Enterprise Architect

User Guide Series

# The Ribbon Menu

How to access Enterprise Architect features and facilities? Ribbons provide options to access all facilities, but you can also customize the ribbons to show just those features you commonly use.

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CREATED WITH ENTERPRISE ARCHITECT

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# The Ribbon Menu

Enterprise Architect displays a set of ribbons at the top of the screen, as a modern, contemporary way of accessing the tool's 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:

- In the 'Microsoft Office 2016' Visual Style theme, 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
- Click on the button (for File Management options) to the left of the ribbon tabs and type your search text in the 'Search' field at the bottom of the resulting dialog; 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, summarizing the function of the option. The tool-tip can be configured to display either in the left end of the status bar at the bottom of the screen or floating beside the option it describes.

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

## Contextual Ribbons

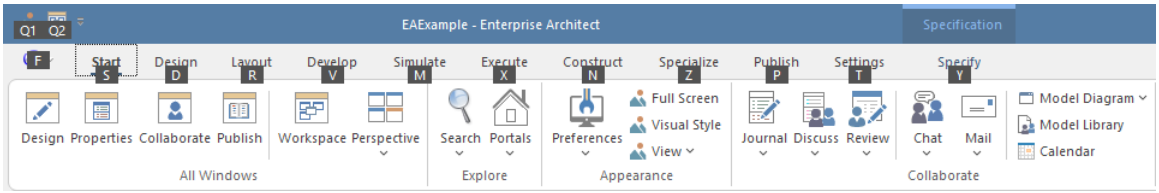
Some ribbons are contextual and are only needed when you are performing a particular task. For example, the 'Document-Edit' ribbon is only needed when you are viewing or editing a document inside Enterprise Architect. This ribbon will remain visible while a document is open; when all documents are closed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

## Moving Between Ribbons

To change the selection of a ribbon, you can either left-click on the tab of the ribbon you require, or hover the cursor on the ribbon band and roll the mouse scroll-wheel forward to scroll right to left through the ribbon tabs or backwards to scroll left to right.

## 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 ribbon 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 > All Windows > Workspace > Workspace Tools > My Ribbon Sets), 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. For more information, see the *Customizing Ribbon Sets* Help topic.

## 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 name tab of the currently-displayed ribbon.

## Hiding Ribbon Text

At times you might find that the ribbon text adds more visual distraction than you would like. You can select another option on the ribbon context menu to hide the text underneath the larger ribbon icons so that it only displays when you mouse-over the icon. You can then remind yourself of the icon's purpose or select the drop-down options from the icon menu without the text being displayed there permanently.

Right-click on the ribbon background and select the 'Minimal Text Mode' option. Click on the option again to

deselect it and redisplay the icon text.

# 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

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| Other | Click on |

## File Management Options

| Option | Action |
|---|---|
| New Project | Create a new Enterprise Architect project.<br>Shortcut: Ctrl+N |
| Open Project | Open an existing project, or create a new project from scratch or from a base template project, using the 'Manage Projects' dialog<br>Shortcut: Ctrl+O |
| Reload Project | Reload the current project. (Use this in a multi-user environment to refresh the |

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| | Browser window).<br>Shortcut: Ctrl+Shift+F11 |
| Close Project | Close the current project. |
| Save as Shortcut | Create a desktop shortcut to the current project.<br>(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.<br>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.<br>Shortcut: Ctrl+P |

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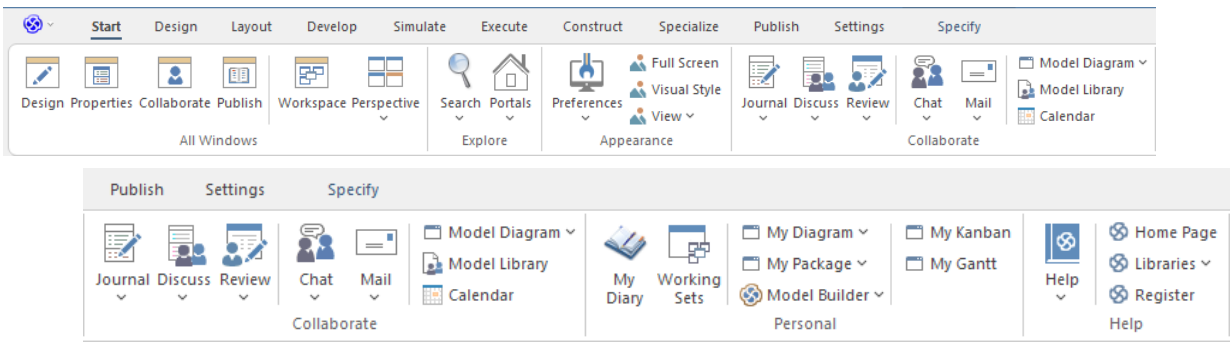
| Print to PDF | Save the currently displayed diagram as a PDF file. A browser displays to select the PDF file name and directory path.<br>By de-selecting the 'Printable' option on an element on a diagram, you can omit that element and its connectors from the diagram in the PDF output. |
| Recent Models | Select from a list of up to ten of the most recently opened projects, to re-open the selected project. |
| Pinned Models | Select from a list of up to ten of your pinned 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. |

# 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 to 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 |
|---|---|
| All Windows | You can use the 'All Windows' panel to access a range of Window Selectors to select and open a window or a workspace. You can define any number of workspace layouts and working sets, saving combinations and arrangements of windows that are specific to a role that |

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| | ultimately increases your productivity as a modeler. |
| Explore | The 'Explore' panel provides access to a range of search facilities and to the Portals feature. |
| Appearance | You can also 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. 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 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 Model Library, Model Mail - which contains messages from other modelers - the Project Calendar listing important events, the 'Journal' informal comment capture facility. The tools ensure that communication about the elements, diagrams, lists and matrices are |

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| | 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. |
| Personal | The 'Personal' panel gives access to a great facility for maintaining a daily diary, in which you can note down reminders of what you have done or intend to do within the model. It provides an option for opening the 'Working Sets' tab of the Focus window, to set up and maintain groups of windows, diagrams and views to return to as a set in later work sessions. On the right hand side it has a set of options for displaying and managing your user default diagram and your default work Package, and for displaying the Gantt Chart listing your work allocations and the Kanban diagram you have set as your personal default. |
| Help | The 'Help' panel provides access to the Help system and to a wide range of on-line facilities to support your use of the tool, including the management of |

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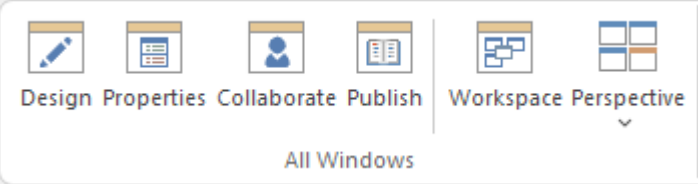
| | License Keys through the 'Register' option. The Help system contains both overviews of functional areas of the application and detailed topics on how to use specific tools, helping you to be highly productive. The Help is normally accessed as an on-line, web-based system, but you can select to download 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. |

# All Windows Panel

You can use the 'All Windows' panel to access a range of Window Selectors to select and open a window or a workspace. The panel also helps you to define any number of workspace layouts and working sets, saving sets and arrangements of windows that are specific to a role that ultimately increases your productivity as a modeler. The 'Perspective' drop-down helps you to select and set the global Perspective for your model.




