selected.</p> <p>The folder turns green, indicating that the option is 'on' for this working set.</p> <p>When you close the model and subsequently open it, the diagrams and views in the working set are automatically opened.</p>
Share a working set	<p>Right-click on the working set name and select the 'Share Working Set' option.</p> <p>The folder icon on the left of the working set name in the list now contains an icon depicting the globe, and the working set is available in the 'Working Sets' tab of every other user of the model.</p> <p>This setting is not reversible; to make the global list into a personal list, make a copy of it.</p>
Add an open view or diagram to a working set	<p>If, in your work, you open a diagram or view that you decide to add to a working set:</p> <ul style="list-style-type: none"> <li>• Click on the 'Working Sets' tab, right-click on the required set name and select</li> </ul>

	<p>the 'Add Active View' option</p> <p>The open view is added to the working set.</p>
Duplicate a working set	<p>If you want to use a variation of a working set without losing the original, you can create a copy and amend that copy as required.</p> <p>Right-click on the source working set and select the 'Copy as New' option.</p> <p>The 'Create Working Set' dialog displays.</p> <p>In the 'Name' field, type a name for the working set.</p> <p>Each of the listed diagrams and views is already selected; make any changes you require, and click on the OK button to save the list as a new working set.</p>
Edit a working set	<p>To change the diagrams and views in a working set, or change the set name, click on the set name and either:</p> <ul style="list-style-type: none"> <li>• Click on the second icon in the toolbar or</li> <li>• Right-click and select the 'Edit' option</li> </ul> <p>The 'Create Working Set' dialog displays.</p> <p>Make any changes you require, and click on the OK button to save the changes.</p>
Delete a working set, or a view in working set	<p>Expand the working set and select a specific item (to remove that item) or the set name (to move the whole set)</p> <p>Either:</p> <ul style="list-style-type: none"> <li>• Click on the fifth icon in the toolbar or</li> <li>• Right-click on the set and select the 'Delete Working Set Item' option</li> </ul> <p>A prompt displays to confirm the deletion; click on the Yes button.</p> <p>The item or set is removed.</p> <p>If you delete a working set that you have opened, the diagrams and views from that set remain open until you specifically close each one or close Enterprise Architect.</p> <p>Note:</p> <ul style="list-style-type: none"> <li>• When you create a Working Set on a diagram, using the icon from the 'Common' page of the Diagram Toolbox, the Working Set persists in the Personal Tasks view if you delete the element from the diagram, but not if you delete the element from the Project Browser/model</li> </ul>
Save floating window layout in working set	<p>If any of the selected diagrams or views in your working set are floating windows, the 'Create Working Set' or 'Edit Working Set' dialog includes the item 'Save Workspace Layout'.</p> <p>Select this checkbox; the working set captures the complete current workspace layout, including the locations of the floating or docked views.</p> <p>Next time you load the working set, the captured workspace layout is reapplied.</p>
Track working set/views last opened	<p>You might use several working sets in a work session, and close some views and open others.</p> <p>To capture the diagrams and views you actually have open when you close down Enterprise Architect, right-click on the body of the tab and select the 'Store Main Tab View History' option. A new, empty working set folder displays at the top of the list - 'Windows open when Model was last closed'.</p> <p>When you reopen the model in a new work session, this new folder is automatically populated with a list of the diagrams and views that were open when you last closed the model; this is a read-only set that cannot be edited.</p> <p>You can expand the set and double-click on specific windows to re-open them, or right-click on the set and use the 'Open Working Set' option to reopen all the</p>



	<p>diagrams and views you had open before.</p> <p>However, it is recommended that you use the 'Apply when model opens' context menu option on the set; thereafter, whenever you open the model, all the diagrams and views you had open when you closed the model are automatically re-opened.</p>
Locate a diagram from the working set in the Project Browser	<p>Either:</p> <ul style="list-style-type: none"><li>• Right-click on the diagram name and select the 'Find in Project Browser' option, or</li><li>• Click on the diagram name and click on the 'Locate in Project Browser' toolbar icon ()</li></ul> <p>The section of the Project Browser containing the diagram is expanded, and the diagram name is highlighted.</p>
Locate a Working Set Artifact element in the model	<p>Either:</p> <ul style="list-style-type: none"><li>• Right-click on the element name and select the 'Find in Project Browser' option, or</li><li>• Click on the element name and click on the 'Locate in Project Browser' toolbar icon ()</li></ul> <p>The section of the Project Browser containing the element is expanded, and the element name is highlighted.</p>

## Local Options



Enterprise Architect has a wide range of default settings for controlling how the system displays and works with models and model elements. You can customize these settings to define your preferred behavior of the system. Most of the settings are stored in your registry so they are set for your use only on any model you open. For a networked workplace, registry settings can be copied down to any network workstation you log in to. Otherwise, the settings control operations under your login on the current machine only.

The settings are grouped according to their actions on specific functional areas, on a number of pages of the 'Preferences' dialog.

### Access

Ribbon	Start > View > Preferences
Keyboard Shortcuts	Ctrl+F9

### Option Groups

Group/Page	Action
General Options	Control the behavior of the system as a whole. You can also define model-specific options (such as the default directory name for the shared files you define for an element) using the 'Manage Project Options' dialog.
Diagram (New Diagram Defaults)	Set the general properties of all diagrams you create.
Diagram - Themes	Create and apply display themes for all diagrams that you open.
Diagram - Standard Colors	Set the display colors and background colors of objects and properties in diagrams across the system.
Diagram - Appearance	Control how elements are displayed on a diagram.
Diagram - Behavior	Control how a diagram responds to actions taken on it.
Diagram - Sequence (diagram display)	Control the appearance and behavior of Sequence diagrams specifically.

Objects (display)	Configure the properties and behaviors of elements created on your diagrams.
Links (Connector display)	Define the creation, behavior and notation of connectors on your diagrams.
Communication Colors (of Communication Messages)	Set the colors of Messages you create in Communication diagrams.
XML Specifications	Configure the settings for working with XML.
Source Code Engineering	<p>Set general user-specific options that apply to all languages when you are generating code from models</p> <p>You can also define model-specific options (such as the default language in which to generate code) using the 'Manage Project Options' dialog.</p>
Code Editors	Configure options for the system internal editor, and for the default editor for DDL scripts.
Object Lifetimes	Enable the creation of constructors and destructors for Object Lifetimes.
Attribute/Operations	Set the system actions on attributes and operations.
Code language specifications	<p>Define how the system handles a particular language when generating code, setting user-specific variables such as the default source directory.</p> <p>You can also define model-specific options (such as the default file extensions to apply when generating code in the selected language) using the 'Manage Project Options' dialog.</p>

## General Options


You can control how the system behaves when you open a project, including setting the home directories and web pages the project refers to.

The 'General' page has a child 'Window Behavior' page for defining how dockable windows display on the system.

### Access

Ribbon	Start > View > Preferences > General
Keyboard Shortcuts	Ctrl+F9   General

### Control system behavior

Field/Button	Action
Author	<p>Defaults to your Windows user name. This value is applied to the 'Author' field when you create new elements and diagrams. Optionally, type in a new Author name, or click on the drop-down arrow and select a name from the list (which contains names defined on the 'Project Author(s)' page of the 'People' dialog).</p> <p>When user security is enabled, this field will be populated with your <i>Firstname Lastname</i> as defined in the 'Manage Users' dialog, and it can only be modified there, not on the 'General' page of the 'Preferences' dialog.</p>
Clipboard Format	Click on the drop-down arrow and select the graphic format in which to save images to the Microsoft Windows clipboard; Metafile has the best detail.
Use Jet 4.0 - requires restart	<p>Select the checkbox to set JET 4.0 as the database engine; this ensures compatibility with .eap files that are in turn compatible with versions of MS Access later than Access 97, and that support unicode character sets.</p> <p>If your project is not in a Jet 4.0 database, you should also download a copy of the Jet 4.0 EABase Model from the Sparx Systems website, and do a 'File to File' transfer of your model into the Jet 4.0 file.</p> <p>If the checkbox is not selected, the database engine is Jet 3.5.</p>
Use extended « and » characters	<p>The checkbox defaults to selected to apply the guillemet characters to stereotype names; recommended for double byte character sets.</p> <p>Deselect the checkbox to hide the guillemet characters.</p>
Allow custom RTF tags in reports	<p>Select the checkbox to use customized rich text format code in report templates when you generate reports with the 'Legacy RTF Report Generator'.</p> <p>In releases of Enterprise Architect from 7.0 onwards, with the notes-formatting facility, this option is not really necessary.</p>
Default Project	<p>Either type in the file path and file name of the project to open when you start up Enterprise Architect, or click on the  button and browse for the project.</p>

Project Directory	Type in the default directory location for the Enterprise Architect project files you create.
Web Home	Type in the URL of the default home page to open when you click on the Home button in the internal web browser.
Web Search	Type in the URL of the default web page to open when you click on the Web Search button in the internal web browser.
Web Mail	Type in the email server address (http://xxxxx/exchange/) for accessing email within Enterprise Architect, through the web browser.
Portal Guides	When you select a PDF User Guide from the User Guide Portal, the system downloads the file from the Sparx Systems website. If you have stored the User Guides in a different location, type in either the local directory path or the URL of the website into which you have moved the files.
Confirm Deletes	<p>The checkbox defaults to selected to display a confirmation prompt whenever you delete a model component.</p> <p>Only clear this checkbox to bypass the prompt if you are an experienced user and have taken other measures to identify and recover from accidental deletes.</p>
Allow Free Sorting	Select the checkbox to allow you to manually reorganize elements within a Package regardless of element type, in the Project Browser.
Show Stereotypes	<p>The checkbox defaults to selected to display element and feature stereotype names as part of the object names in the Project Browser.</p> <p>Deselect the checkbox to hide the stereotype names.</p>
Project Loading Strategy	<p>Click on the drop-down arrow and select the model loading behavior for project files; choose either:</p> <ul style="list-style-type: none"> <li>• 'Load on Demand' (Lazy Load) or</li> <li>• 'Preload Entire Model'</li> </ul> <p>'Load on Demand' does not load the full project view when you load a model; instead, only the parts that are necessary to display the visible portion of the tree are loaded.</p> <p>This means that the model loads faster and you can begin work sooner, but at the expense of later small delays as the system loads specific portions of the model.</p> <p>For server connections, the 'Load on Demand' option is automatically set when the connection is created.</p>

# Window Behavior

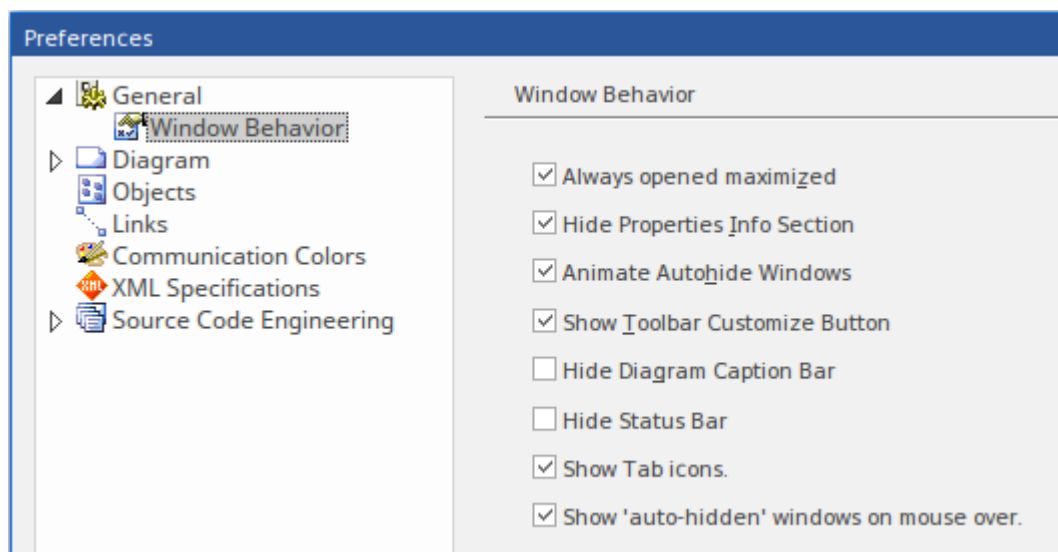
You use the 'Window Behavior' page of the 'Preferences' dialog for setting local options that determine how dockable windows display on your system.

## Access



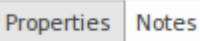
Ribbon	Start > View > Preferences > General > Window Behavior
Keyboard Shortcuts	Ctrl+F9   General   Window Behavior

## Control Window Display

Select from the options listed here.



Field	Description
Always open maximized	The checkbox defaults to selected to set Enterprise Architect to open in a full-screen (maximized) window on start-up. Deselect the checkbox to set Enterprise Architect to open in a smaller window.
Hide Properties Info Section	The checkbox defaults to selected to hide the properties information bar at the bottom of various displays such as the element Properties window, Properties dialogs and Tagged Values window. Deselect the checkbox to expose the information bar.
Animate Autohide Windows	If you are using windows that have been automatically hidden, they simply appear in the workspace when you move the cursor over the window tab. Select this checkbox to slide the windows out into the workspace when you place the cursor on the window tab.