## Available Facilities

| Facility | Description |
|---|---|
| Design | Click on this icon to display the Design Window Selector, which provides access to the windows for locating, creating and working on objects on the model, including within diagrams. Click on the name of the required window to immediately open it. |
| Properties | Click on this icon to display the Properties Window Selector, which lists |

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| | the windows for editing the properties, features, structural elements and internal structures of an element. Click on the name of the required window or tab to immediately open it. This window can be displayed from both the 'Start > All Windows' panel and the 'Design > Element' panel. |
| Collaborate | Click on this icon to display the Collaborate Window Selector, which provides access to the Collaboration facilities such as Discussions, Reviews, Journal entries, personal conversations and information concerning the overall model. |
| Publish | Click on this icon to display the Publish Window Selector, which provides access to facilities for generating static and dynamic reports, exchanging models in part or entire, and keeping the model data accurate and up to date. |
| Workspace | Click on this icon to display the Workspace window, from which you can select from lists of system-defined and user-defined ('User Layouts') workspaces. Each workspace opens a number of |

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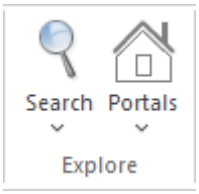
| | related windows that together support a particular task or area of work in Enterprise Architect. |
| Perspective | Click on this icon to display a list of options to select and set the global Perspective for your model.<br>The list is headed by the option to set 'All' Perspectives, followed by options for Perspectives defined for the model, Perspectives you have defined for your personal use, and Perspectives (in the 'Specialized' group) provided by MDG Technologies.<br>In the next block of options are the names of the standard, system-defined Perspective groups, which expand to list the Perspective Sets.<br>The last item in the list is the Settings option, which you select to display the 'Perspective Sets' dialog. You use this dialog to define the Personal and Model-based Perspective Sets, and to set up the Security Group-linked Perspectives. |

# Explore Panel

The 'Explore' panel contains icons to invoke the Portals feature and a range of search facilities.




## The Search Facilities

Click on the drop-down arrow under the icon to display a selection of search facilities that you can use to locate objects in the model, or code in source files:

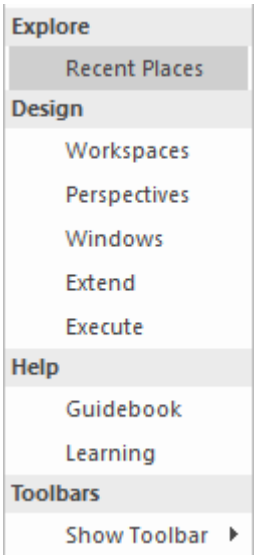
- Model - display the Find in Project view, which provides access to the full range of standard and customized searches in your project (Ctrl+Alt+A)
- Files - locate and open source files having specific characteristics, using the 'Find in Files' dialog (Ctrl+Shift+Alt+F)
- Recent Diagrams - display 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
- 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
- Recent Tasks - display the 'Find in Project' view defaulted

to an executed specific search for Active Tasks (those that are in progress)

- Diagram - display the Find in Project view, pre-loaded with the Diagram Details search to locate diagrams of a specific name or type
- Package - display the Find in Project view, pre-loaded with the Find Package search to locate Packages of a specific name or type
- Browse for Diagram - locate and select a specific diagram using the 'Select Classifier' dialog, which shows the full hierarchy of Packages in the model (Ctrl+Shift+Alt+D)
- Browse for Package - locate and select a specific Package using the 'Find Package' dialog, which shows the full hierarchy of Packages in the model (Ctrl+Shift+Alt+P)

## The Portals

Clicking on the Portals icon displays a list of the Portals 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). The icon next to the name of the selected Portal is highlighted, so the list indicates which Portal is active.




| Portal/Option | Description |
|---|---|
| Workspaces | 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:<br>• My Workspaces<br>• Core<br>• Design<br>• Software<br>• Simulation<br>• Construction<br>• BABOK Guide |
| Recent Places | Provides links to recently viewed diagrams, documents and files. Links are grouped into these categories:<br>• Current Diagrams |

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| | • Recent Diagrams<br>• Documents<br>• Recent Files |
| Perspectives | 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 Builder dialog. The system-provided Perspectives are:<br>• UML<br>• Strategy<br>• Analysis<br>• Requirements<br>• UX Design<br>• Business Modeling<br>• Software Engineering<br>• Systems Engineering<br>• Database Engineering<br>• Enterprise Architecture<br>• Information Exchange<br>• Publishing<br>• Construction<br>• Management |
| Windows | Provides links to the Enterprise Architect |

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| | 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:<br>• Exploring the model<br>• Displaying object properties<br>• Managing the display of diagrams<br>• Working with specialized tools<br>• Tracing relationships between objects<br>• Enabling collaboration between team members<br>• Managing tests<br>• Managing resource tasks<br>• Project management and maintenance<br>• Developing code and document templates |
| Extend | Lists the MDG Technologies currently active in your model - such as ArcGIS and NIEM (4.0) - and for each one provides links to the facilities for working with those technologies within Enterprise Architect. |
| Execute | Provides a wide range of options that help you to:<br>• Perform Execution Analysis on your model - building and running the |

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| | Analyzer scripts<br>• Open the Record & Analyze, Profiler, Debugger and/or Testpoints dialogs for monitoring the execution of your modeled application<br>• Set up and perform simulations of the execution of your application<br>• Control the progress of a simulation<br>• Access various windows that display specific aspects of debugging an application<br>• Control the progress of a debug<br>• Set up and run recording of the execution of an application<br>• Display the dialogs to prepare to profile the execution of an application<br>• Create and edit code from the model |
| 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 *Enterprise Architect User Guide*, or the locally-installed Help if you have |

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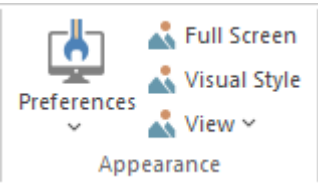
| | downloaded that. The Portal also provides links to a number of useful web pages on the Sparx Systems website, such as the Resources, Tutorials, Webinars and Video Demos pages. |
| Show Toolbar | Not actually a Portal but a list of the 'floating' Toolbars that you can also anchor to the Toolbar ribbon above the work area. Toolbars that are currently active are marked with a tick. Click on the unmarked name of a hidden Toolbar to expose it either floating or anchored, and click on a ticked Toolbar name to hide that Toolbar. |

# Appearance Panel

The 'Appearance panel helps you to define the look and feel of Enterprise Architect, setting preferences that change the style of the interface to suit the work role you are performing. 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. You can also select options to display the interface in full-screen mode and in one of several visual styles, and you can temporarily hide or display selected sections of the interface.




## Available Facilities

| Facility | Description |
|---|---|
| Preferences | Click on the drop-down arrow to display options for:<br>• Opening 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 |

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| | project refers to and how the Browser window responds when items are selected in it<br>• Displaying the Diagram Toolbar at the top of every diagram you open in the model<br>• Making toolbar icons larger and more visible both in the Toolbar ribbon and at the top of each dockable window, with immediate effect<br>• Opening the 'Toolbars' tab of the 'Customize' dialog to set which Toolbars to automatically display in the Toolbar ribbon<br>• Opening the 'Customization' dialog ('Other Options') to tailor other user controls, such as additional key combinations for accessing Enterprise Architect dialogs and facilities, and external tools to link to from within Enterprise Architect |
| 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. |

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| | 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. |
| View | When you click on the drop-down arrow, this icon displays a menu of four options for managing what segments of the screen are displayed and how they are displayed.<br>The 'Manage Views' option has these sub-options:<br>• 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<br>• Focus View - set the input focus back to the View that last had focus (intended to be accessed via the command shortcut keys Ctrl+Shift+0)<br>• Reload View - load the latest information from the model database, to update the display of the current View<br>• Close View - lose the current View; you will be prompted to save any unsaved modifications<br>• Close All Except Current - close all |

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| | Views except the current view; you will be prompted to save any unsaved modifications<br>• Close All - close all Views; you will be prompted to save any unsaved modifications<br>• 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<br>• Auto Hide Active Window - auto hide the currently active window<br>• Auto Hide All Docked Windows - auto hide all open and docked windows<br>• Close Active Window - close the currently active window<br><br>The 'Show Start Page' option simply shows or hides the Start Page; this setting persists through shut down and restart, until you specifically change the option.<br>The 'Show All Ribbons' option refreshes the display of ribbons to show all of them, revealing any hidden by using a Custom Ribbon Set.<br>The 'Always on Top' option forces the |

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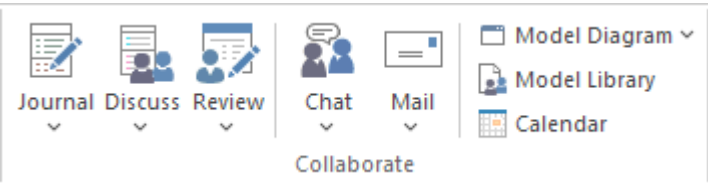
| | main Enterprise Architect window to be on top of all other windows. |