Show Toolbar Customize Button	<p>Each toolbar can have a down-arrow button on the end, which enables you to customize the toolbar options. This checkbox defaults to selected to show the down-arrow button; deselect the checkbox to hide the button, if you prefer.</p> 
Hide Diagram Caption Bar	<p>The diagram caption bar normally displays at the top or bottom of a diagram. If you prefer, select this checkbox to hide the caption bar.</p>
Hide Status Bar	<p>The Status Bar normally displays at the bottom of the Enterprise Architect work area. It shows information on the current operation and certain key settings, and provides a 'zoom bar' for adjusting the scale of the diagrams you view. If you prefer to hide the Status Bar, select the checkbox.</p> <p>You can also hide sections of the information that the Status Bar shows by right-clicking on it and de-selecting either or both of the options:</p> <ul style="list-style-type: none"> <li>• Zoom Slider</li> <li>• Status Indicators</li> </ul>
Show Tab icons	<p>Select this checkbox to show a representative icon on the name tab of each docked window.</p>  <p>Deselect the checkbox to hide these icons.</p> 
Show 'auto-hidden' windows on mouse over	<p>The checkbox defaults to selected to show hidden windows when you drag the cursor onto the window's tab using the mouse. When you move the cursor off the window, it no longer displays.</p> <p>If you deselect the checkbox, you have to left-click on the window's tab to display the window.</p>
Full Row Select in Tree Controls	<p>In a window that displays a hierarchy of model elements - such as the Project Browser - clicking on an item highlights the selection. Selecting the 'Full Row Select in Tree Controls' checkbox causes the highlight to extend across the width of the window. Deselecting the checkbox restricts the highlight to the object name.</p>
Track Selection in Tree Controls	<p>When this checkbox is selected, moving the cursor over an item in a hierarchy window - such as the Project Browser - causes an underline to display under the element name, indicating that the item has focus and can be selected. If you deselect the checkbox, the listed items are not underlined and none have focus until they are explicitly clicked on.</p>

## Diagram Options

In order to maintain consistency in the format, layout and visibility of objects in your diagrams, you can define a number of default settings to apply to all diagrams that you display, whether you are creating them or reviewing them. You can change or reverse many of these default settings for your view of individual diagrams (whether you created them or another user created them) on the diagram 'Properties' dialog.

### Access

Ribbon	Start > View > Preferences > Diagram
Keyboard Shortcuts	Ctrl+F9   Diagram

### Control diagram set up

Field/Button	Action
Default Page Size	Show (underneath the field name) the default page size for diagrams. You set the default page size using the Page Setup button.
Page Setup	Click on this button to define the page dimensions for diagrams that you create. The 'Page Setup' dialog displays, on which you set the page size, orientation, printer paper tray, and page margins.
Print with Border	Select the checkbox to set the default to printing a border on all diagrams you have created.
Landscape	This checkbox is controlled from the 'Page Setup' dialog. When selected, any diagrams that you create default to being printed in landscape orientation.
Show Public Features Show Protected Features Show Private Features	Select any or all of the checkboxes to automatically show Class features with the scope of public, protected and/or private on the diagrams you create.
Show Diagram Notes	Select the checkbox to display, by default, the diagram details (name, parent Package, version and author) in the top left corner of any new diagram that you create.  Selecting this checkbox sets the 'Show Diagram Details' checkbox to selected on the 'Diagram Properties' dialog for the new diagram.
Use Opaque Diagram Labels	Select any or all of the checkboxes to specify which renditions of your diagrams should have opaque diagram labels; 'Screen' and 'Printing' are most often applicable.  An opaque label is a connector or element label that, when the label overlaps the connector line or border, hides the line rather than allowing it to show through the label text.



Disable fully scoped object names	<p>Select this checkbox to disable the use of fully scoped object names for elements in all diagrams.</p> <p>A scoped object name has the format <code>MyClasses::foo</code>, where the <code>::</code> character indicates that the Class is within another namespace.</p> <p>Alternatively this can be disabled for a specific diagram via the diagram's display options.</p>
Allow change of Created Date	Select this checkbox to allow you to change the diagram creation date on any diagram, through the 'Diagram Properties' dialog.
Zoom to best scale	Select this checkbox to resize all diagrams that you open to neatly fit the monitor screen.
Auto-pan with middle mouse button	<p>Select this checkbox to turn on auto-panning using the middle mouse button. In this case, when you hold down the middle mouse button a black compass icon displays, and as you move the cursor away from this icon the diagram scrolls in that direction.</p> <p>If you deselect the checkbox, when you hold down the middle mouse button a white compass icon displays, and as you move this icon the whole diagram moves with it across or up and down the screen.</p>
Enable Connector line jumps	<p>Defaults to selected, so that solid-line connectors show 'hoop' icons or 'jumps' when they cross, on all diagrams that you open.</p> <p>Deselect to disable line jumps so that connectors simply cross with no 'hoop' icon at the intersection.</p>
Scale Saved Bitmaps to	<p>You can save images of diagrams to file, suitable for using in published works, using the 'Publish &gt; Diagram &gt; Image &gt; Save to File' ribbon option. This option prompts you to specify the file location and file format. If you select to save the files in <i>bitmap</i> format, the images are scaled to the default of 133%.</p> <p>If you prefer to use a different scale, click on the drop-down arrow and select one of the other set values between 100% and 400%.</p> <p>Images saved in formats other than bitmap are not scaled.</p>
Apply scale to clipboard	<p>You can also save images of diagrams to the clipboard, in either bitmap or metafile format (set in the 'Clipboard Format' field on the 'General' page of the 'Options' dialog), using the 'Publish &gt; Diagram &gt; Image &gt; Save to Clipboard' ribbon option.</p> <p>If you have set the format to 'Bitmap', you can save the images to the clipboard scaled to the same percentage as is set for saving to file, by selecting this checkbox. You cannot scale metafile images.</p>
Image Memory Limit	<p>When you generate images for document or web reports or save images to file, the memory limit for storing this image defaults to 48 MB. If the image is beyond this limit, the system starts to scale down the image.</p> <p>You can click on the drop-down arrow and select a lower or higher memory limit for the image files of your diagrams. A low memory setting means the system scales the image sooner.</p>
Diagram Frames	<p>Click on any or all of the checkboxes to specify which saved images of your diagrams will automatically include a diagram frame around them - those saved to disk, those printed out, and/or those saved to the default system clipboard.</p> <p>A diagram frame is a labeled outline around the diagram image, providing both a border and a reference. A SysML Internal Block element can have its own diagram</p>

	<p>frame; if that frame is selected to be shown, these Diagram Frames options are ignored for the diagram.</p> <p>These diagram frames are not the same as the Diagram Frame element in which you can enclose a diagram image or reference when you drag the diagram from the Project Browser onto another diagram.</p>
Show Tooltips	<p>Select the checkbox to display a tool-tip when the cursor is rolled over an element on a diagram you have opened, or over the background of the diagram itself.</p> <p>If the 'Show tips in Status bar' option is selected on the 'Application Look' dialog, the tool-tip displays in the Status Bar; if that option is not selected, the tool-tip displays at the cursor position on the diagram.</p> <p>If you have selected the 'Show Tooltips' checkbox, select the checkbox against each item of information you want to be displayed as part of a tool-tip.</p> <p>If you select the 'Notes' checkbox, and the tooltip is being displayed on the diagram, consider whether the 'Max Characters' value is appropriate to represent the text of your element 'Notes' fields. The 'Max Characters' field defines the maximum number of characters of Notes text included in the tool-tip; if you want to show less text or more, reset the character limit accordingly.</p> <p>Be aware that, if the tool-tip is being displayed in the Status Bar, the 'Notes' field text will not be included.</p>
Close	<p>Click on this button to save the changes you have made, and to close the 'Preferences' dialog.</p>

## Diagram Theme Options

It is possible to apply a theme to all diagrams in the project that you display on your workstation; that is, how the diagrams and their contents appear when you display them in the Diagram View. By applying a theme you can change the color, font, gradient, line thickness and background image (tile). Each design helps bring your diagrams to life with brighter colors, better contrast and stylish new designs. As you select a theme, the appearance settings are immediately applied to any diagram that you have open. Enterprise Architect includes a number of basic built-in themes, which are useful to a wide range of users and are good examples of how a theme can enhance the diagrams that you have open.

You can also create your own themes, capturing the set of colors, text font, line thickness and/or gradient properties that you have currently defined in the 'Preferences' dialog, on the:

- 'Gradients and Background' page
- 'Standard Colors' page
- 'Appearance' page, and
- 'Links' page

You select or deselect a checkbox for each set of properties you want to include or exclude, from the 'Preferences' dialog pages.

### Access

On the 'Preferences' dialog, select the 'Diagram > Themes' page.

Ribbon	Start > View > Preferences
Keyboard Shortcuts	Ctrl+F9

### Configure themes for diagrams and elements

Option	Action
Name	Click on the drop-down arrow and select the theme you want to either: <ul style="list-style-type: none"><li>• Apply as the default appearance of your diagrams</li><li>• Edit (user-defined theme)</li><li>• Use as the base for a new user-defined theme, or</li><li>• Delete (user-defined theme)</li></ul>
Font	Select the checkbox to include the 'User Font Face' and 'Font Size' settings from the 'Appearance' page of the 'Preferences' dialog (click on the 'Configure Default Element Fonts' button on the 'Appearance' page to set these fields). Deselect the checkbox to retain the previous font applied to the diagram.
Color	Select the checkbox to include the element, connector and diagram colors defined on the 'Gradients and Background' page and the 'Standard Colors' page. Deselect the checkbox to retain the previous set of colors applied to the diagram.
Line Thickness	Select the checkbox to include the 'Default Element Border Width' from the 'Appearance' page, and the 'Pen Width' (for connector line thickness) from the 'Link'

	<p>page of the 'Preferences' dialog.</p> <p>Deselect the checkbox to retain the previous set of line widths applied to the diagram.</p>
Gradient	<p>Select the checkbox to apply the setting of the 'Show Gradient Fill for Paper Color' checkbox (which applies a color gradient to the background color of the diagrams you display) and the 'Gradient Fill Direction for an Element' field on the 'Gradients and Background' page of the 'Preferences' dialog.</p> <p>Deselect the checkbox to retain the previous color gradient settings applied to the diagram.</p>
Background Image	<p>Select the checkbox to incorporate the currently-set diagram background image in the theme.</p>
Element Shadows	<p>Select the checkbox to incorporate the currently-set element shadow setting (on or off) and color in the theme.</p>
Save	<p>Click on this button to either:</p> <ul style="list-style-type: none"> <li>• Create a new user-defined theme, or</li> <li>• Save changes to an existing theme</li> </ul> <p>The 'Diagram Theme' dialog displays for the theme name. Either:</p> <ul style="list-style-type: none"> <li>• Type in a name for the theme and click on the OK button to create the new theme, or</li> <li>• Simply click on the OK button and then click on the Yes button to save the updates to the theme under the same theme name</li> </ul>
Delete	<p>(Only available if a user-defined theme is selected.)</p> <p>Click on this button to delete the selected theme.</p> <p>A prompt displays for you to confirm the deletion. Click on the Yes button to delete the theme, or on the No button to cancel the deletion.</p>
Close	<p>Click on this button to close the 'Preferences' dialog.</p> <p>If you have edited an existing theme, this applies all changes to the theme to the diagrams you have open.</p>

## Notes

- You cannot edit or delete a built-in theme; you can use a built-in theme as the base for a user-defined theme
- A theme draws its properties from other pages of the 'Preferences' dialog, therefore if you select the 'Gradient' checkbox the theme will apply the status of the 'Show Gradient Fill for Paper Color' checkbox on the 'Gradients and Background' page, when that status might be disabled because you have applied a background tile image
- You can apply a different theme to an individual diagram, on the 'Theme' tab of the diagram 'Properties' dialog

## Diagram Gradients and Backgrounds

When reviewing the diagrams in your model, you have a range of options for managing the display and appearance of the diagrams and their contents. These options include setting the color and shading of the diagram and elements, and the style of the page border of the diagram. You can also, instead of using the color wash, select a tiled background image for the diagrams you display, from a set of system-supplied images or from images that you have created or downloaded to a local system folder yourself.

### Access

Ribbon	Start > View > Preferences > Diagram > Gradients and Background
Keyboard Shortcuts	Ctrl+F9   Diagram   Gradients and Background

### Diagram Background Options

Field/Button	Action
Tile	<p>Either:</p> <ul style="list-style-type: none"> <li>Type in the file path for a .jpg, .bmp or .png graphics file to use as a background for all your diagrams, or</li> <li>Click on the Select Tile button to the right of the field and select a file (by default from the Enterprise Architect supplied tiles folder, but you can browse to any other file location for the required file)</li> </ul> <p>The selected background is immediately applied to any diagrams you have open, and the field displays the location of the background graphic file, such as:</p> <p>C:\Program Files\Sparx Systems\EA\BackgroundTiles\Aqua_03.jpg</p> <p>If you no longer want to apply a background tile to your diagrams, click on the Clear File button to clear the field.</p> <p>All diagrams with a background tile will include that background when saved as a Diagram Image or a copy.</p>
Paper	<p>Click on the drop-down arrow to change the background color of the diagrams you display.</p> <p>This field is disabled if you have selected a background tile (above). The field is re-enabled when the file path is deleted from the 'Tile' field.</p>
Page Border Style	<p>Click on the drop-down arrow and select the option for the type of page border you want to use when displaying diagrams on your monitor. You can choose from:</p> <ul style="list-style-type: none"> <li>Solid (the default) - pages are framed by a solid dark gray line on the screen</li> <li>Dash - pages are framed by a broken dark gray line</li> <li>Dash (with white line) - pages are framed by a broken dark gray line on a solid pale background</li> <li>Dot - pages are framed by a dotted dark gray line</li> <li>Dot (with white line) - pages are framed by a dotted dark gray line on a solid</li> </ul>

	<p>pale background line</p> <ul style="list-style-type: none"> <li>Chiselled - pages are framed by a thin black line bordered by a thicker dark gray line to the right or below</li> </ul> <p>If you cannot see the page border on a diagram, right-click on the diagram and select the 'Properties' option, then check that the 'Hide Page Border (All Diagrams)' or 'Hide Page Border (Current Diagram)' options are not selected.</p>
Gradient	<p>Click on the drop-down arrow and select the direction of the color gradient to apply to the background color of the diagrams you display - Up or Down. You set the background color itself in the 'Paper' field.</p> <p>Select &lt;none&gt; to apply the background color uniformly to the diagram background.</p> <p>This field is disabled if you have selected a background tile. The field is re-enabled when the file path is deleted from the 'Tile' field.</p>

## Element Fill Options

Option	Action
Gradient Fill Direction For an Element	<p>Click on the drop-down arrow and select the direction of the color gradient applied to the element fill color.</p> <p>Select &lt;none&gt; to apply the element fill color uniformly to the element, with no color gradient.</p>
Gradient Style for Element	<p>Click on the drop-down arrow and select the style to apply to the element fill color gradient. The options apply:</p> <ul style="list-style-type: none"> <li>On the left or upper edge of each element, a band of the gradient color that fades in the fill direction defined above, and that has an angled line or curve on the inner boundary</li> <li>On the right or lower side of each element, a band of the gradient color that fades at 90 degrees to the gradient direction defined above</li> </ul> <p>Select '&lt;none&gt;' to have a single band of color fading across the element in the fill direction.</p>
Fill	<p>Click on the drop-down arrow and select the fill color of all elements (except Screen elements and Notes) on the diagrams you display.</p> <p>You can also change the element fill color on the 'Standard Colors' page, where you can define the fill color of Screen and Notes elements as well.</p> <p>You can quickly make fill color changes using the 'Hue', 'Saturation' and 'Luminosity' fields, in combination. The 'Fill' field reflects the color changes as you make them, but having a diagram open with large elements also shows the changes immediately and very clearly.</p>
Revert	<p>Click on this button to reset the fill color to the previously saved color. If you have been testing new colors but have not closed and re-opened the 'Preferences' dialog, you can return to the color you originally changed from.</p>
Hue	<p>Click on the slider icon and drag it along the line to set the basic primary color or combination of two primary colors. The numerical value of the color (the H value in the HSL code) displays in the field to the right of the slider.</p>

Saturation	Click on the slider icon and drag it along the line to set the color saturation (the degree of grayness in the color). The numerical value of the saturation (the 'S' value in the 'HSL' code) displays in the field to the right of the slider.
Luminosity	Click on the slider icon and drag it along the line to set the color luminosity (the degree of light in the color, from none (black) to full (white)). The numerical value of the luminosity (the L value in the HSL code) displays in the field to the right of the slider.

## Gradient Options

These options are ineffective if the 'Gradient Fill Direction for an Element' field is set to '<none>'.

Field/Button	Action
Tint Amount	<p>Click on the slider icon and drag it along the line to set the degree of tint in the color gradient. Moving from the left end the slider sets completely black at the top of the gradient, through no tint to completely white at the top of the gradient.</p> <p>The percentage tint displays in the field to the right of the slider, showing -50% for the left end of the slider, 0% (the default) in the center and 50% at the right end.</p> <p>To reset the Tint Amount to the system default (which is a slight, dusky gradient), click on the Default button.</p>
Fill Amount	<p>Click on the slider icon and drag it along the line to set the degree of fill of the gradient. From the left end the slider sets, effectively, no gradient (0%) through to starting the gradient immediately at one edge of the element and building right across the element (100%).</p> <p>The percentage gradient fill displays in the field to the right of the slider.</p> <p>To reset the Fill Amount to the system default (80%), click on the Default button.</p>

## Standard Colors

On a model diagram, the objects and texts are rendered in the system default colors. You can change any of these default colors to either one of a range of standard colors, or a color that you define yourself. Another user viewing the same model diagrams will still see the diagrams in either the standard default colors or colors that user has selected for their own use.

If you define and select a 'non-standard' color for an object type, that color is shown in the color pallet whilst it is the selected color for that object type. If you then select a different color, the non-standard color is no longer available in the pallet. You can, however, define up to 16 custom colors (using the Define Colors button) that are permanently available to use in changing the appearance of individual elements through the 'Default Appearance' dialog and 'Diagram' page of the 'Preferences' dialog.

### Access

Ribbon	Start > View > Preferences > Diagram > Standard Colors
Keyboard Shortcuts	Ctrl+F9   Diagram   Standard Colors

## Customize Diagram Element Colors

The color combo boxes on the 'Standard Colors' page help you to customize the various colors that will be used to draw elements (and their features) on all diagrams.

Step	Action
1	On the selected color combo box, click on the drop-down arrow. A 10x14 color pallet displays showing a range of standard colors, with the system default color shown above the pallet and a row of squares for custom colors underneath. If custom colors have already been defined (using the Define Colors button) they are shown in the additional row.
2	If the color you want to use is shown on the pallet, click on it to select it and to return to the 'Standard Colors' page.
3	If the color you want to use is not shown, click on the Other button. The 'Color' dialog displays showing the 'Standard' tab, offering a larger range of standard colors.
4	If the color you want to use is shown on the pallet, click on it to show that color in the 'New' panel and (optionally) compare it with the currently-set color in the 'Current' panel. Click on the OK button to set the selected color and to return to the 'Standard Colors' page.
5	If a suitable color is not available in the extended pallet, click on the 'Custom' tab. This contains: <ul style="list-style-type: none"> <li>A spectrum panel, with a 'sampler' icon; move the icon around the panel to change the color shown in the 'New' panel</li> <li>A 'Luminosity' bar; move the arrow on the right up and down to change the intensity of the color shown in the 'New' panel</li> <li>'Hue', 'Sat(uration)' and 'Lum(inosity)' (HSL) fields, and 'Red', 'Green' and 'Blue' (RGB) fields; type and increment or decrement the decimal values to either: <ul style="list-style-type: none"> <li>- make slight modifications to a color or</li> </ul> </li> </ul>



	<p>- exactly define a color for which you know the HSL and/or RGB values</p> <p>As you define the color it changes in the 'New' panel; (optionally) compare it with the currently-set color in the 'Current' panel and adjust it as necessary.</p> <p>When you have defined your color, click on the OK button to select it and to return to the 'Standard Colors' page.</p>
6	<p>As an alternative to selecting a standard color or defining a new one, you can capture a color that is used elsewhere on your current monitor screen.</p> <p>Click on the Select button to redisplay the cursor as an 'eye-dropper' icon; move this around the screen to the color you want to sample.</p> <p>Position the cursor so that the color is under the tip of the 'eye-dropper' and shown in the 'New' panel.</p> <p>Click the left mouse button to capture the color, then click on the OK button to select it and to return to the 'Standard Colors' page.</p>
7	Click on the Close button to save your changes and close the 'Preferences' dialog.

## Elements

Element / Component	Description
Fill	<p>Define the fill color of all elements (except Screen elements and Notes) on the diagrams you display.</p> <p>This color can also be changed on the 'Gradients and Backgrounds' page, and overridden by any other fill color definition in your model, such as the Layout ribbon fill setting, element default appearance, Template Element Package or stereotype definition.</p>
Line	Define the line color of all element borders on the diagrams you display.
Text	Define the font color of element text and labels on the diagrams you display (including Text elements).
Shadows	Define the color of element outline shadows on the diagrams you display (including Notes).
Attributes	Define the font color of attribute text in the attribute compartment of all elements on the diagrams you display.
Methods	Define the font color of method (operation) text in the operation compartment of all elements on the diagrams you display.
Behaviors	Define the color for behaviors in Activity diagrams you display.
Notes	Define the color of text in the element notes compartment of all elements on the diagrams you display.

## Notes & Constraints Elements

Element / Component	Description
Fill	Define the fill color of Note and Constraint elements on the diagrams you display.
Text	Define the font color of Note and Constraint text on the diagrams you display.
Note Line	Define the line color of the borders on Note elements on the diagrams you display.
Constraint Line	Define the line color of the borders on Constraint elements on the diagrams you display.

## Others

Element / Component	Description
Connector Lines	Define the line color of all connectors on the diagrams you display.
Screen Fill	Define the fill color of Screen elements on User Interface diagrams you display.
Custom Colors	Click on the Define Colors button to define a set of custom colors for you to apply to diagram elements anywhere in the model.
Use Dark Theme Style	Select this option to apply a system-managed color theme to certain types of element (including Packages, Navigation Cells, Hyperlinks and Diagram Notes) on diagrams when a dark Theme is applied to the diagrams. The general effect is to make the element colors brighter and richer. The option also allows use of a diagram background color when saving the diagram as an image or copying it to the clipboard.

## Notes

- To override the default appearance of a specific element on all diagrams on which it is found, right-click on the element and select the 'Appearance | Default Appearance' option; the 'Default Appearance' dialog displays
- To change the appearance of a specific element on the current diagram only, use the 'Style' panel of the 'Layout' ribbon

## Create Custom Colors

If the standard colors available through the color palettes do not meet your requirements, you can define up to 16 custom colors that you apply to individual elements and connectors through the 'Connector Appearance' dialog and element 'Default Appearance' dialog.

By applying such custom colors within a template diagram, you can render all elements of the same type with the same custom color, for all users of the project.

If another user has a set of custom colors that you want to use, or a project manager has defined colors specifically for the project, they can export these colors to the project file and you can then import them directly as your custom color pallet. If you have your own colors in the pallet, they are overwritten by the imported set.

### Access

Ribbon	Start > View > Preferences > Diagram > Standard Colors : Define Colors
Keyboard Shortcuts	Ctrl+F9   Diagram   Standard Colors : Define Colors

### Define your custom colors

Step	Action
1	On the 'Color' dialog, click on the Define Custom Colors » button. The 'Color' dialog is extended to provide color selection fields on the right of the dialog.
2	Click on an empty block in the 'Custom colors' pallet (or, if you are replacing a color, click on that color block in the pallet) and on the: <ul style="list-style-type: none"> <li>'Spectrum' panel, move the 'sampler' icon around the panel to change the color shown in the 'Color Solid' box</li> <li>'Luminosity' bar, move the arrow on the right up and down to change the intensity of the color shown in the 'Color Solid' box</li> <li>'Hue', 'Sat'(uration) and 'Lum'(inosity) (HSL) fields, and 'Red', 'Green' and 'Blue' (RGB) fields; type decimal values to either: <ul style="list-style-type: none"> <li>- make slight modifications to a color or</li> <li>- exactly define a color for which you know the HSL and/or RGB values</li> </ul> </li> </ul> As you define the color it changes in the 'Color Solid' box.
3	When you have finished creating the color, click on the Add to Custom Colors button to add the color to the selected Custom Colors block.
4	Repeat steps 2 and 3 for any other custom colors you want to define.
5	Click on the OK button to close the 'Color' dialog and return to the 'Standard Colors' page of the 'Preferences' dialog.
6	To make the custom colors available for your use, select the 'Show Project Custom Colors in Color

	Combo Boxes' checkbox. Up to 16 custom colors are displayed at the end of the color selection pallets on the 'Connector Appearance' dialog and element 'Default Appearance' dialog.
7	Click on the Close button to close the 'Preferences' dialog.

## Get/Set Custom Project Colors

If more than one person is working on a project, you might want to share a set of custom colors with other team members, or possibly provide special colors for use across the whole project. You would then:

- Capture the custom or project colors you have defined, in the project file, or
- Retrieve a set of colors someone else has defined, from the project file

### Access

Ribbon	Configure > Reference Data > Settings > Colors > Get Project Custom Colors Configure > Reference Data > Settings > Colors > Set Project Custom Colors
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### Set custom project colors in the project file

Step	Action
1	Define the custom colors on the 'Standard Colors' page of the 'Preferences' dialog.
2	Select the 'Set Project Custom Colors' option. This message displays: <i>Project Custom Colors export successful. 16 custom colors saved to the project file.</i>
3	Click on the OK button. Notify the appropriate users that the colors are available for importing.

### Get project custom colors from the project file

Step	Action
1	Select the 'Get Project Custom Colors' option. This message displays: <i>Project Custom Colors import successful. 16 custom colors imported from the project file.</i>
2	The custom colors are now available at the end of the color pallets of the 'Default Appearance' dialog and 'Connector Appearance' dialog. <ul style="list-style-type: none"><li>• If the colors do not show, select the 'Start &gt; View &gt; Preferences' ribbon option and the 'Diagram &gt; Standard Colors' page, and select the 'Show Project Custom Colors in Color Combo Boxes' checkbox</li></ul>

## Diagram Appearance Options

It is possible to configure the appearance of diagrams and elements in your models; that is, how diagrams and their contents appear when displayed in the Diagram View. There is a wide range of options you can set to create this display configuration. As you select an option, it has immediate effect on any diagram that you have open, so you can see what the change in appearance is.

### Access

Ribbon	Start > View > Preferences > Diagram > Appearance
Keyboard Shortcuts	Ctrl+F9   Diagram   Appearance

### Configure the appearance of diagrams and elements

Field/Button	Action
Configure Default Element Fonts	Click on this button to set the default text fonts to use on diagrams that you have opened yourself.
Renderer	<p>Render smooth curves and diagonal lines in diagrams, so that staggered vertical or horizontal pixels are less obvious. Click on the drop-down arrow and select the type of renderer you prefer to use:</p> <ul style="list-style-type: none"> <li>• Basic is GDI32; it does not provide anti-aliasing and gradient fills</li> <li>• Enhanced-1 is parallel to Windows GDI+ but internal to Enterprise Architect; it provides anti-aliasing and gradient fills, and operates well across different platforms</li> <li>• Enhanced-2 is Windows GDI+; this can vary across different platforms, performing better than Enhanced-1 in some environments, and less well in others</li> </ul> <p>Experiment with these options and see which works best for your system and requirements.</p>
GDI Plus Metafiles	<p>This checkbox defaults to selected, to include the use of GDI+ metafiles in your diagrams.</p> <p>Deselect the checkbox if you do not want to use GDI+ metafiles.</p>
Image Quality	<p>Defaults to 'High' to maximize image drawing quality for scaled and resized images on a diagram. The option does not affect the drawing of EMF or WMF images.</p> <p>This setting has an effect on processing performance of the diagram, so if a diagram has many images and performance is more important than high image quality, you can reset the field to 'Low'.</p>
Default Element Border Width	Click on the drop-down arrow and select the default element border width (1, 2 or 3 pixels).