# Collaborate Panel

Enterprise Architect is a convenient collaboration platform that 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 Model Library, Model Mail - which contains messages from other modelers - the Project Calendar listing important events, the 'Journal' informal comment capture 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 |
|---|---|
| Journal | Displays either the Discuss & Review window at the 'Journal' tab (main icon) or |

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| | a short menu (drop-down arrow) providing these options:<br>• Journal - opens the Discuss & Review window at the 'Journal' tab, which providing a great facility for maintaining a daily log of reminders of what the developers concerned with a selected element or diagram have done or intend to do for the selected object<br>• Journal History - opens the Discuss & Review History window at the Journal tab, on which you can review the journal entries for elements, grouped for Today, Yesterday, This Week, Last Week, This Month and Last Month<br>• Help - displays the *Journal* Help topic |
| Discuss | Displays either the Discuss & Review window (main icon), on which you can manage current discussions of elements and diagrams, or a menu (drop-down arrow) providing these options:<br>• Discuss - to display the Discuss & Review 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<br>• Discussion History - to display the Discuss & Review - History window at |

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| | the 'Discussions' tab, on which you can review the separate discussions of elements recorded in the model, grouped for Today, Yesterday, This Week, Last Week, This Month and Last Month<br>• Recently Discussed - to run a report that presents elements that have been the subject of discussion in the last 7 days (you can change the number of days in the 'Search Term' field)<br>• Help - to display the *Discussions* Help topic |
| Review | Displays either the Discuss & Review 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:<br>• Review - to display the Discuss & Review 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<br>• Review History - to display the Discuss & Review - History window at the 'Reviews' tab, showing the elements included in a selected review; you can |

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| | switch to the 'Review' tab of the Discuss & Review window to show the details of a selected element under review<br>• Manage Reviews - to display the Reviews view, listing all current and recent reviews of elements<br>• Help - to display the *Reviews* Help topic |
| Chat | Displays either the Chat & Mail window (main icon), on which you can start or continue Chats, or a menu (drop-down arrow) providing these options:<br>• Chat - to display the Chat & Mail window at the 'Chat' tab, on which you can follow and participate in quick conversations on a point of interest, with a selected user or members of a selected user group<br>• Chat History - to display the Discuss & Review History window at the 'Chat' tab, on which you can review the separate Chats recorded in the model, grouped for Today, This Month, Last Month and Older<br>• Recent Chats - to run a report that presents Chats that have been recorded in the last 3 days (you can change the |

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| | number of days in the 'Search Term' field to cover a longer period)<br>• Help - to display the *Model Chat* Help topic |
| Mail | Click on this icon to display the 'Mail' tab of the Chat & Mail window, which provides access to the Model Mail facility. This enables you 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.<br>If you click on the drop-down arrow, you can select from options to:<br>• Open the 'Sent Messages' tab of the main work area, listing all emails sent by you or by other members of the security groups of which you are a member<br>• Open the 'Model Message' dialog, in which you create and send an email message to one or more team members<br>• (Having selected a model object first) Open the 'Model Message' dialog that already contains a hyperlink to the selected object |
| Model | Click on this icon to open the diagram |

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| Diagram | that has been defined as the default model diagram for all users of the model.<br>Click on the drop-arrow beside this icon to presents two options:<br>• Open Model Diagram - which opens the diagram that has been defined as the default model diagram for all users of the model<br>• Manage - provides sub-options to set the currently-open diagram as the model default, search for and select another diagram as the model default, or clear the current default selection; you have to have the proper authorization to set the model default diagram |
| Model Library | Click on this icon to open the Model 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. |
| 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 |

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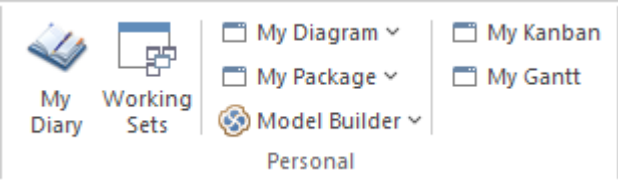
| | day in the future. |

# Personal Panel

The 'Personal' panel provides options to maintain work area settings that are specific to your login, such as your daily diary, your working sets - groups of windows, diagrams and views to return to as a set in later work sessions - your user default diagram, your default work Package, your Gantt Chart listing your work allocations, and the Kanban diagram you have set as your personal default.




## Available Facilities

| Facility | |
|---|---|
| My Diary | Click on this icon to open the 'My Diary' tab of the Chat & Mail window, through which you can maintain a daily diary containing ideas, comments, notes, suggestions, events, to-do lists and other reminders of what you have done or intend to do within the model. The facility is simple to use, allowing you to quickly jot down your thoughts as they occur to you. |
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| Working Sets | Click on the Working Sets icon to open the 'Working Sets' tab of the Focus window, on which you can examine, edit, select, create and delete collections of windows and diagrams to open in your work area. |
| My Diagram | Click on this icon to open the diagram that has been set as your user default diagram.<br>Click on the drop-arrow beside this icon to display options to open your user default diagram, or to set the currently open diagram as your user default, locate and select another diagram as the user default, or clear the currently-specified user default diagram. |
| My Package | Click on this icon to open in the Browser window, the Package set as your user default Package.<br>Click on the drop-arrow beside this icon to display options to locate and open your default Package, or to locate and select a Package as the default to open in the Browser window when you log in to Enterprise Architect. |
| Model | Click on this icon to display the Model |

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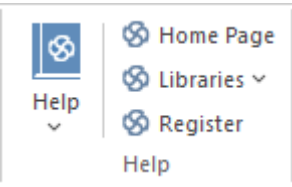
| Builder | Builder window, which allows you select and import a model pattern as a starting point for your project. It offers a large variety of patterns across a wide range of modeling domains.<br>Click on the drop-down arrow to display the Builder Page Options menu. |
| My Kanban | Displays the Kanban 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. |

## Notes

- The 'Set Current as Default' and 'Choose 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

# Help Panel

The 'Help' panel provides access to the extensive Help system and to a wide range of on-line facilities to support your use of the tool, including the management of License 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 | 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 |

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| | from Sparx Systems.<br>• Open Help - opens the Help as a set of pages in HTML format, either on the web or local to your system, beginning with the *Introduction to Enterprise Architect* topic<br>• Search Help - opens the 'Find in Files' search facility, which you use to specify and search for a text string in the Help<br>• Go toTopic - opens a specific Help topic that you identify by name, if you already know the topic you want to display<br>• Explore Online Resources - opens a submenu of options for accessing resources on the Sparx Systems web site:<br>- Install Help Locally - displays a prompt to download the 'EA UserGuide' installer file (EAUserGuide.msi), which you use to install the Help files locally<br>- User Forum and News - opens the Sparx Systems User Forum, which you can read as a guest or as a logged-in user<br>- Request a Feature - opens the standard form for submitting a |

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| | request for a feature you would like to see in Enterprise Architect<br>- 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)<br>- Automation Interface - opens the Sparx Systems web page on the Automation Interface, providing a number of examples of its use<br>- Introducing UML - accesses the Sparx Systems online UML tutorials<br>- Pricing and Purchase Options - displays details on purchasing or upgrading Enterprise Architect over the internet<br>• 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<br>• Open the Example Model - opens the EAExample model within the current instance of Enterprise Architect<br>• Configure On-line Help Translate - displays a short dialog in which you |

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| | 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)<br>• Register and Manage Your License Key(s) - configure and manage the license keys used to register Enterprise Architect and its Add-Ins<br>• Check for Updates - displays the Sparx Systems web page on the latest build and its release notes<br>• View the License Agreement - displays the Enterprise Architect End User License Agreement<br>• Ordering Information - displays information on how to purchase Enterprise Architect<br>• Pro Cloud Server Connection - where the current repository is a Pro Cloud server repository, this displays in the System Output window: the version details, the response of a ping to that Pro Cloud Server and the timing of a simple query<br>• Read Me - displays the Readme.txt file, which details the changes and |

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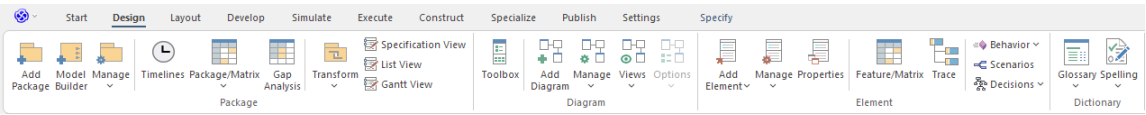
| | enhancements in Enterprise Architect, build by build<br>• About EA - displays a window showing your installation details, including the program version, your registration key, your repository connection, the Enterprise Architect edition and your user id |
| Home Page | Click on this option to open the Home page of the Sparx Systems web site. |
| Libraries | Click on the drop-down arrow to display these commands;<br>• Learning Center - displays information from the Learning Center as a view in the central workspace area<br>• Download Library - Opens the web page for the Learning Center library, from which you can download the Learning Center into your file system: https://sparxsystems.com/resources/libraries/index.html<br>• Manage Library - install, enable and disable Library files |
| Register | Click on this option to open the 'License 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, representations can be created, viewed and tied together to form either blueprints of a system to be implemented or documentation of an existing system.




## Panels

| Panel | Description |
|---|---|
| Package | The 'Package' panel provides facilities to create and manage a model. 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 |

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| | 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 useful 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 in other formats such as a list of elements, or a Gantt chart describing the allocation of resources to the elements, or as a textual specification. |
| | The 'Element' panel provides facilities to |

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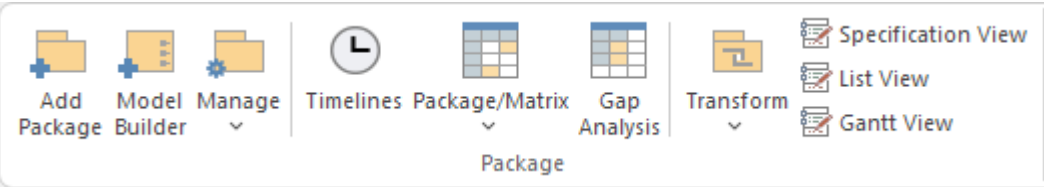
| Element | create, edit and manage the elements that are the building blocks of models. Elements can be created and specified with attributes, operations, Receptions, Tagged Values, Scenarios, Requirements and Constraints. |
| Dictionary | The 'Dictionary' panel provides options to check the spelling in the current Package or the whole model, and to create and edit entries in the Project Glossary. |

# 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

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| Add Package | Click on the icon 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. |
| Model Builder | Click on the icon to display the Model Builder, which provides Patterns from a |

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| | wide range of technologies that you can use to quickly generate new models in your project. |
| Manage | Click on the drop-down arrow to select from a number of facilities that you can use to manage Packages in the model.<br>• Properties - maintain the properties of the current Package, using the 'Properties' dialog<br>• Update Status - provide a bulk update on the Status, Phase and Version of the selected Package and its elements<br>• Lock - display the 'Lock Package' dialog for the selected Package, on which you restrict changes to the Package<br>• Clone Structure as New Version - copy the structure of the selected Package and paste it into the Browser window 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<br>• Validate - display a short menu of options to create validation rules and run and cancel a validation of the current Package |

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| | • Manage Baselines - display the 'Baselines' dialog for the selected Package, to create and compare Baselines of the Package with the current version (Ctrl+Alt+B)<br>• Find Baselines - execute a report that finds and lists all the Baselines in the model<br>• Level Numbering - toggle the display of automatically applied level numbering within the Specification Manager and the Browser window, for elements within the currently displayed Package<br>• Auto Naming - apply configured auto naming conventions to existing elements in the selected Package<br>• 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<br>• DBMS Options - display the 'Manage DBMS Options' dialog to change the DBMS Type and/or Owner of one or more database objects<br>• Copy to Clipboard - immediately copy the selected Package to the clipboard<br>• Paste from Clipboard - paste a Package |

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| | held on the clipboard as a child of the selected Package<br>• 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<br>• Browse for Package - display a 'Find Package' dialog listing only Packages, through which you can easily locate and select a specific Package from within the model hierarchy (Ctrl+Shift+Alt+P) |
| Timelines | Click on this icon to display the 'Timelines' window. The Timelines window provides facilities for viewing and managing snapshots and baselines associated with diagrams, packages and individual elements as they change over time, during the development of your model. |
| Package/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. Select options to set the current Package as the source, target, or |

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| | both. |
| 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. |
| Transform | Click on the drop-down arrow to display options for applying Transformation Templates in building physical models from more abstract content.<br>• Apply Transformation - display the 'Model Transformation' dialog, from which you select and apply a model transformation on the elements of the current Package<br>• 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<br>• Transform Templates - edit and configure the templates used to perform transformations, in the Transformation Editor view<br>• Help - display the *Model Transformation* Help topic |

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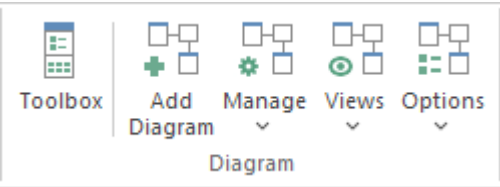
| Specification View | Click on this icon to display the Specification Manager, a document-based interface to a selected Package in the model, providing the means of creating and reviewing elements as text representations of objects in the Browser window. When you select this option, the 'Design' ribbon changes to the 'Specification-Specify' ribbon. |
| List View | Click on this icon to display the selected Package in the Package Browser window, in List View mode. |
| Gantt View | Click on this icon to display the selected Package in the Package Browser window, in Gantt View mode. |

# Diagram Panel

The 'Diagram' panel contains a set of facilities for creating and managing diagrams and the elements they contain. Diagrams are a 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 |
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| Toolbox | 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. |
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| Add Diagram | Click on this icon to create a new diagram under the selected Package or element. The 'Diagram Builder' tab page of the 'Model Builder' 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. |
| Manage | Click on the drop-down arrow to display a list of options for actions to apply to the selected diagram.<br>• Properties - maintain the properties of the current diagram, using the diagram 'Properties' dialog<br>• Lock - display the 'Lock Diagram' dialog for the currently-open diagram, on which you restrict changes to the diagram<br>• Clone as New Version - copy the currently-selected diagram in the Browser window and paste it into the Browser window 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<br>• Compare to Baseline - Compare the current diagram with a |

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| | previously-captured Baseline of the diagram<br>• Add to Working Set - add the diagram to a working set to open when you open the model<br>• Save as Profile - Save the current diagram as a Profile<br>• Swimlanes - divide the currently-open diagram into logical areas or partitions using the 'Swimlanes and Matrix' dialog<br>• Kanban - convert the currently open diagram to Kanban format, using the 'Kanban' dialog<br>• Roadmap - convert the currently open diagram to a roadmap with a timescale, using the 'Roadmap options' dialog<br>• Search for Diagram - display the Find in Project view, pre-loaded with the 'Diagram Details' search to locate diagrams of a specific name<br>• Browse for Diagram - display the 'Select Classifier' browser, through which you can locate and open a diagram in your model |
| Views | Click on the drop-down arrow to display a list of options to display the currently |

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| | open and selected diagram:<br>• In the standard graphical display format<br>• As a tabular, editable list of elements (Diagram List)<br>• In a Gantt Chart format, showing the Project Resources assigned to each element<br>• With each element represented by a text description in the Specification Manager<br>• With every relationship shown in a matrix of the source and target elements, in the Relationship Matrix<br>• In the Construct View, representing the diagram as an element hierarchy showing element type, order of display and any parent-child structures<br>• In the 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 |
| Options | Click on the drop-down arrow to display a list of options for managing the diagram's behavior. |