Scale view by	<p>Click on the drop-down arrow and select the percentage (from 0 to 50, in increments of 10) by which you can automatically increase the size of all objects on a diagram you are viewing, without affecting other users reading that diagram.</p> <p>You can perform the same function with the Zoom Slider on the Status bar; changes in the 'zoomed' display scale of a diagram update this field and affect any other diagrams that you open.</p> <p>This has no impact any other diagram Zoom facility in the system.</p>
Print in Color	<p>Select the checkbox to print your diagrams in color.</p> <p>Deselect the checkbox to print the diagrams in black and white.</p>
Document with background color	Select this checkbox to apply the background color of the current theme to all diagram images generated in the RTF Generator, instead of the standard white.
HTML Report with background color	Select this checkbox to apply the background color of the current theme to all diagram images generated in the HTML Generator, instead of the standard white.
Anti-aliased text	<p>Select the checkbox to force text anti-aliasing in diagrams.</p> <p>If you deselect the checkbox, the system applies the MS Windows default setting. Therefore, if you do not want to use anti-aliasing, ensure that the Windows anti-aliasing default is also set to OFF.</p>
Compress text to fit within Element	<p>Select the checkbox to compress element text within the current element boundaries, when text at zoom levels other than 100% would not fit inside those boundaries.</p> <p>Deselect the checkbox to expand the element boundaries under those conditions.</p>
Italic Note Element Text	Select the checkbox to display the text of Note elements in italics.
Use Element Group Style	<p>Select the checkbox to apply a different fill color to each object type, with objects derived from a common element having the same color (for example, Object, Boundary, Control and Lifeline elements are the same color).</p> <p>Overrides all other settings for element fill colors.</p>
Bold Element Names	Select the checkbox to display element names in bold text.
Element Shadows On	Select the checkbox to display a shadow around the bottom and right edges of each element in a diagram.
Invert rotated text for metafiles	Select the checkbox to use a different text format when external metafile readers are causing issues.
Round edges for elements	Select the checkbox to soften the corners of all elements that have a rectangular appearance, so that they have rounded corners.
Hand Draw Mode Font	Click on the drop-down arrow and select the font to be used in any diagram you display that has the 'Hand Drawn diagram' option selected.
Default	Click on this button to re-set the font you see used in hand-drawn diagram mode to the system default (Segoe Print).
Italic	For diagrams displayed in Hand Draw mode, select this checkbox to display text in

	italics.
Use Watermark	Select the checkbox to add a watermark to any diagrams that you print.
Text	Type in the text to use as watermark text. If the 'Use Watermark' checkbox is selected, this text is displayed on any diagrams that you print.
Close	Click on this button to save the changes you have made, and to close the 'Preferences' dialog.



## Set User Default Fonts

A diagram in your model uses a standard font that is applied to any diagram displayed in any model. You can override this by setting a user-specific font that applies to any diagram that you display in any model.

You can also define Model Fonts that apply to any diagram that any user displays within the model; the Model font overrides the User font, to ensure that all members of the project team have a consistent and coherent view of the model. This avoids the problem of one user creating a diagram in a small font, and another user trying to view it in a larger font, which distorts the diagram.

### Access

Ribbon	Start > View > Preferences > Diagram > Appearance : Configure Default Element Fonts
Keyboard Shortcuts	Ctrl+F9   Diagram   Appearance : Configure Default Element Fonts

### Control default diagram fonts

Field/Button	Action
Font Face	Click on the drop-down arrow and select the font typeface to apply to your diagrams if no model font is specified.
Font Size	Click on the drop-down arrow and select the font size to apply to your diagrams if no model font size is specified.
Restore Defaults	Click on this button to restore the system defaults to the user 'Font Face' and 'Font Size' fields.
OK	Click on this button to close the dialog and save your changes.
Cancel	Click on this button to close the dialog and discard your changes.

### Notes

- In the Corporate, Unified and Ultimate editions of Enterprise Architect, if security is enabled you must have 'Manage Project Settings' permission to set, change or clear the 'Model Font' fields
- User fonts are overridden by specifically-defined element fonts, so that the element is viewed as designed regardless of the model or user defaults; to define the font for a specific element, right-click on the element in a diagram and select the 'Appearance | Set Font' option
- If you cannot read the diagrams because the default font makes the objects and text too small, you can scale up all objects (that is, all diagram displays) to a more readable size for you only; the objects are not scaled up for other users  
Everything on the diagram is enlarged to the same extent, so it remains in proportion and readable; to do this, return

to the 'Diagram Appearance' page of the 'Preferences' dialog and enter a suitable percentage value in the 'Scale view by' field

# Diagram Behavior Options

As you create and edit diagrams in your model, the system can respond in different ways to the types of object you are adding to a diagram. You can configure a range of options to control what response the system makes to the object you are adding or the action you are performing.

## Access

Ribbon	Start > View > Preferences > Diagram > Behavior
Keyboard Shortcuts	Ctrl+F9   Diagram   Behavior

## Control diagram behavior

Field/Button	Action
Auto Instance	Select the checkbox to automatically create object instances when dragging certain element types - such as Class and Component - from the Project Browser onto the diagram, with the dragged element as the classifier. Deselect the checkbox to paste the element as a link. This option has no effect on Sequence diagrams.
Instance has Classifier style	Select the checkbox to automatically apply the classifier style of the element from which an instance is instantiated, when the instance is created either through the 'Paste Element' dialog or when 'Auto Instance' is selected. The classifier style is the default appearance of the classifier, such as fill color and text font.
Show Life Lines	Select the checkbox to adjust the alignment of life lines for Sequence elements.
Layout uses all relations	Select the checkbox to automatically take connectors of all types into account when you lay out the diagram; deselect the checkbox to ignore Association connectors in automatically laying out the elements. The elements with Association connectors are moved as if they do not have those relationships, although the connectors themselves are still depicted on the diagram. This option acts through the 'Layout > Diagram > Edit > Properties > Diagram : Set Layout Style' option, and through the 'Digraph' option of the Layout Tools window ('Layout > Tools > Diagram Layout > Open Diagram Layout Tools').
Auto Save Changes	Select the checkbox to automatically save your changes as you work. No prompts are displayed asking you to save the changes. Deselect the checkbox to display prompts to save your changes when you attempt to close the diagram without having saved it.
Show 'Hidden' Parents	Select the checkbox to list each element's parent elements that are not already part of the diagram, in the top right corner of the element in the diagram.

	Deselect the checkbox to not list the parent elements.
Auto Group Elements	<p>Select the checkbox to also move contained elements when you are moving their container elements. Deselect the checkbox to move the container elements independently.</p> <p>You can toggle to the opposite setting of this option when moving an element on a diagram, by pressing and holding Alt.</p>
Show Linked Items in Package	<p>Select the checkbox to include external elements in the Package contents list in a Package element on a diagram. For this to take effect, the 'Package Contents' checkbox must be selected on the 'Elements' tab of the 'Diagram Properties' dialog for the diagram.</p> <p>Deselect the checkbox to omit external elements from the list.</p>
Show Package Item Scope	<p>Select the checkbox to display the scope indicators (such as +, # and -) against the elements in the contents list within a Package element. For this to take effect, the 'Package Contents' checkbox must be selected on the 'Elements' tab of the 'Diagram Properties' dialog for the diagram.</p> <p>Deselect the checkbox to hide these indicators in the list.</p>
Shift-Mouse Autoscroll	Select the checkbox to enable you to autoscroll around diagrams by pressing and holding Shift and pressing the middle mouse button while you move the mouse.
Use Automatic SubActivities	Select the checkbox to automatically create a new Structured Activity element when you drag one Activity diagram from the Project Browser onto another Activity diagram, and select the 'Hyperlink' option.
Always Highlight Context Element	<p>Select the checkbox to show a hatched border around any element when you select it, along with the tracking handles (see <i>Tracking Handle Size</i>).</p> <p>Deselect the checkbox to show only the tracking handles when you select an element.</p>
Objects Snap to Grid	<p>Select the checkbox to make all elements on a diagram always align with the nearest grid point.</p> <p>Deselect the checkbox to position elements at a precise point regardless of the grid.</p>
Show Grid	<p>Select the checkbox to display the grid points as pale gray dots. If you specify a large grid size the grid points can be hard to see.</p> <p>Deselect the checkbox to hide the grid points.</p>
Grid Size	<p>If you have selected the 'Objects Snap to Grid' checkbox, type in the separation of the grid points, in pixels.</p> <p>If you deselect the 'Objects Snap to Grid' checkbox the value is grayed out, but it remains in the field and is applied again if you re-select the checkbox.</p>
Auto Tidy	Select the checkbox to automatically tidy line angles for custom connectors; this 'nudges' the custom line into horizontal and vertical increments.
Tidy line gap	Type in the maximum distance, in pixels, that the 'Auto Tidy' option can adjust the end point of a non-orthogonal line to make it orthogonal, for custom connectors.
Alias only	Select the radio button to display, on elements with aliases, the alias instead of the element name.

	This option and the next two options take action on diagrams for which the 'Use Alias if Available' checkbox is selected on the 'Diagram Properties' dialog.
Alias and Name	Select the radio button to display, on elements that have aliases, both the element name and the Alias in the format '(Alias) name'.
Use alias field for role	Select the checkbox to use the Alias property of instances of elements to show the Role property.
Enable Presentation Mode	<p>Select the checkbox to display your diagrams in Presentation Mode.</p> <p>In Presentation Mode, you can display a diagram in a presentation and, when you click on an element on the diagram, the element is highlighted with a solid colored border. This provides a more visually appealing highlight of the element you are discussing.</p> <p>In Presentation Mode, the 'tracking handles' are hidden.</p>
Highlight	<p>Click on the drop-down arrow and select the color in which to highlight elements in Presentation mode.</p> <p>You can select either:</p> <ul style="list-style-type: none"> <li>• One of the available colors</li> <li>• The Other button, or</li> <li>• (If you have previously changed the color) the Default color button (Aqua)</li> </ul> <p>The Other button displays the 'Colors' dialog, from which you can select a preset color from the 'Standard' tab or define a custom color on the 'Custom' tab.</p> <p>Click on the OK button to apply the new color as the highlight in diagram presentations.</p>
Tracking Handle Size	<p>Click on the drop-down arrow and select the size of the 'size change handles' or 'tracking handles' on an element, connector or label in a diagram. These display when you click on the object to select it.</p> <p>You can select:</p> <ul style="list-style-type: none"> <li>• Small (the default, 8 pixels)</li> <li>• Medium (12 pixels), or</li> <li>• Large (16 pixels)</li> </ul> <p>If 'Enable Presentation Mode' is selected, the 'tracking handles' are hidden. You can still expand or contract the element by dragging on the corners, ends or mid-points of the object.</p>
Color	<p>Click on the drop-down arrow and select the fill color of the 'tracking handles' from the list:</p> <ul style="list-style-type: none"> <li>• White</li> <li>• Light Gray</li> <li>• Dark Gray or</li> <li>• Black</li> </ul>
Reset BPMN Prompts	<p>Working on a BPMN 2.0 diagram can result in certain prompts being displayed, which you can hide by selecting the 'Do not show this message again' checkbox on each prompt.</p> <p>Click on this Reset BPMN Prompts button to clear that checkbox so that the prompts are again displayed.</p>

Close	Click on this button to save your changes and close the 'Preferences' dialog.
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## Notes

- If you have a diagram open when you reset any of these diagram behavior options, you might need to close the diagram and open it again to see the effect

## Sequence Diagram Options


When you are modeling using Sequence diagrams, there are a number of rendering features that are specific to that diagram type, such as the focus of the control indicator. You can define default settings for these features, in addition to the more-general diagram settings that you define on the other diagram pages of the 'Preferences' dialog.

### Access

Ribbon	Start > View > Preferences > Diagram > Sequence
Keyboard Shortcuts	Ctrl+F9   Diagram   Sequence

### Control Sequence diagram behavior

Field/Button	Action
Default page layout is Landscape	Select the checkbox to set the default orientation of your Sequence diagrams to landscape.
Show Sequence Numbering	Select the checkbox to display sequence numbers against the Sequence Messages on the diagrams. (This option has immediate effect.)
Assume right to left messages are Return	Select the checkbox to automatically render new Messages passing from right to left as Return Messages.
Default concurrency is Asynchronous	Select the checkbox to set the default concurrency for Sequence Messages to Asynchronous. Deselect the checkbox to set the default concurrency to Synchronous.
Enable tooltips when re-ordering messages	Select the checkbox to display a tool-tip when you attempt to move one Message above or below another. The tool-tip is to remind you that to swap the Message positions, and thus re-order the Messages, you must hold down the Alt key. If you do not hold down the Alt key the selected Message will move close to the next Message but will not go past it. To avoid displaying the tool-tip, deselect the checkbox. This is only advisable if you are familiar with the requirement to use the Alt key.
Width	Click on the drop-down arrow and select the line width (in points, between 0 and 20) of the 'focus of control' rectangle (the body at the start and end of a Message, on the Lifeline). (This option takes effect when a new element is added, an existing element is repositioned, or the diagram is closed and re-opened)
Assume message returns	Select the checkbox to set implicit Return Messages when none are explicitly drawn (recommended). Deselect the checkbox to use Return Messages only when they are explicitly

	created.
GarbageCollect	Select the checkbox to automatically truncate the Lifelines for elements that have a defined lifecycle, by drawing an X after the last Message (that is, assume garbage collect rather than explicit delete).
Name	<p>Click on the  button to display the MS Windows 'Font' dialog, and define how the caption bar text (above the Sequence diagram) is rendered. The caption bar shows each element name immediately above its element in the diagram.</p> <p>This feature is particularly useful for non-English character sets.</p> <p>Changes take effect immediately after the 'Preferences' dialog is closed.</p>
Size	<p>Click on the drop-down arrow and select the font size of the caption bar text.</p> <p>This overrides the font size set in the MS Windows 'Font' dialog, above.</p>
Use System	Select this checkbox to override (but not overwrite) the 'Name' and 'Size' settings with the system default heading font definition.
Close	Click on this button to save the changes you have made, and to close the 'Preferences' dialog.



# Object Display Options


In modeling with elements, you can configure the standard contents of the elements you create and view and, in diagrams, how they are rendered and how the system responds to actions you take on them.