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| | • Configure Z Order - display the 'Modify Z Order' dialog, on which you set the Z order of each element on the diagram<br>• Make all Elements Selectable - click on this option to make all the elements on the current diagram selectable, so that they each can be worked on<br>• Change Type - change the diagram type<br>• Sequence Communication Messages - (in a Communication diagram) change the sequence of messages<br>• Auto Reload Changed Diagrams - automatically reloads open diagrams that have been saved by other users within the last 60 seconds |

## Notes

If an element is:

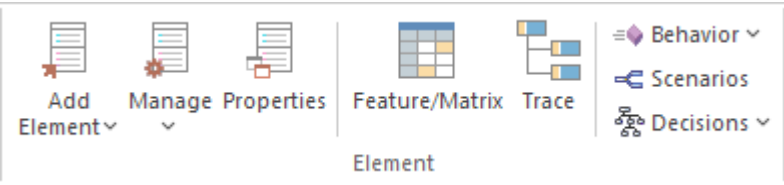
- Selectable, you can move it around the diagram and perform right-click context-menu operations
- Unselectable, you cannot move it around the diagram and the only right-click operation available is to make the element selectable

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 |
|---|---|
| Add Element | Click on the drop-down arrow to display a short list of options for adding elements to the model:<br>• Element - 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<br>• Multiple Elements - add a number of individual elements to the currently-open diagram, using the 'Create Multiple Elements' dialog<br>• Related Element - identify elements |

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| | that are related to the currently selected element and, if they are not on the currently-open diagram, add them to it<br>• Any Element - add any existing element to the currently-open diagram; the option displays the 'Select Element' browser, which you use to locate the element to add |
| Manage | 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 Browser window.<br>• Clone Element as New Version - copy the structure of the selected element and paste it into the Browser window 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<br>• Lock - open the 'Lock Element' dialog through which you can set or clear editing locks on the selected element<br>• Lock Element with Children - open the 'Lock Element' dialog through which you can set or clear editing locks on the selected element and all child elements |

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| | of that element<br>• Edit Linked Document - open the Linked Document editor for the Linked Document on the currently-selected element<br>• 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<br>• 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<br>• Parents and Interfaces - add or delete Generalization and Realization relationships to Parent or Interface Classes, using the 'Set Parents and Interfaces' dialog<br>• Overrides and Implementations - set |

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| | the system to automatically override methods from parent Classes and from realized Interfaces, using the 'Override Operations/Interfaces' dialog<br>• Template Parameters - display the 'Templates' dialog on which you can define Template Parameters and Binding Expressions for a Parameterized Class<br>• Change Type - change the type of the selected element, using the 'Select Element Type' dialog<br>• Find in Project Browser - highlight in the Browser window an element selected from a diagram<br>• Find in Diagrams - find the selected element in every diagram in which it has been used; if the element is used in more than one diagram, the 'Element Usage' dialog displays<br>• Search - display the Find in Project view, through which you can search for the use of any aspect of an element across the model<br>• Bookmark - add or remove a Bookmark on the selected element on the diagram; the element is marked with a red triangle |
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| Properties | Click on this icon to display the Properties Window Selector, a page of options for editing element properties, including Tagged Values and Linked Documents. |
| Feature/Matrix | If you have selected two elements in an open diagram, the Feature Matrix helps you to create and manage relationships between the features (attributes, operations and receptions) of those elements. |
| Trace | 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. |
| Behavior | Click on this icon to display the Source Code editor, to create or edit Behavior code for the operations in the selected element, or in the parent of the selected operation. You have three options:<br>• Edit Behavior<br>• Edit Internal Code<br>• Edit (or View) Source Code<br>All three options display the Code Editor window, but show the appropriate |

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| | features, code and editing options for the type of code identified by the option. |
| Scenarios | Displays the Scenarios View, on which you can:<br>• Construct the scenario step-by step, or<br>• Import a text file that describes a scenario, or<br>• Generate a scenario from an Activity diagram that was itself generated from a scenario (thus regenerating the scenario or importing it from another element) |
| Decisions | Click on the drop-down arrow to display a short menu of options for working with Decision Tables for the selected element.<br>• Find Decision Models - executes a report on the Find in Project window, to locate all DMN models represented by an Artifact with the stereotype <<DMNSimConfiguration>><br>• Add New Decision Model (Model Builder) - displays the Model Builder ready to generate a DMN Model from a Pattern (if the left hand panel header is not 'Decision Modeling', click on the ☰ icon and select 'Requirements > Decision Modeling') |

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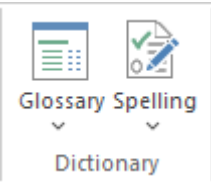
| | • Find Simple Decision Tables - executes a report to locate and list all elements that contain Decision Tables<br>• Create/Edit Simple Decision Table - Opens the Decision Tables window, through which you can create or edit a Decision Table on the current element<br>• Help - display the top-level Help topic on Decision Models |

# Dictionary Panel

The 'Dictionary' 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 |
|---|---|
| Glossary | Click on this icon to display options for viewing and editing the terms defined in the Project Glossary:<br>• Glossary View - display the Glossary window, listing all terms defined in the Project Glossary<br>• Edit - display the 'Glossary' dialog, which provides options to add, edit, and delete glossary terms and modify the display of terms<br>• Implement a Model Based Glossary - display the *Create a Glossary as a Package Structure* Help topic |
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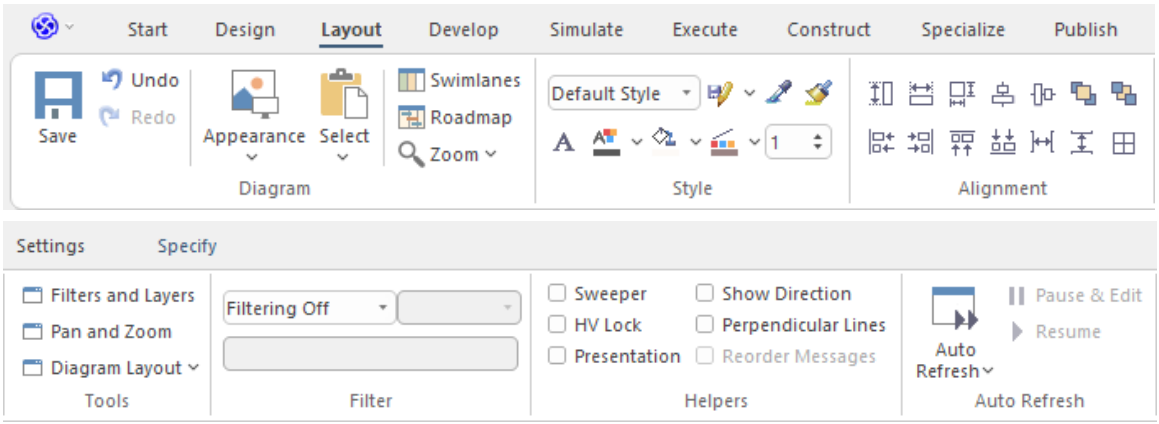
| Spelling | Click on this icon to access the project Spell Checking facilities. A short menu displays from which you can select:<br>• Spell Check Project - the 'Spell Check' dialog displays, on which you specify what model components to check<br>• Spell Check Current Package - the 'Spell Check' dialog again displays, but in this context you do not have to set any parameters<br>• Spelling Options - configure the spell checker using the 'Spelling Options' dialog |

# 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 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 Layers' 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 |

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| | presentation of elements in a diagram. |
| 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 tools that assist in working with large |

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| | 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. |
| Auto Refresh | The 'Auto Refresh' panel provides access |

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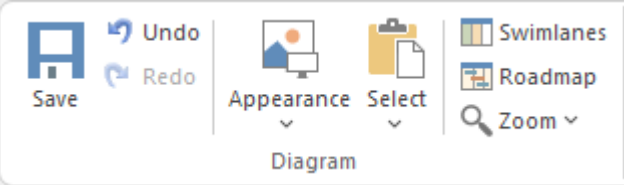
| | to the diagram Auto Refresh facilities, which assist in collaborative diagram design by providing improved support for multiple people giving input on the same diagram. |

## 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 > Appearance > Preferences > 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. |
| Undo | Click on this icon to reverse the last unsaved and un-reversed change made to the diagram. 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 icon to step back through all the unsaved changes that have been made. For practical purposes, there is no limit to how many consecutive |

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| | unsaved changes can be undone or redone. |
| Redo | Click on this icon to re-establish the last undone and unsaved change made to the diagram. |
| Appearance | Click on the drop-down arrow to display a list of options for configuring the appearance of the current diagram.<br>• 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<br>• Hand Drawn Mode - display the current diagram in 'hand drawn' mode<br>• White Board Mode - display the current diagram in 'white board' mode<br>• Theme & Appearance Options - set the theme and appearance options for all diagrams that you review, using the 'Diagram > Themes' page of the 'Preferences' dialog<br>• Hide Page Borders (All Diagrams) - hide the printable-page border lines on all diagrams that you review; deselect the option to redisplay the borders |

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| | (overridden by the 'Hide page borders (current diagram)' setting on the 'Diagram' page of the 'Properties' dialog for the diagram)<br>• Show Diagram Property Note - display the diagram property note on the current diagram<br>• Set Visible Relationships - display the 'Set Visible Relations' dialog through which you select the relationship connectors to show or hide on the current diagram<br>• 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<br>• Configure Status Colors - set the status types and colors, using the 'Status' page of the 'General Types' dialog<br>• Reset Local Element Appearance - for selected elements or all elements on the diagram, reset the fill, line and font colors and line width from the locally-set values (via the 'Layout > Style' ribbon panel, for example) to the values defined at the next level (that is, |

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| | default values set on those elements (the F4 / 'Default Appearance' dialog) or on all elements ('Start > Preferences > Preferences > Diagram > Standard Colors' page)<br>• Reset Default Element Appearance - for selected elements or all elements on the diagram, reset the fill, font and line colors and the line width from the F4 / 'Default Appearance' dialog values to the 'Standard Colors' page default; this then updates all diagrams in the model that also display those elements<br>• Set Local Appearance as Default - for selected elements or all elements on the diagram, reset the F4 / 'Default Appearance' dialog values of the fill, font and line color and line width to the locally-set values of the selected elements (those elements will change to these colors in any diagram they are on, unless they are not overridden by values set locally or by stereotype) |
| Select | Click on the drop-down arrow to display a list of options for selecting, copying and pasting elements on the current diagram.<br>• Select All Elements - select every element in the diagram |

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| | • Select Elements by Type - specify an element type and - if appropriate - stereotype, and select all elements of that type in the diagram<br>• Copy Selected Element(s) - copy all selected elements to the clipboard<br>• Clear Current Selection - clear all selected elements in the diagram<br>• 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)<br>• 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)<br>• 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<br>• Paste Image as Element - paste a single image of the copied element(s) and any connectors between them from the |

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| | 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<br>• 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 |
| Swimlanes | Click on this icon to divide the currently-open diagram into logical areas or partitions using the 'Swimlanes and Matrix' dialog on the diagram. |
| Roadmap | Click on this icon to convert the currently open diagram to a Roadmap with a timescale, using the 'Roadmap options' dialog. |
| Zoom | This Zoom option provides a number of zoom settings that you can apply to your diagram:<br>• Clear<br>• 50% |

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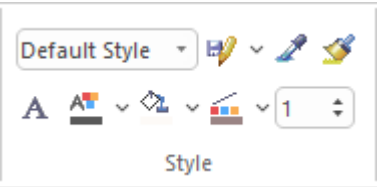
| | • 60%<br>• 75%<br>• 80%<br>• 100%<br>• 150%<br>• 200%<br>When you select a zoom level here, it persists when you close and re-open the diagram.<br>The 'Clear' option resets the diagram's Zoom level to the default; that is, the Zoom level that the diagram was created at. This option only affects diagrams when the 'Base Zoom' setting from the 'Start > Appearance > Preferences > Preferences > Diagram > Appearance' page is set to a value other than 'None'. |

# 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.<br>• 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 |

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| | 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<br>• Save Style - save the style of the object under its existing style name (after changing the appearance of the object)<br>• Refresh List - change the 'Style List' field setting back to 'Default Style'<br>• 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 |
| 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. |

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| 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 |

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| | 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 | Click on this icon to move the selected elements to the top of the diagram relative to other elements (the top of the Z-Order). |
| Send to Back | Click on this icon to 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.<br>Shortcut: Ctrl+Alt+Left Arrow |

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| Align Right | Click on this icon to align the right edges of all selected elements vertically with the right edge of the reference element.<br>Shortcut: Ctrl+Alt+Right Arrow |
| Align Tops | Click on this icon to align the top edges of all selected elements horizontally with the top edge of the reference element.<br>Shortcut: Ctrl+Alt+Up Arrow |
| Align Bottoms | Click on this icon to align the bottom edges of all selected elements horizontally with the bottom edge of the reference element.<br>Shortcut: Ctrl+Alt+Down Arrow |
| Space Horizontally | Click on this icon to evenly separate the selected elements by the same amount horizontally. |
| Space Vertically | Click on this icon to evenly separate the selected elements by the same amount vertically. |
| Grid and Placement Options | Click on this icon to display a menu of options for the Standard Grid and Smart Placement features. |

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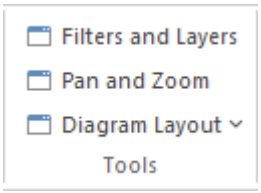
| | **Standard Grid:** Standard Grid ensures that elements 'snap' to the nearest grid point when they are moved or resized.<br>**Smart Placement:** When moving or resizing elements: automatically aligns element edges and centerlines with edges and centerlines of nearby elements, automatically spaces elements at equal distances from each other and spaces them evenly. For Sequence diagrams, this feature helps in aligning Notes on Messages.<br>Please refer to *Move Elements Within Diagrams* for a full description of the options. |

# Tools Panel

The 'Tools' panel provides a suite of facilities for aligning, viewing or filtering the elements in a diagram. These are tools that assist in working with large or detailed diagrams. Filters and Layers can be used to separate out 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 |
|---|---|
| Filters and Layers | Click on this icon to display the 'Filters & Layers' window, 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 |

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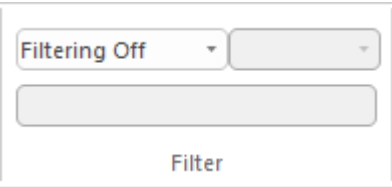
| | of interest. |
| Diagram Layout | Click on this icon to display a menu of options that you can use to select, configure and apply a wide range of diagram layouts to the current diagram. These options include:<br>• Apply Default Layout - automatically apply the default standard Digraph layout to the current diagram<br>• 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<br>• <diagram layouts> - 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 |

# 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 | 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.<br>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 |

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| | necessary. The filter types include:<br>• Relationships - filters for elements that are the source or target of the same type of connector as the selected element<br>• Hierarchy - filters for elements on the diagram in the same hierarchy as the selected element, both above and below that element in the hierarchy<br>• Name / Alias - filters for elements having the specified text string in the 'Name' or 'Alias' fields<br>• Alias - filters for or against elements having the specified text string in the 'Alias' field<br>• Author - filters for or against elements created by the specified author(s) (as shown in the 'Author' field)<br>• DateCreated - filters for or against elements created before, on or after the specified 'Created' date<br>• DateModified - filters for or against elements modified before, on or after the specified 'Modified' date<br>• Difficulty - filters for or against Requirement-type elements (Change, Feature, Issue) of the specified difficulty (see the element's 'Properties' |

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| | dialog 'General > Main' page)<br>• GenType - filters for or against elements of the specified code generation language (such as Java) specified in the 'Language' field<br>• Filename - filters for or against elements having the specified code generation file path and name in the 'Filename' field<br>• Keywords - filters for or against elements having the specified text in the 'Keywords' field<br>• Name - filters for or against elements having the specified text string in the 'Name' field<br>• Notes - filters for or against elements having the specified text string in the 'Notes' field (see the element's 'Properties' dialog, 'General' page)<br>• ObjectType - filters for or against elements having the specified object type as defined in the 'Type' field<br>• Phase - filters for or against elements having the specified phase as defined in the 'Phase' field<br>• Version - filters for or against elements having the specified object type as defined in the 'Version' field |