## Access

Ribbon	Start > View > Preferences > Objects
Keyboard Shortcuts	Ctrl+F9 > Objects

## Control element appearance and behavior

Field/Button	Action
Version	Type in the default version number or code for new elements.
Phase	Type in the default phase number or code for new elements.
Highlight References	Select the checkbox to highlight parameters in operations that are passed by reference rather than value.
Reference Char(s)	Type in a character or character string to act as the reference.
Prefix/Suffix	Select the appropriate radio button to display the 'Reference Char(s)' value as either a prefix or a suffix on the operation parameter.
Warn about spaces in class names	Select the checkbox to display a warning message when a Class, operation or attribute name has embedded spaces (which can cause coding problems). Deselect the checkbox to hide such messages.
Classes honor analysis stereotypes	Select the checkbox to show Classes as their stereotype; for example, if a Class is stereotyped as a Boundary, it appears as a Boundary rather than a Class. Deselect the checkbox to show the element as its base type; that is, as a Class.
Show stereotype icon for requirements	Select the checkbox to show a code letter in the top right corner of Requirement (E, for external), Change (C) and Issue (I) elements. Deselect the checkbox to hide the indicator letter.
Support for Composite Objects	Select the checkbox to: <ul style="list-style-type: none"> <li>• Display a hashed border within a valid parent element when you drag a potential child element onto it in a diagram</li> <li>• Automatically embed the child element in their parent element in the model, when you drag and drop the child element onto the parent element in a diagram</li> <li>• Automatically disengage the child element from the parent (break the child-parent relationship) in the model when you drag the child element out of</li> </ul>

	<p>its parent element</p> <p>Deselect the checkbox to not display the hashed border and to not embed the child element in the parent in the model.</p>
Auto-resize marks diagram 'dirty'	<p>Select the checkbox to set auto-resizing of elements as an unsaved change to the diagram (displaying an asterisk on the diagram tab), so that you must manually save the diagram to protect the change.</p> <p>Deselect the checkbox to automatically save autosizing changes.</p>
Highlight {abstract} elements	<p>Select the checkbox to indicate, on a diagram, Classes set as abstract by displaying the tag <i>{abstract}</i> below and to the right of the Class name.</p>
Allow elongated Use Cases	<p>Select the checkbox to allow Use Cases or Use Case extension points to elongate to accommodate long names.</p> <p>If you deselect the checkbox, Use Case re-sizing is proportional and the 'make same height/width' menu options are blocked.</p>
Show status colors on diagrams	<p>Select the checkbox to display color coding in Requirement, Change and Issue elements on all diagrams.</p> <p>Deselect the checkbox to display the status bands and element shadows in the standard fill and shadow colors. You can, however, select an option in report generation to still show the status colors in diagrams in the report.</p> <p>You can increase the range of element types on which to use status color coding, through the 'Status' page of the 'General Types' dialog ('Configure &gt; Reference Data &gt; Project Types &gt; General Types').</p>
Copy inheritance links on duplicate	<p>Select the checkbox to duplicate Inheritance and Realization connectors when you copy their elements.</p>
Show buttons for selected Object on diagram	<p>Select the checkbox to enable the display of the floating toolbar buttons to the right of an object when you select it.</p>  <p>Deselect the checkbox to not display these toolbar buttons or element icons.</p>
Edit Object on New	<p>Select the checkbox to automatically display the element 'Properties' dialog when a new element is added to a diagram.</p> <p>Deselect the checkbox to simply create the element without displaying the 'Properties' dialog.</p>
Show «column» stereotype	<p>Select the checkbox to show the «column» stereotype as a heading in Table elements, when data modeling.</p> <p>Deselect the checkbox to just display the column names without the «column» heading.</p>
Extend Complexity	<p>Select the checkbox to extend levels of complexity to five levels in the 'Complexity' field in the element 'Properties' dialog:</p> <ul style="list-style-type: none"> <li>• 'Easy'</li> <li>• 'Medium'</li> </ul>

	<ul style="list-style-type: none"> <li>• 'Difficult'</li> <li>• 'Extreme'</li> <li>• 'Unknown'</li> </ul> <p>Deselect the checkbox to restrict the field to three options (omitting 'Extreme' and 'Unknown').</p>
UML 1.5 Components	Select the checkbox to perform your modeling using UML 1.5 components (Enterprise Architect versions from 4.0 onwards default to using UML 2.x).
Show State Compartment	Select the checkbox to show, in a State element, the State compartment divider under the State name.
Show Duplicate Tags	<p>Select the checkbox to enable duplicate tag names to be shown in the element Tagged Values compartment and in the Tagged Values window for the element.</p> <p>The system defaults to hiding duplicate tag names, to avoid displaying inherited and overridden Tagged Values. It is useful to display the duplicate tags when you are revising them; for example, when you are adding namespaces and labels in ODM.</p>
Group Operations by Stereotype	<p>Select the checkbox to group an element's operations by their stereotype, in the element's operations compartment on the diagram.</p> <p>The order in which the stereotypes are listed is determined by the order of the operations in the 'Operations' page of the Features window for the element - if operation AA with stereotype Z is the first in the operation list, stereotype Z is first in the stereotype list.</p> <p>Deselect the checkbox to list the operations ungrouped, in the order in which they appear in the Features window for the element.</p>
Group Attributes by Stereotype	<p>Select the checkbox to group an element's attributes by their stereotype, in the element's attributes compartment on the diagram.</p> <p>The order in which the stereotypes are listed is determined by the order of the attributes in the 'Attributes' page of the Features window for the element - if attribute AA with stereotype Z is the first in the attribute list, stereotype Z is first in the stereotype list.</p> <p>Deselect the checkbox to list the attributes ungrouped, in the order in which they appear in the 'Attributes' page for the element.</p>
Sort Features Alphabetically	<p>Select the checkbox to list element features of each type alphabetically. Features include Attributes, Operations, Tags, Constraints and Test Cases.</p> <p>Deselect the checkbox to list the features in the order in which they are defined (if not alphabetical) in the corresponding dialog or window for the feature.</p> <p>To observe the effects of selecting or deselecting the checkbox, you must close the diagram and reload it.</p>
Disable spelling	<p>Select the checkbox to turn off automatic spell checking.</p> <p>Deselect the checkbox to resume automatic spell checking.</p> <p>The spelling checker operates on the view, dialog or window where you initially enter the text strings.</p>
Advanced	<p>Click on this button to specify which types of element should be listed in document reports and in diagram Packages.</p> <p>Some types of element do not appear in Packages and in document output by default. You use this facility to include such types.</p>

Show invoked Activity name (UML)	For UML and other non-SysML diagram types. Select the checkbox to show CallBehaviorAction names as 'Action:Activity'. Clear the checkbox to show the names as 'Action'.
Show invoked Activity name (SysML)	For SysML diagram types. Select the checkbox to show CallBehaviorAction names as 'Action:Activity'. Clear the checkbox to show the names as 'Action'.
Close	Click on this button to save the changes you have made, and to close the 'Preferences' dialog.

## Connector Display Options

It is possible to configure a number of settings that control the creation, behavior and notation for the connectors that you define in your diagrams.

### Access

Ribbon	Start > View > Preferences > Links
Keyboard Shortcuts	Ctrl+F9   Links

### Control connector appearance and behavior

Field/Button	Action
Edit Connector on New	<p>Select the checkbox to automatically open the connector 'Properties' dialog each time you create a new connector on a diagram.</p> <p>Deselect the checkbox to simply create connectors without displaying the 'Properties' dialog to assign a name or properties.</p>
Association default = source --> target	<p>Select the checkbox to automatically set the direction of new Associations, flowing from source to target element (that is, with an arrow head at the target end).</p> <p>Deselect the checkbox to create Associations with no direction (no arrowhead on the connector line.)</p>
Generalization link style Default = Tree	<p>Select the checkbox to show Generalizations in vertical tree-style, forming a hierarchy where multiple links to elements exist.</p> <p>Deselect the checkbox to create Generalizations in Auto Route style.</p>
Shade Qualifier boxes	<p>Select the checkbox to lightly shade all Qualifier boxes on Associations in the diagrams you open (see <i>Suppress Qualifier Boxes</i>).</p> <p>Deselect the checkbox to prevent shading of the Qualifier boxes.</p>
Draw Aggregations Reversed	<p>Select the checkbox to draw Aggregate and Composite connectors from target element to source element (the diamond on the source end of the line).</p> <p>Deselect the checkbox (the default), to draw these connectors from source to target (the diamond on the target end of the line).</p>
Prompt on connector deletes	<p>Select the checkbox to display a prompt before deleting connectors, offering the choice of hiding the connector on the diagram or deleting it completely.</p> <p>If you deselect this option, the delete operation defaults to the last-set option on the dialog.</p>
	Select the checkbox to hide any constraints set on connectors in the diagrams you

Suppress Link Constraints	<p>open.</p> <p>Deselect the checkbox to allow the constraints to display on the connector lines.</p>
Suppress Qualifier boxes	<p>Select the checkbox to hide the qualifiers (in their boxes) on Association connectors.</p> <p>Deselect the checkbox to show the qualifiers on the diagrams you open.</p>
Show Uses arrowheads	<p>Select the checkbox to show an arrowhead on the target end of each Use connector in a Use Case diagram.</p> <p>Deselect the checkbox to show the connector as a simple line.</p>
Show 'Override Operation' dialog on new connector	<p>Select the checkbox to show the 'Override Operation' dialog automatically when adding Generalization and Realization connectors between Classes and Interfaces, if the target element has features that can be overridden.</p>
Suppress ' + ' Role Scope	<p>Select the checkbox to hide the 'Public' indicator (+, when Access = Public in the connector role properties) of the source and/or target role on a connector.</p> <p>Deselect the connector to allow the + symbol to display.</p> <p>When changing this setting, you might need to reload the diagram to see the change take effect.</p>
Strict Connector Syntax	<p>Select this checkbox to check that each new connector complies with UML, BPMN 2.0 and SysML 1.2 &amp; 1.3 syntax as you add it, and to enforce compliance.</p>
Pen Width	<p>Click on the drop-down arrow and select the default connector line width (between 1 and 4 pixels).</p>
Routing	<p>Click on the drop-down arrow and select the default connector style for new connectors (Direct, Routed or Custom).</p>
Enable	<p>Select the checkbox to enable the Quick Linker, showing the Quick Linker arrow when you click on an element on the diagram.</p> <p>Deselect the checkbox to hide the Quick Linker arrow and make the Quick Linker unavailable.</p>
Show Help	<p>Select the checkbox to add a 'Help' option at the end of the Quick Linker menu, to display the <i>Quick Linker</i> Help topic.</p>
Center to center	<p>Select this radio button to set the orientation of the dashed guide line for new connectors to anchor on the center of the source element and, as you approach the target element, the center of that element.</p> <p>The guide line displays both when you are dragging the Quick Linker arrow and when you have dragged a connector icon from the Diagram Toolbox.</p>
Exact placement	<p>Select this radio button to set the orientation of the dashed guide line for new connectors to the exact point on the element you drag from and the exact position of the cursor as you drag to the target element.</p> <p>This option enables the 'Force perpendicular line' checkbox.</p>
Force perpendicular line	<p>Select this checkbox to set the orientation of the dashed guide line for new connectors to a perpendicular line between the source and target element edges, wherever this is possible.</p> <p>You can toggle between this effect and the Exact Placement effect by holding [Ctrl]</p>

	as you move the cursor between the source and target elements.
Close	Click on this button to save the changes you have made, and to close the 'Preferences' dialog.

## Notes

- For the 'Draw Aggregations Reversed' option, all tools have the parent as the target and the child as the source of the connector, which is a requirement of UML; only the direction in which you drag the mouse to draw the connector is changed

## Communication Message Colors

Communication diagrams illustrate how components interact and exchange information in a process. They have a large number of messages that indicate the timing or sequence of events in the communication process. You can define the sequence of these messages using sequence numbers, which also help you to group messages within a stage in the sequence. To help make the sequence easier to see at a glance, you can also:

- Select to display the messages in color
- Set a color for each group of messages

### Access

Ribbon	Start > View > Preferences > Communication Colors
Keyboard Shortcuts	Ctrl+F9   Communication Colors

### Notes

- Select the 'Use Communication Message Coloring' checkbox to turn on message coloring in the Communication diagrams you open; when you select this option, Communication messages display in different colors depending on the sequence group they belong to on the diagram - for example, messages 1.n are black, 2.n are red and 3.n are green
- Click on the down arrow in the color field for each numerical message group and click on the color to set for that group; if you have more than eight groups in the sequence the color pattern repeats, so group 9 messages are the same color as group 1 messages, and group 10 messages are the same color as group 2 messages
- Click on the Close button to save the changes you have made, and to close the 'Preferences' dialog



# XML Specifications

Many of the model development and management tasks you perform operate either directly or indirectly with XML. You can set defaults on a number of settings to standardize the way in which you use XML in your own modeling activities. You can override several of these settings on any specific XMI import or export, especially when publishing a model Package in XMI to another modeling language or tool.


## Access

Ribbon	Start > View > Preferences > XML Specifications
Keyboard Shortcuts	Ctrl+F9   XML Specifications

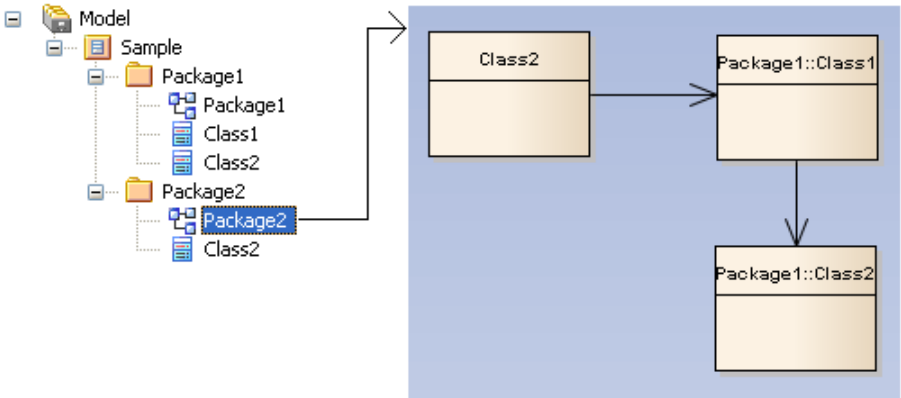
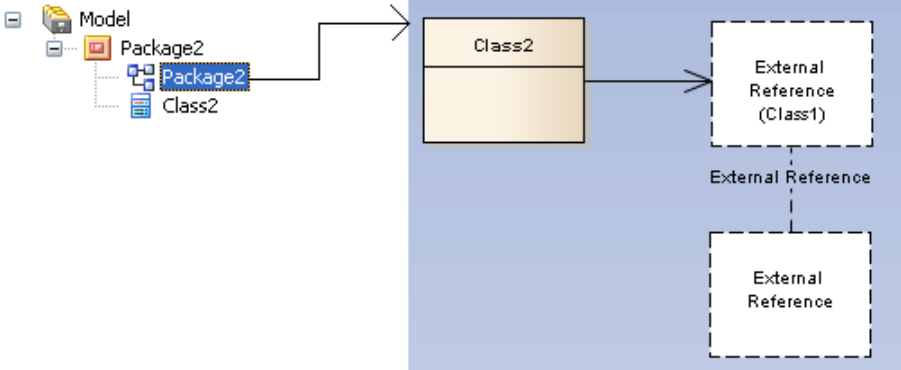

## Notes

- If 'Export Alternate Images' is set, and you have Packages in your model under version control, then any alternative images used in those Packages are also exported to the version control repository when you check in the Packages; in this case, you would only select the checkbox if the alternative images are subject to frequent change. Otherwise, do not select this option and instead use the 'Configure > Model > Transfer > Export Reference Data' and 'Import Reference Data' ribbon options to manage alternative images.

## Set XML Specification Options

Field/Button	Action
Editor	<p>Specify the default editor for reviewing any XML documents you open within the system. Either:</p> <ul style="list-style-type: none"><li>• Type in the location of the editor .exe file, or</li><li>• Click on the  button and browse for the location</li></ul>
Code Page	<p>Defaults to windows-1252; if you do not want to use this Code Page, type in your preferred code page reference.</p> <p>Setting a null encoding string results in the encoding tag being entirely omitted from the XML output.</p> <p>Click on the Default button to restore the setting to the default Code Page.</p>
Format XMI Output	<p>Select the checkbox to set formatting of your XMI output into human-readable form as the default.</p> <p>Deselect the checkbox to show the XMI as unformatted code.</p>
Use DTD	<p>Select the checkbox to default to using a Data Type Definition (DTD) in your XMI imports and exports. A DTD validates the correctness of the model and checks that no syntactical errors have occurred.</p> <p>Deselect the checkbox to set the default to not using a DTD.</p>

Export Diagrams	Select the checkbox to default to including diagrams when you export XML to another format or tool.
Export Alternate Images	Select the checkbox to export any alternative images used in the model when you export to XML.
Validate XMI against Schema/DTD	Select the checkbox to validate the XML format against the schema or Data Type Definition when loading an imported XML file.
Import using single transaction	<p>Select the checkbox to make all XMI import operations and all Paste Package from Clipboard operations default to being performed within a single transaction.</p> <p>Deselect this checkbox to make all XMI imports and paste Package operations default to being performed data item by data item, so that one failure does not block the whole operation (recommended for large imports/copies).</p> <p>In either case, in any specific XMI import operation the setting can be overridden.</p>
Write Log	<p>Select the checkbox to write the execution activity to a log file when you import or export XML.</p> <p>Deselect the checkbox to not record the activity of the import or export to a log file.</p>
Export Diagram Images	Select the checkbox to export diagrams as images when you export to XML.
Image Type	If you select the 'Export Diagram Image's option, click on the drop-down arrow and select the image format to export to. Select from metafile, bitmap, .gif, .png and .jpeg.
Create placeholders for missing External References during XMI 1.1/2.1 Import	<p>Select the checkbox to show, during the import of an Enterprise Architect-exported XMI 1.1/2.1 file, any missing:</p> <ul style="list-style-type: none"> <li>• Diagram elements, using a Boundary element as a placeholder</li> <li>• Diagram connectors, using a Dependency connector as a placeholder</li> </ul> <p>When importing an Enterprise Architect-exported XMI 1.1/2.1 file with cross-Package references, use this option to visually show the diagram items that are not yet in the model.</p> <p>A sample scenario would be, as shown here, exporting 'Package2' to 'XMI 1.1' from 'Master.EAP' and importing it into 'New.EAP' - the Classes 'Class1' and 'Class2' and the connector between them are shown using a placeholder on the diagram 'Package2'.</p>

	<p>Master.EAP :</p>  <p>New.EAP :</p>  <p>If the file is for a Package under Package Control or version control, and this checkbox is not selected, it is overridden if the 'For all packages, create placeholders for external references' checkbox is selected on the 'Version Control Settings' dialog and/or 'Package Control Options' dialog.</p>
Prefix EA tagged values in XMI 1.0 with ea\$	Select the checkbox to prefix any Enterprise Architect Tagged Values within any XMI 1.0 you create, with ea\$.
Update Last Save Time	Select the checkbox to update the timestamp of the last time each controlled Package was saved.
Report Cross Package Reference Deletions (XMI 1.1)	Select the checkbox to report any Package cross-references that would be deleted when a Controlled Package from an 'incomplete' model is exported to XMI 1.1.
Default XML Directory	Type in the location of the default XML directory to use when importing and exporting XML, or click on the  button and browse for the location.
Close	Click on this button to save the changes you have made, and to close the 'Preferences' dialog.

## Model-Specific Options

The 'General page' is the default page of the 'Manage Project Options' dialog. It helps you to set those of the general options that apply only to the model in which they are set, and that affect all users of that model. One of these options is specific to SysML Control Flows.

The 'Manage Project Options' dialog contains other pages for identifying MDG Technologies, Code Engineering options and code language options that also are specific to the model.

### Access

Ribbon	Configure> Model > Options
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### Control system behavior

Field/Button	Action
File Directory	Type in the default directory name for the shared files you define on the 'Files' tab of an element's 'Properties' dialog (maximum 50 characters).
Minimum Version	Click on the drop-down arrow and select the minimum version of Enterprise Architect required to open this model.
Minimum Build	Type in the number of the earliest build required to open this model. Alternatively, click on the Select Current button to set the build of the system that the model is currently open in.
Font Face	Click on the drop-down arrow and select the font in which to display all element text in diagram renditions of elements.
Font Size	Click on the drop-down arrow and select the font size in which to display all element text in diagram renditions of elements.
Clear	Click on this button to clear the 'Font Face' and 'Font Size' fields.
Ignore image transparency	Select this checkbox to ignore transparency for all images in the model, effectively rendering them as 24-bit images. Deselect the checkbox to show the transparency for all (32-bit) images on which it has been used.
Message Spacing	Type in the vertical gap (in points, between 15 and 45) to maintain between Sequence Messages on a Sequence diagram. This spacing can be overridden manually by dragging a Message up or down.

### SysML Options

Field/Button	Action
Dashed Line for Control Flow	Select this option to draw all control flows on SysML diagrams as dashed lines. Deselect this option to draw all control flows on SysML diagrams as solid lines. This option does not affect control flows on non-SysML diagrams, which will always be drawn as solid lines.

## Notes

- In the Corporate, Unified and Ultimate editions of Enterprise Architect, if security is enabled you must have 'Manage Project Settings' permission to set, change or clear the 'Font Face' and 'Font Size' fields, and to enable/disable diagram image-maps
- Similarly, if security is enabled you must have 'Configure Project Prerequisites' permission to update the 'Minimum Version' and 'Minimum Build' settings
- You can also define User fonts on the 'Preferences' dialog that apply to any diagram you display in any model; the User font is overridden by the Model font, to ensure that all members of the project team have a consistent and coherent view of the model
- Model fonts are themselves overridden by specifically-defined element fonts, so that the element is viewed as designed regardless of the model defaults; to define the font for a specific element, right-click on the element in a diagram and select the 'Appearance | Set Font' option
- It is recommended that a project authority sets the Model font, and all project members abide by it and do not change it without project approval; in editions where security is enabled, changes can be restricted by allocating permission only to the project authority

## Cloud Page

The Cloud page is generally maintained by a model or project administrator. It provides options to:

- Configure the WebEA 'Properties' dialog for each element and diagram to provide a URL that can be copied and sent to a user (by, for example, email) so that they can directly link to that object in WebEA
- Enable HTML pages for Linked Documents, and Diagram Images and Image Maps for all Enterprise Architect diagrams, to be generated and updated in cache for access from WebEA

### Access

Ribbon	Configure > Model > Options > Cloud
--------	-------------------------------------

### Configuration Options

Option	Description
URL	Type the IP address of the site hosting this model in WebEA. For example: http://123.123.123.123:180
Model Number	Type the position number of this model in the list of models presented in the WebEA 'Login' page. (As in the [model_list] section of the WebEA config file.)
Auto create Diagram Image and Image Map (each time a Diagram is saved)	(In the Corporate Edition and above.) Select this checkbox to create Diagram Images and image-maps for all diagrams. These images and image-maps will be automatically updated whenever the diagram content changes.  This option is necessary for publishing the model via the Pro Cloud in WebEA.  Deselect the checkbox to stop creating images and image-maps for diagrams. A prompt displays through which you specify whether to retain or delete the existing images and image-maps in the model.
Auto create HTML Page (each time a Linked Document is saved)	(In the Corporate Edition and above.) Select this checkbox to create HTML pages for all Linked Documents in the model. These HTML pages will be will be automatically updated whenever the Linked Document content changes.  This option is necessary for publishing the model via the Pro Cloud in WebEA.  Deselect the checkbox to stop creating HTML pages for Linked Documents. A prompt displays through which you specify whether to retain or delete the existing HTML pages in the model.
Batch create Diagrams and/or Linked Documents cache	(Only if you have selected the 'Auto create Diagram Image and Image Map' and/or 'Auto create HTML Page' options.)  Click on the 'Create' button to page through the diagrams and Linked Documents of the model, creating an initial diagram image and image map for each diagram and an initial HTML page for each Linked Document.  You should only need to do this occasionally, to force a wholesale update of the cache; normally the individual diagram images and Linked Document pages are updated automatically when the original object is changed.

## Integrations

*This feature was introduced in version 14.1.*

It's possible to connect a non-cloud model to the Integration Plugins provided by a Pro Cloud Server.

The screenshot shows the 'Integrations' configuration window. At the top, there is a section titled 'Integrations'. Below it, there is a checkbox labeled 'Enable' which is checked. To the right of this checkbox is a text field labeled 'Pro Cloud Server Connection String:' containing the text 'Test Cloud --- ;Connect=Cloud=protocol:http,address:loca'. To the right of this text field is a button labeled 'Fill Providers'. Below these elements is a table of providers:

Provider	Account
<input checked="" type="checkbox"/> Jazz	Jazz Online Demo account
<input checked="" type="checkbox"/> Jira	Jira hosted example
<input type="checkbox"/> Service Now	Online demo account
<input checked="" type="checkbox"/> Team Foundation Server	Our TFS team

To enable this feature

- Tick the 'Enable' check -box.
- Enter a connection string to a Pro Cloud Server (it is not necessary to include a 'Data Source' or 'DNS').
- Click 'Fill Providers' to populate the list of available external data providers.
- Tick any providers that should be made available to this model.

**Note:** the connection string for a cloud connection can be obtained via the Manage Project window by right-clicking on a recent connection and selecting 'Edit connection string'. See [Managing Connections to Projects](#)

## Notes

- In the Corporate, Unified and Ultimate editions of Enterprise Architect, if security is enabled you must have 'Manage Project Settings' permission to set 'Auto create Diagram Image and Image Map' and the WebEA URL and model number

# Tutorial



## Welcome to Enterprise Architect!

This quick-start tutorial helps you get up to speed with Enterprise Architect.

As you read through this tutorial, it is recommended that you have Enterprise Architect open so that you can try out the tasks described. By the end you should be able to begin modeling your own business/software projects with Enterprise Architect.

Throughout the descriptions there are hyperlinks to more detailed information on a range of topics.

## Basic Tasks

Task
Creating a new project
Adding Views to your model
Adding Packages to your model
Adding diagrams
Adding elements to your model Packages
Creating links between model elements
Refining the model



# Startup

When you install Enterprise Architect on your system, two items are created:

- An Enterprise Architect icon on your Windows desktop
- A new program folder called Enterprise Architect <version number> in your Windows 'Start > All Programs' menu; this folder contains the execution option 'Enterprise Architect'

You can start Enterprise Architect by clicking on either of these objects. After a short pause, the Start Page displays, from which you can:

- Open a project file (.eap file or .feap file)
- Create a new project (.eap file or .feap file)
- Connect to a DBMS repository (Corporate and extended editions)
- Connect to a project via the Cloud (Corporate and extended editions)
- Return directly to one of the projects you most recently opened
- Open one of a number of Portals to a set of facilities that support an area of work in Enterprise Architect

## Notes


- If you changed the default system folder name during installation, the Enterprise Architect <version number> folder in the 'All Programs' menu will have the name you provided
- By default, when you install Enterprise Architect, an empty 'starter' project called EABase.eap is installed, as well as an example project named EAExample.eap; we recommend that new users select the EAExample file and explore it in some detail while they become familiar with UML and software engineering using Enterprise Architect
- Enterprise Architect .eap files default to use JET 3.5 as the database engine, which does not support unicode character sets
- If you want to use unicode character sets (for example, to provide user interface texts in languages other than your Windows-defined native language), you must either upsize to a DBMS repository or set JET 4.0 as the database engine; resetting the database engine ensures compatibility with .eap files that support unicode character sets and that are in turn compatible with versions of MS Access later than Access 97
- If your .eap project is not in a Jet 4.0 database, you should also download a copy of the Jet 4.0 EABase model from the Sparx Systems website, and do an EAP to EAP transfer of your model into the Jet 4.0 file

## Create a Project

A project is a single file or repository-based store for one or more models.

- The first step in getting started with Enterprise Architect is to either open an existing project, or create a new one
- In this example we create a new file-based project and add a template-based model to kick-start our modeling
- Once your new project has been created it will have a simple Use Case model added for you to explore and tailor to your requirements
- You can re-open your project at any time by double-clicking on it in a file browser
- It should also appear in the 'Recent' list on the Start Page

### Create a New Project

Step	Description
1	Start Enterprise Architect.
2	<p>When the 'Start' page displays, click on the 'New File' option.</p> <p>Result: The standard Windows file browser dialog displays.</p> <p>File-based Enterprise Architect projects are named with:</p> <ul style="list-style-type: none"><li>• A .eap extension (JET 3)</li><li>• A .eapx extension (JET 4)</li></ul> <p>You can also create projects on Firebird by clicking on the drop-down arrow in the 'Files of type' field and selecting the '*.feap' option.</p>
3	<p>Locate a suitable folder for your project and, in the 'File name' field, type in a distinctive name.</p> <p>Click on the Save button to continue.</p> <p>Result: Enterprise Architect creates a new project file and places it in the specified location.</p> <p>The project is then opened automatically. The Project Browser window displays with the 'Model' icon at the top.</p>
4	<p>Click on the  icon in the Project Browser toolbar; the Model Wizard window displays, showing the 'Model Patterns' tab.</p> <p>In the left hand column header, click on the drop-down arrow and select 'UML &gt; Behavioral' and scroll down to 'Use Case Diagrams'. Select 'Basic Use Case Model'.</p> <p>Click on the Create Patterns button.</p> <p>Result: The Model Wizard automatically creates a new Use Case model for you, with an initial diagram, some notes and default elements to help get you started.</p>
5	<p>Close the Model Wizard window.</p> <p>At this stage all your changes have been saved to file and do not require further action.</p>

## Add a View to your Model

A View is a top level Package within a model. It can be categorized by purpose, such as Use Case View, Component View or Deployment View, the purpose being indicated by using different types of icon. Views are used to add an optional level of grouping of Packages, diagrams and elements - the building blocks of your model.