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| | • Priority - filters for or against Requirement-type elements (Change, Feature, Issue) of the specified priority (see the element's 'Properties' dialog 'General > Main' page)<br>• RequirementType - filters for or against Requirement-type elements (Change, Feature, Issue) of the specified type (see the element's 'Properties' dialog 'General > Main' page)<br>• Scope - filters for or against elements having the specified scope value, as defined in the 'Scope' field ('Details' page of the 'Properties' dialog, 'Advanced' section of the Properties window)<br>• Status - filters for or against elements having the specified status, as defined in the 'Status' field<br>• Stereotype - filters for or against elements having the specified stereotype as defined in the 'Stereotype' field<br>• Selectable - filters for or against elements that have been flagged as selectable, using the element context menu<br>• Printable - filters for or against |

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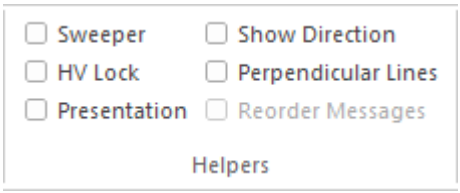
| | elements that have been flagged as printable, using the element context menu<br>For some filter types, one or both of the remaining two fields might not be required and they will be grayed out. |
| Top Right | This field defines the operator to apply to any property or value you define; that is, 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.<br>Click on the drop-down arrow and select the appropriate operator. |
| Bottom | Type the value or range of values to be matched against the element property or text. |

# 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 |

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| | 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.<br>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 |

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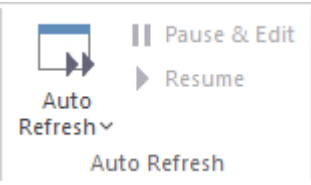
| | relationships are red, and outgoing relationships are green. If the element is not selected, the connectors are not color coded. |
| Perpendicular Lines | When this option is selected, connectors are forced to adopt a vertical or horizontal position when they are adjusted. Connectors that are not adjusted when this option is selected will remain at whatever angle they present.<br>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. |

# Auto Refresh Panel

The 'Auto Refresh' panel provides access to the diagram Auto Refresh facilities, which assist in collaborative diagram design by providing improved support for multiple people giving input on the same diagram, and allowing those users to monitor changes on a specific diagram.




## Available Facilities

| Option | Description |
|---|---|
| Auto Refresh | Displays a menu of options to:<br>• Disable Auto Refresh on this diagram (the default setting)<br>• Enable Auto Refresh and poll for changes to the diagram every 7 seconds<br>• Enable Auto Refresh and poll for changes to the diagram every 15 seconds<br>• Enable Auto Refresh and poll for changes to the diagram every 30 seconds<br>• Enable Auto Refresh and poll for |

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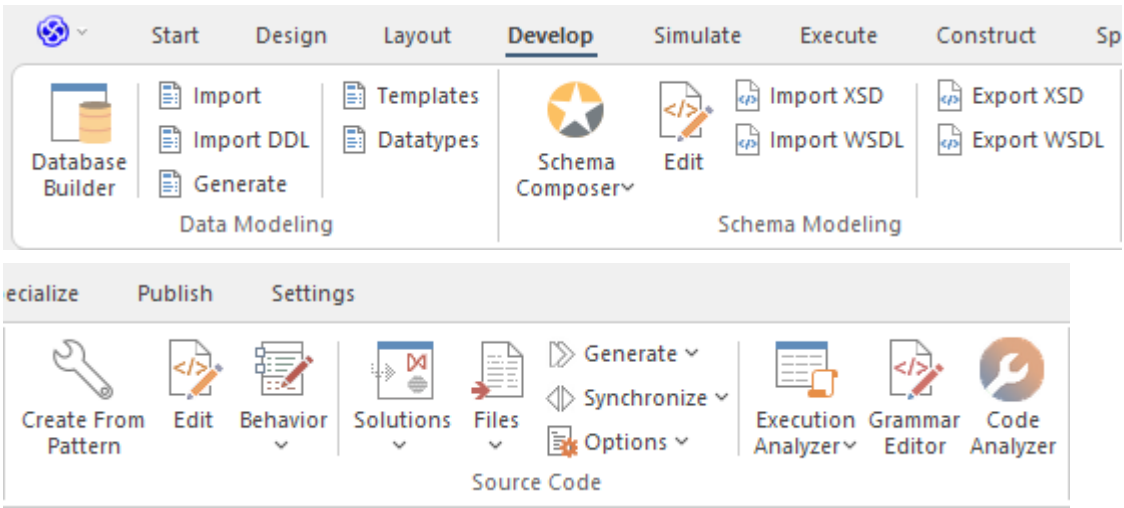
| | changes to the diagram every 60 seconds<br>• Pause Auto Refresh to enable you to edit the diagram<br>• Resume Auto Refresh under the current interval after you have paused it to edit the diagram |
| Pause & Edit | Pauses Auto Refresh to enable you to edit the diagram. |
| Resume | Resumes Auto Refresh under the current interval after you have paused it to edit the diagram. |

# Develop Ribbon

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




## Panels

| Panel | Description |
|---|---|
| Data Modeling | The 'Data Modeling' 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, |

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| | creating new model elements that represent the classes in those files. |
| Schema Modeling | From the 'Schema Modeling' 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. |
| 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 with updated source code. You can also locate, open, edit and merge source code files. Also available are the:<br>• Execution Analyzer, in which you can specify how the model is used to generate a built product, including how an application will be compiled, debugged and simulated<br>• Grammar Editor window, an advanced facility that allows you to view, add, edit and manage language grammars, used for importing source code, and<br>• Code Analyzer that allows code |

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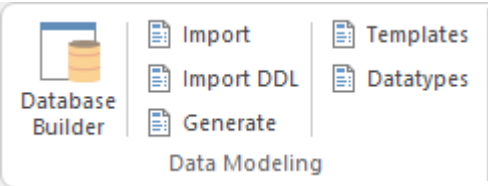
| | metrics to be queried much faster than conventional methods |

# Data Modeling Panel

The 'Data Modeling' panel provides facilities for importing existing database projects from other tools, to create or add to an Enterprise Architect project, and for importing database schema and DDL files.




## 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. |
| Import | Click on this icon to display the 'Import DB schema' dialog, through which you can specify a database schema to import from a target DBMS. |
| Import DDL | Click on this icon to display the 'Import DDL Scripts' dialog, through which you can import DDL scripts from a specified directory in your file system, to create |

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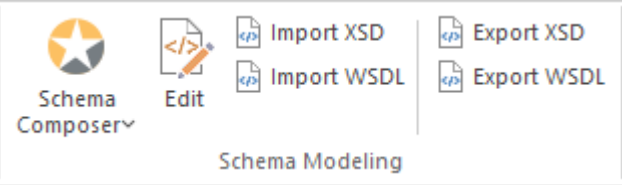
| | Database Model objects in your Enterprise Architect model. |
| Generate | Click on this icon to display the 'Generate DDL' dialog, from which you can export the current model selection as DDL script, targeting a particular DBMS. |
| Templates | Click on this icon to display the 'DDL Template Editor', in which you can edit the templates used to create DDL scripts for each DBMS. |
| Datatypes | Click on this icon to display the 'Database Datatypes' dialog to add, modify and delete database datatypes. |

# Schema Modeling Panel

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




## Available Facilities

| Facility | Description |
|---|---|
| Schema Composer | Click on the drop-down arrow to display options for creating and managing custom profiles for the generation of industry-specific XSD files.<br>• Open Schema Composer - display the Schema Composer view, which you use to create Schema profiles and generate XSD files from them<br>• Import for Schema Composer - import a Schema Composer profile from an external file, using the 'Schema Importer' dialog<br>• Find Schema Composer Profiles - execute a standard search to locate all Schema Composer profiles in the |

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| | project<br>• Help - display the *Schema Composer* Help topic |
| Edit | Displays an 'Open File' browser through which you locate and select an XSD/XML file to open in the Code Editor window. |
| Import XSD | Click on this icon to 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 |
| Import WSDL | Click on this icon to display the 'Import WSDL' dialog, where you can choose a file to import into the selected Package |
| Export XSD | Click on this icon to 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 |
| Export WSDL | Click on this icon to generate either a «WSDLnamespace» stereotyped Package or a «WSDL» stereotyped Component |