### Add a View

Step	Instruction
1	In the Project Browser, right-click on the 'Model' icon (the model root node) and select the 'Add View' option. The 'Create New View' dialog displays.
2	In the 'Name' field, type an appropriate name for the new View.
3	Click on the appropriate radio button to select an icon for the View (we suggest Simple).
4	Click on the OK button. The 'Create New View' dialog closes. The new View is created as a child of the Model root node.

### Notes

- There are six types of View, which represent conventional ways of categorizing the purpose of a Model View; these Views represent different structural or behavioral aspects of the same model

## Add New Packages


A Package is a container of model elements, and is represented in the Project Browser as a 'folder' icon.

- A Package holds the model building blocks, such as diagrams, elements and other Packages
- To begin developing your model, you create an initial Package to hold your first diagrams and model structures

### Access


There are numerous ways in which you can add a Package to your model. Start by selecting the parent Package (or View or Root node) in the Project Browser.

Then choose any of the methods outlined here.

Ribbon	Design > Package > Insert > Insert a Simple Package
Context Menu	Right-click on parent Package   Add a Package
Keyboard Shortcuts	Ctrl+W
Other	Project Browser tool bar   

### Add a Package to your model

On the 'New Package' dialog, complete the fields as instructed.

Option	Instruction
Owner	<p>Displays the name of the currently-selected Package or View, to which you are adding the new Package.</p> <p>If this is not the required owner Package, click on the  button and select the correct Package.</p>
Name	Defaults to Package1. Overtyping this with the name of the new Package.
Select and Apply Model Pattern	Click on this radio button if you want to create the new Package from a Model Pattern.
Create Diagram	Click on this radio button if you want to immediately create a child diagram for the Package.
Package Only	Click on this radio button if you want to just create a Package.
OK	<p>Click on this button to create the Package in the Project Browser.</p> <p>If you selected the 'Select and Apply Model Pattern' radio button, the Model Wizard view displays. Select the appropriate Perspective and Model Pattern to import. Click on the OK button.</p> <p>If you selected the 'Create Diagram' radio button, the 'New Diagram' dialog displays. Type in a name for the diagram and select the appropriate Perspective</p>

	<p>Group and Perspective (in the 'Select From' panel) and the required diagram type. Click on the OK button.</p> <p>The new Package is inserted into the Project Browser under the selected parent Package or View.</p>
Cancel	<p>Click on this button to abort the changes you have made and close the dialog.</p>


## Create a New Diagram

A diagram is a visual representation of the elements of your model and:

- Their attributes and characteristics
- How they are connected and/or interact with each other

Different diagram types show different aspects of the model and the relationships between elements.

### Add new diagrams to your model

Step	Action
1	<p>Click on a Package or View in the Project Browser, then either:</p> <ul style="list-style-type: none"><li>• Click on the Project Browser  button, or</li><li>• Press Ctrl+Insert, or</li><li>• Select the 'Design &gt; Diagram &gt; Insert' ribbon option, or</li><li>• Right-click on the Package or View and select the 'Add Diagram' option</li></ul> <p>The 'New Diagram' dialog displays.</p>
2	<p>Enterprise Architect provides a default diagram name that is the same as the parent Package name.</p> <p>Overtyping this with your preferred diagram name, if necessary.</p>
3	<p>Click on the 'Select From' header and select the Perspective Group and Perspective most appropriate to the area you are working in.</p> <p>The panel below the header displays a list of diagram groups; click on the required group.</p>
4	<p>In the 'Diagram Types' panel, click on the type of diagram to create.</p> <p>A description of the selected diagram type displays in the field underneath this pane.</p>
5	<p>Click on the OK button.</p> <ul style="list-style-type: none"><li>• The 'New Diagram' dialog closes</li><li>• A new diagram is created as a child of the currently selected Package</li><li>• The new diagram is opened in the Diagram View, ready for editing</li></ul>


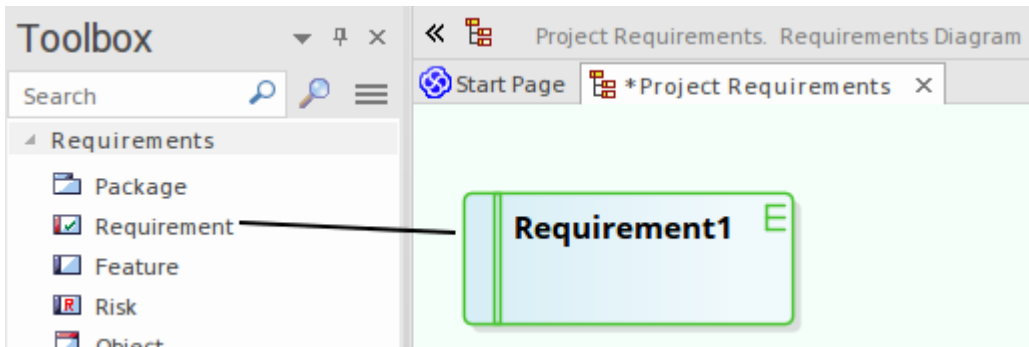
### Notes

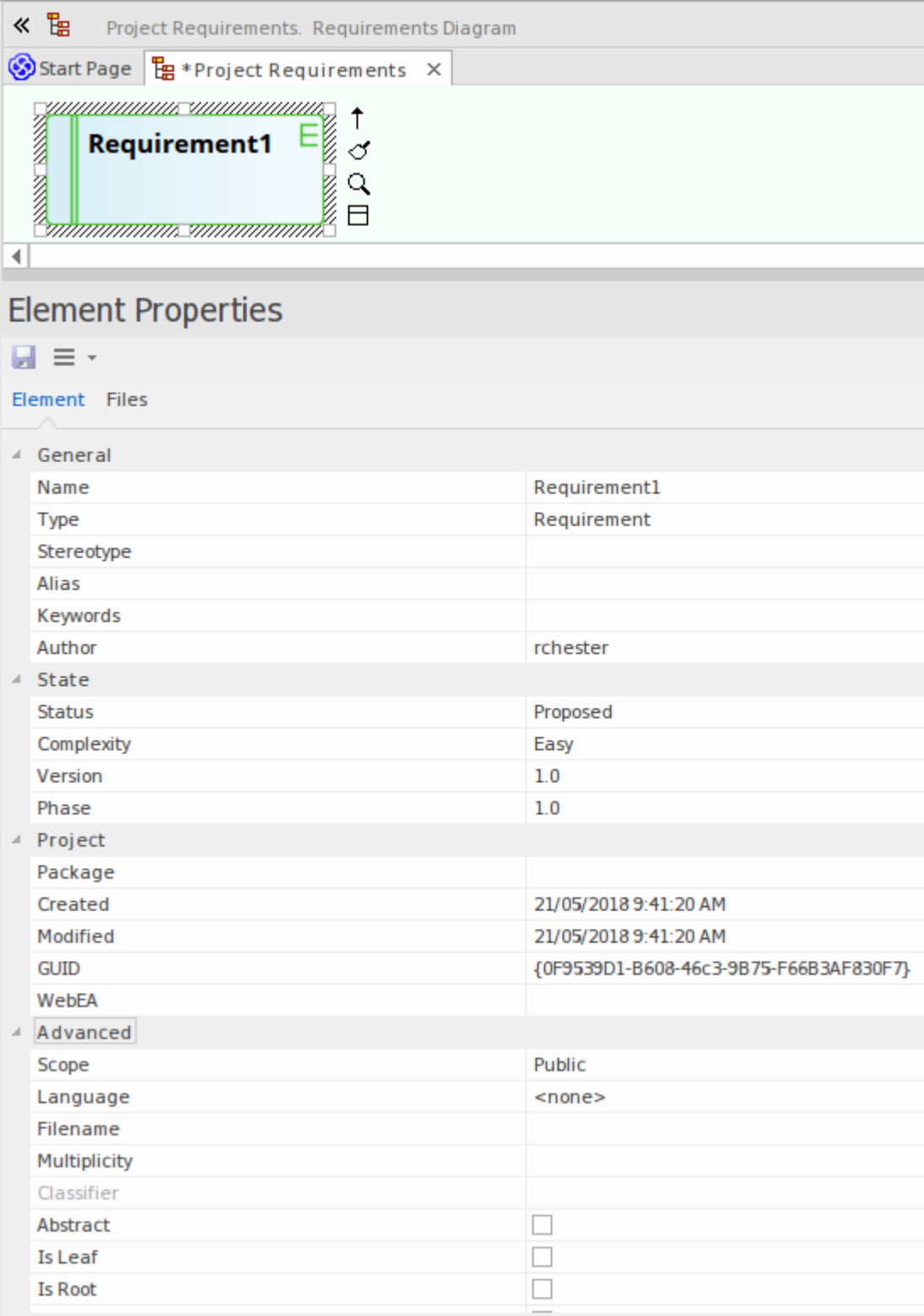
- When you create a Package, if you leave the 'Create Diagram' option selected, the 'New Diagram' dialog displays automatically

## Create New Elements on a Diagram

Models are constructed from elements, each of which has its own meaning, rules and notation. Generally, when you create a new element in your model, you want to use that element on a diagram. The simplest way to do this is to create the element directly on the diagram. In this procedure, we will use a Requirement element as the example.

### Create a new element on a diagram in your model

Step	Action
1	Display the Properties window; select the 'Start > Explore > Properties > Properties' ribbon option. Also display the Diagram Toolbox; select the 'Design > Diagram > Toolbox' ribbon option
2	Display the diagram on which the elements are to be created, in the Diagram View. To open the diagram, double-click on the diagram name in the Project Browser. The diagram opens and the Toolbox is updated to display the categories of elements and relationships that are applicable to that type of diagram.  In this example, we must change this to the Custom toolbox. Click on  to display the 'Find Toolbox Item' dialog, and specify 'Custom'.
3	Click on the appropriate icon in the Toolbox to select the type of element to create (in this example, the Requirement element). The element type is highlighted in the Toolbox.
4	Click on the diagram at the location where you want to place the element.   <p>The new element is created as a child of the Package that contains the diagram, and is placed onto the diagram at the cursor position. The element's initial details are displayed in the Properties window.</p>
5	Use the Properties window to define the element's name and other properties it should have.

	 <p>The screenshot shows the Enterprise Architect software interface. At the top, there's a title bar with 'Project Requirements. Requirements Diagram'. Below it, a tab bar shows 'Start Page' and '*Project Requirements'. The main workspace displays a 'Requirements Diagram' with a single requirement element labeled 'Requirement1'. The element is a light blue rectangle with a green border and a green 'E' icon in the top right corner. To the right of the diagram, the 'Element Properties' panel is open, showing a tree view with 'Element' selected. The properties are organized into sections: General, State, Project, and Advanced. The 'General' section includes Name (Requirement1), Type (Requirement), Stereotype, Alias, Keywords, and Author (rchester). The 'State' section includes Status (Proposed), Complexity (Easy), Version (1.0), and Phase (1.0). The 'Project' section includes Package, Created (21/05/2018 9:41:20 AM), Modified (21/05/2018 9:41:20 AM), GUID ({0F9539D1-B608-46c3-9B75-F66B3AF830F7}), and WebEA. The 'Advanced' section includes Scope (Public), Language (&lt;none&gt;), Filename, Multiplicity, Classifier, Abstract (checkbox), Is Leaf (checkbox), and Is Root (checkbox).</p>
6	Right-click on the diagram background and select the 'Save Current Changes' option.

## Notes



- You can also drag or paste existing elements onto a diagram from the Project Browser
- If you are creating several elements of one type, after creating the first just press Shift+F3 or Ctrl+click to create the next element of that type
- You can also create elements using shortcuts to the main facilities of the Toolbox, using the 'Toolbox Shortcut' menu; press the Insert key or Spacebar key to display this menu

## Add Connectors

Connectors define specific relationships between specific elements, so you usually create them directly on the diagram by dragging the required relationship type from the Diagram Toolbox. As for elements, the Toolbox automatically presents the connector or relationship types appropriate to the type of diagram currently displayed.

### Define a relationship between two model elements on a diagram

Step	Action
1	<p>Display the Diagram Toolbox; either:</p> <ul style="list-style-type: none"><li>• Select 'Design &gt; Diagram &gt; Toolbox' or</li><li>• Press Alt+5</li></ul> <p>Also, if it is not already displayed, open the Properties window ('Start &gt; Explore &gt; Properties &gt; Properties' ribbon option).</p>
2	<p>Open the diagram containing the elements to be connected, in the Diagram View (double-click on the diagram name in the Project Browser).</p> <p>The selected diagram opens and the Toolbox is updated to display the categories of elements and relationships that are applicable to that diagram type.</p>
3	<p>Click on the required connector in the Toolbox to select the type of connector to draw.</p> <p>The connector type is highlighted in the Toolbox.</p>
4	<p>Click on the source element in the relationship, then drag across to the target element.</p> <p>The selected connector is drawn between the two elements.</p> <p>The connector becomes the focus of the Properties window.</p>
5	<p>Use the Properties window to define the characteristics of the connector as required.</p>

### Notes

- If you are creating several connectors of one type, after creating the first just click on the appropriate source element and press F3 to create the next connector of that type
- As you drag a connector path, you can press Shift to create a bend in the connector; if necessary, you can put several bends in the connector line, pressing Shift every time you want to change direction
- To roll back the bends, keep holding the left mouse button down and press the Backspace key as many times as is necessary
- To find out more about the type of connector you have dragged on to a diagram, right-click on the connector and select the 'UML Help' option, which displays a Help page on the connector type

# Modify Properties

When you create an element and connect it to another element, you usually have to define various characteristics of both the element and the connector to identify the purpose and function they represent. You do this using the Properties window.