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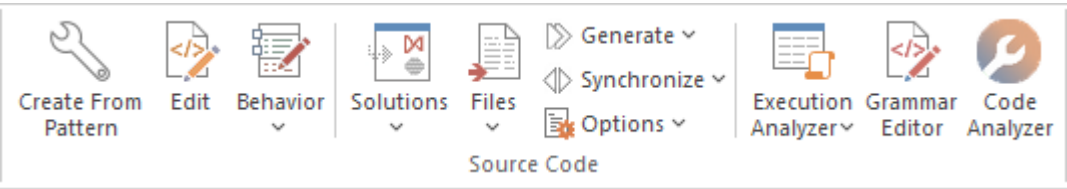
| | (Document) to WSDL files |

# 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 are also provided for:

- Issuing commands to generate source code from the model
- Synchronizing the model from the source code
- Performing code analysis
- Accessing tools such as the Debugger, Profiler, Execution Recorder and the Testpoints Window
- Working with language grammars
- Managing code templates and defining the way source code is imported into and generated from your model




## Available Facilities

| Facility | Description |
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| Create From Pattern | Click on this icon to display the Patterns window, through which you can generate:<br>• Starter projects including model information, code and build scripts for one of several basic application types (on the 'Application Patterns' page)<br>• Examples of key sections of code to generate Sequence diagrams, including a Class model, build scripts and related source code (from the 'VEA Examples' page) |
| Edit | Click on this icon to open a file browser through which you locate and open the required code file to edit. |
| Behavior | Click on this icon to display the Source Code editor, to create or edit Behavior code for the operations in the selected element, or in the parent of the selected operation. You have three options:<br>• Edit Behavior<br>• Edit Internal Code<br>• Edit (or View) Source Code<br>All three options display the Code Editor window, but show the appropriate features, code and editing options for the type of code identified by the option. |

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| Solutions | 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:<br>• Import a Visual Studio Solution<br>• Import a Mono Solution<br>• Import an Eclipse Project<br>• Import a Netbeans Project<br>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. |
| Files | Click on the drop-down arrow to display a list of options for importing code files into the current model from a variety of sources, selecting from a range of popular coding languages.<br>• Edit New Source File - display the Code Editor window as a 'New File' document, enabling you to create and populate a new code file of whatever type and format you require |

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| | • Import Directory - display the 'Import Source Directory' dialog, through which you import a complete directory tree in one pass; language and other options can be specified within the dialog<br>• View Dry Run Log - If you have performed a source directory import with the 'Perform a Dry Run' option selected, a log file of that dry run is generated; this option displays that log file<br>You can also import:<br>• ActionScript Files<br>• C Files<br>• C# Files<br>• C++ Files<br>• Delphi Files<br>• Java Files<br>• PHP Files<br>• Python Files<br>• Visual Basic Files<br>• VB .Net Files<br>• Binary File - supported file types are: Java JAR files and .NET PE or IL format (exe, dll)<br>• Windows .RC File (a Windows C/C++ |

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| | .RC file), as a series of screen definitions<br>If you have developed model structures for any customized programming language, those languages are also included in the list. |
| Generate | Click on this icon to display options to generate source code for:<br>• The currently selected model element(s), or<br>• A single element, with options, or<br>• All elements in the current context<br>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. |
| 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. |
| Options | 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 |

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| | model.<br>• 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<br>• Set Package as Namespace Root - set the selected Package as the Namespace root, for code generation<br>• Suppress Namespace - ignore the current subordinate Package when generating Namespaces and showing Package paths<br>• 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<br>• Configure Code Engineering Datatypes - manage the list of Datatypes that are used in Code Engineering<br>• Define Preprocessor Macros - manage a list of preprocessor macros that will be used when C and C++ code is imported into the model<br>• Reset Source Language - display the 'Manage Code Generation' dialog to change the source language and other generation options for all Classes in the |

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| | selected Package<br>• Set Live Code Generation - update your source code instantly as you make changes to your model |
| Execution Analyzer | Click the drop-down arrow to access a menu of Analyzer tools.<br>• 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<br>• Edit Active Script - display the Analyzer script editor to edit the currently-active Analyzer script<br>• Show Testpoints Window - display the Analyzer Test Points window, to configure, execute and work with dynamic test suits and test cases<br>• Find Test Suites and Test Sets - search the model for Test Suites and Test Sets<br>• Open Debugger - display the Analyzer Debug window to facilitate debugging and testing of the current application<br>• Open Profiler - display the Analyzer Profiler window, from which you can perform application performance |

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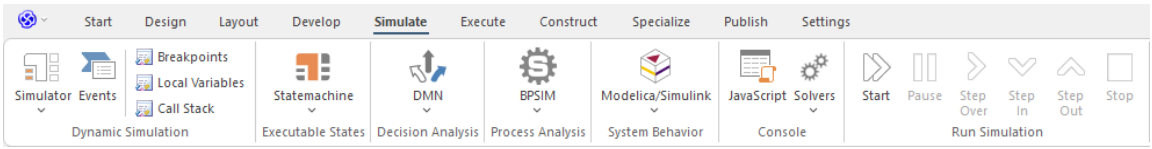
| | profiling and execution inspection of the current application<br>• Open Recorder - display the Analyzer Recording window, from which you can set recording points, record program execution and create diagrams based on recordings<br>• Open Object Workbench - open a simple Object Testing window, from which you can make ad hoc calls on Object methods; available for Java and .NET objects |
| Grammar Editor | Display the Grammar Editor window, an advanced facility that allows you to view, add, edit and manage language grammars, used for importing source code. |
| Code Analyzer | The Code Analyzer can perform very complex queries on source code repositories at lightning speed either locally or on a Sparx Intel Cloud service, allowing code metrics to be queried much faster than conventional methods. |

# Simulate Ribbon

The 'Simulate' ribbon presents a range of tools for configuring, building and running simulations of models, in particular models of executable states, decision analysis, business process analysis and system behavior. The definition of a simulation is further supported by the facility to create JavaScript to control a simulation, including the use of mathematical solvers such as MATLAB and Octave.

Enterprise Architect also provides the ability to start, pause and resume execution of a simulation, as well as set break points and view 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 |
|---|---|
| Dynamic Simulation | The 'Dynamic Simulation' 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 |

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| | view the Call Stack. It also offers a number of pre-defined model searches for retrieving recently modified StateMachines and Activity Graphs, and enables you to apply the appropriate Perspective and Work Space for the simulation you are performing. |
| Executable States | Executable StateMachines provide a 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.<br>The 'Executable States' 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 |

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| | code in the built-in code editor. |
| 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 Object Modeling Group (OMG). This facility enables you to open a DMN Simulation and set up DMN Expressions, and to locate and work from DMN Configuration Artifacts. |
| Process Analysis | The 'Process Analysis' panel provides facilities to manage and run BPMN 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. |
| Console | The 'Console' panel provides options for working on JavaScript code, and specifically on the code for MATLAB |

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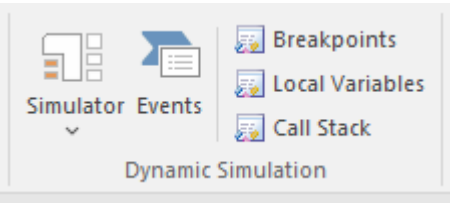
| | and Octave Solvers. |
| Run Simulation | The 'Run Simulation' panel provides a number of buttons to control execution of an active simulation, namely Start, Pause, Step Over, Step In, Step Out and Stop. |

# Dynamic Simulation Panel

The 'Dynamic Simulation' 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, and enables you to apply the appropriate Perspective and Work Space for the simulation you are performing.




## Available Facilities

| Facility | Description |
|---|---|
| Simulator | Click on this icon to display a short menu providing these options:<br>• Open Simulation Window - display the Simulator control window, from which you can manage, activate and control simulations<br>• Find