When you create elements, Enterprise Architect automatically names and numbers them by type - for example, Class1, Class2 - so you should at least change the 'Name' field to more easily identify each element. Enterprise Architect does not automatically name connectors, but for many connector types you can provide a name that describes the purpose of the connection.

## Modify the characteristics of a model element or connector

Step	Action
1	Select the 'Start > Explore > Properties > Properties' ribbon option. The Properties window displays. Click on the element or connector for which to define properties. The initial details for that object display in the Properties window.
2	Modify the element or connector characteristics as required.
3	Click on the diagram background. The element or connector details in the window are saved; the diagrams that contain the element or connector are updated as necessary, as is the Project Browser.


## Notes

- You can also modify the properties of an element or connector using the 'Properties' dialog, which is specific to the selected object; select:
  - For an element, the 'Design > Element > Properties > Properties Dialog' ribbon option or
  - For a connector, right-click on the connector and select the 'Properties' menu option
- On the 'Properties' dialog, click on the OK button to save the changes and close the dialog

## Save Changes

Throughout much of your work in Enterprise Architect, any changes you make are automatically saved when you close the dialog (data entry window) on which you made the changes. In some cases the dialog contains a Save button or Apply button, which you can click on to save your changes and then keep working on the dialog.

**If there is no specific dialog, such as when you create a diagram, you can save your work by**

- Clicking on the Save icon in the Diagram toolbar ()
- Pressing the Ctrl+S keyboard keys, or
- Right-clicking on the diagram and selecting the 'Save Current Changes' menu option

Often, Enterprise Architect does not let you close a screen without confirming that you want to save or discard your changes. You can also save your diagram changes automatically, by selecting the 'Auto Save Changes' checkbox on the 'Diagram Behavior' page of the 'Preferences' dialog.

# Move Objects Around

You have created a project containing Packages, diagrams and elements, and you have connected the elements. How do you change where things are?

## Move diagrams, elements and connectors



Task
Change the Project Browser list order - re-arrange the order of items in the Project Browser
Move elements between Packages - move diagrams, elements and child Packages from one parent Package to another
Move elements on a diagram - re-arrange the position of diagram elements
Move elements between diagrams - cut an element from one diagram and paste it onto another
Move connectors on a diagram - re-link a source element to a different target element

## Move Objects Within a Package

In the Project Browser, the contents of a Package are listed in the order: diagrams, child Packages, elements.

- Elements are further arranged in order of type (but see Notes)
- Within a type, components are initially listed in alphabetical or numerical order
- You can change the order in which items are listed within their groups

### Adjust the order in which items are listed in the Project Browser

Step	Action
1	Click on an item in the Project Browser, then click on  or  in the toolbar at the top of the window. The selected item is moved up or down in the Project Browser accordingly, but remains within its particular group of items.
2	To revert to listing components in alphabetical order, in the Project Browser right-click on the Package and select the 'Contents   Reset Sort Order' option.

### Notes

- You can re-arrange elements in your preferred sequence regardless of type, by selecting the 'Allow Free Sorting' checkbox on the 'General' page of the 'Preferences' dialog

# Move Objects Between Packages

When creating the various diagrams, elements and Packages that make up your model, at some point you might create one of these objects under the wrong parent Package. It is quite simple to relocate a model object from one Package to another, either to a higher level Package, a lower level Package or a different Package at the same level.

## Move objects between Packages

Step	Action
1	<p>In the Project Browser, click on and drag the model item to be relocated from its existing position, and drop it onto the new parent Package.</p> <p>The dragged item and all of its child items are relocated to the target Package.</p>

## Notes

- Moving elements in the Project Browser does not affect the use of elements in diagrams
- Moving an element or Package has no effect on any relationships that the element, Package, or elements within the Package have
- Moving a diagram generally does not affect the location of elements in Packages
- However, elements of certain types, such as Initial Node, Decision and Final Node, are used only within one diagram and have no meaning outside that diagram; if you move a diagram containing these elements, they are moved to the new parent Package with the diagram

## Move Elements in a Diagram

To improve the understanding of a diagram or to simply improve the presentation, you might want to adjust the position of the elements on your diagram.

### For coarse adjustments

Step	Action
1	Click on a diagram element and drag it to its new position.

### For fine adjustments

Step	Action
1	Click on a diagram element to select it.
2	While holding down the Shift key, press the keyboard arrow keys to move the selected element one pixel at a time in the direction of the arrow.



## Move Elements Between Diagrams

If an element is present in one diagram but not in another, you can simply move or copy the element from one diagram into the other.

### Move elements from one diagram to another

Step	Action
1	In the Project Browser, double-click on the name of the diagram that contains the element to be moved. The diagram opens in the Diagram View.
2	Click on the element in the diagram to select it.
3	Either: <ul style="list-style-type: none"><li>• Click on the 'Cut' (scissors) icon in the Default Tools toolbar, or</li><li>• Press Ctrl+X</li></ul> The selected element is copied to the clipboard. However, the element remains visible on the current diagram until the clipboard content is pasted onto a different diagram. The model element itself is not affected in any way.
4	In the Project Browser, double-click on the name of the diagram into which the element is to be moved. The diagram opens in the Diagram View.
5	Either: <ul style="list-style-type: none"><li>• Click on the Paste button in the Default Tools toolbar, or</li><li>• Press Ctrl+V or Shift+Insert</li></ul> The element is pasted from the clipboard onto the current diagram and removed from the original (source) diagram. Again, the model element itself is not affected in any way.

### Copy elements from one diagram to another

Step	Action
1	In the Project Browser, double-click on the name of the diagram that contains the element to be moved. The diagram opens in the Diagram View.
2	Click on the element in the diagram to select it.
3	Either: <ul style="list-style-type: none"><li>• Click on the Copy icon in the Default Tools toolbar, or</li><li>• Press Ctrl+C, or</li></ul>

	<ul style="list-style-type: none"><li>• Right-click on the element and select the 'Copy / Paste   Copy' menu option</li></ul> <p>The selected element is copied to the clipboard.</p> <p>Neither the current diagram, nor the model element itself are affected in any way.</p>
4	<p>In the Project Browser, double-click on the name of the diagram into which the element is to be copied.</p> <p>The diagram opens in the Diagram View.</p>
5	<p>Either:</p> <ul style="list-style-type: none"><li>• Click on the Paste button in the Default Tools toolbar, or</li><li>• Press Ctrl+V or Shift+Insert</li></ul> <p>The element is pasted from the clipboard onto the current diagram.</p> <p>Again, neither the source diagram nor the model element itself are affected in any way.</p>

## Notes

- By selecting more than one element at a time, you can move or copy multiple elements in the same operation
- You can remove an element from a diagram by selecting it, then pressing the Delete key
- You can also place an element onto an open diagram by locating the element in the Project Browser, then dragging it onto the diagram

## Connect a Different Element on a Diagram

When creating connectors in your diagrams, at some point you might connect the wrong pair of elements. Enterprise Architect provides a simple method to help you to move the end of a connector from one element to another; that is:

- Change the source element of a connector from the current element to another, or
- Change the target element of a connector from the current element to another

### Change a connected element

Step	Action
1	In the diagram, click on the connector to select it. The connector is highlighted with 'handles' at each connector end.
2	Move the cursor over the 'handle' at the end of the connector to reconnect. The cursor changes to a small arrow pointing upwards to the right.
3	Click on and drag the connector end to the other element to connect to. When you release the mouse button, the connector breaks from the original element and reconnects to the new element.

### Notes

- You can also tidy up a connection by dragging the end of the connector to a better position on the edge of the element, or move both ends at once by dragging the middle of the connector

## Delete a Connector

It is possible to hide a connector on a diagram, or to delete it entirely from the model, removing the relationship between the previously connected elements.

Displaying all of the connectors on a complex diagram can make the diagram somewhat confused, so it can be useful to hide some of the connectors, to clarify a specific aspect of a more complex picture.

### Hide or remove a connector between two elements

Step	Action
1	<p>Open the diagram containing the connector of interest.</p> <p>Either:</p> <ul style="list-style-type: none"> <li>• Double-click on the diagram name in the Project Browser, or</li> <li>• Make an already open diagram the 'active' diagram, by clicking on its tab in the Diagram View</li> </ul>
2	<p>Click on the connector in the diagram to select it.</p> <p>The selected connector is highlighted in the diagram.</p>
3	<p>Either:</p> <ul style="list-style-type: none"> <li>• Press Ctrl+Delete</li> <li>• Right-click on the connector and select the 'Delete Connector' option, or</li> <li>• Press the Delete key</li> </ul> <p>If you press Ctrl+Delete, a dialog displays prompting you to confirm that you want to delete the connector (and the relationship it describes) from the model. You can click on the Yes button immediately to remove the connector, but the dialog also provides a Traceability button that displays the Traceability window, so you can check what impact deleting the connector might have on other representations of the model.</p> <p>The Delete key and 'Delete Connector' option display the 'Remove Connector' dialog.</p>
4	<p>On the 'Remove Connector' dialog, choose one of the options:</p> <ul style="list-style-type: none"> <li>• Hide the connector or</li> <li>• Delete the connector from the model</li> </ul> <p>'Hide the connector' obscures the connector on the current diagram; you cannot see it but the relationship between the two elements still exists and is shown on other diagrams containing the two elements together, and on all reports of connectors between the elements.</p> <p>'Delete the Connector from Model' removes the relationship that exists between the two elements; the connector is removed from the current diagram, from all other diagrams on which it is shown, and from all reports on connectors between the two elements.</p>
5	<p>Optionally, tick the checkbox 'Don't ask again'.</p> <p>Selecting this option prevents the 'Remove Connector' dialog from being displayed next time you select the 'Delete Connector' command; the command uses the setting you last used on the dialog.</p> <p>Make sure that you have selected the right option to use as your default.</p>
6	<p>Click on the OK button.</p> <p>The connector disappears from the diagram.</p> <p>If you selected the 'Delete the connector from the model' option, the relationship represented by the connector is also deleted from your model.</p>

## Notes

- You cannot select multiple connectors - it is only possible to select one connector at a time
- If you select the 'Don't ask again' checkbox on the 'Remove Connector' dialog, you can reset this option on the 'Links' page of the 'Preferences' dialog ('Start > View > Preferences > Links' ribbon option)
- Selecting the 'Hide the connector' option in the 'Remove Connector' dialog has the same effect as hiding the connector on the 'Links' tab of the source element 'Properties' dialog, or using the 'Visibility | Hide Connector' context menu option on the connector

# Delete an Element

You can delete the elements of a model from a diagram or from the Project Browser.

## Delete an element

Options
Remove elements from a diagram: this is essentially 'hiding' the element in that particular view of the model.
Delete elements from a model - the element, its properties and any child elements or diagrams it has are all deleted; the element is removed from all diagrams on which it appears.

# Remove Elements From a Diagram

Removing an element from a diagram does not delete the element from the model and therefore does not alter the structure of the underlying model. When you remove an element from a diagram, you are essentially 'hiding' the element in that particular view of the model.

## Remove elements from a diagram

Step	Action
1	<p>Open the diagram that is to be modified.</p> <p>Either:</p> <ul style="list-style-type: none"><li>• Double-click on the diagram name in the Project Browser, or</li><li>• Make an already open diagram the 'active' diagram, by clicking on its tab in the Diagram View</li></ul>
2	<p>Either:</p> <ul style="list-style-type: none"><li>• Press Ctrl+A to select all of the elements in the diagram, or</li><li>• Click on an element in the diagram to select it (and use Ctrl+click to add further elements to your selection, or to remove elements from the selection)</li></ul> <p>The selected elements are highlighted in the diagram.</p>
3	<p>Either:</p> <ul style="list-style-type: none"><li>• Press the Delete key, or</li><li>• Press Ctrl+D, or</li><li>• Right-click a selected element and select the 'Delete &lt;element name&gt;' or 'Delete Selected Elements' option</li></ul> <p>The selected elements are removed from the diagram.</p>

## Notes

You can 'undo' the removal of a diagram element, by pressing Ctrl+Z, or by clicking the Undo button in the Default Tools toolbar

## Delete Elements From Your Model

You can delete elements from your model, working either from the Project Browser or from a diagram.

- When you delete an element from your model, the element, its properties and any child elements or diagrams it contains are all deleted.
- The deleted element is removed from all diagrams on which it appears
- All relationships that it was involved in are also deleted from the model

### Delete one or more items from your model using the Project Browser

Step	Action
1	In the Project Browser, click on an item to select it. To select additional items, or to remove items from the selection, use Ctrl+click or Shift+click. The selected items are highlighted in the Project Browser.
2	Either: <ul style="list-style-type: none"><li>• Press Ctrl+Delete or</li><li>• Right-click on one of the selected elements, then select the 'Delete selected item(s)' option</li></ul> A confirmation dialog displays.
3	Click on the Yes button. The selected items are deleted from your model.

### Delete one or more items from your model using a diagram

Step	Action
1	To open the diagram containing the items to be deleted from your model, either: <ul style="list-style-type: none"><li>• Double-click on the diagram name in the Project Browser, or</li><li>• Make an already open diagram the 'active' diagram, by clicking on its tab in the Diagram View</li></ul>
2	Either: <ul style="list-style-type: none"><li>• Press Ctrl+A to select all of the elements in the diagram, or</li><li>• Click on an element in the diagram to select it, then use Ctrl+click to add or remove specific elements to and from the selection</li></ul> The selected elements are highlighted in the diagram.
3	Press Ctrl+Delete. A confirmation dialog displays.
4	Click on the Yes button. The selected elements are removed from the model.



## Notes

- Deleting a Package completely removes the Package and all its contents - diagrams, child Packages and elements - from the model
- Deleting an element completely removes the element and its properties, connectors, child elements and child diagrams from the model, and from every diagram that contains it
- Deleting a diagram completely removes the diagram from the model, but not the diagram's component elements; they remain in the parent Package

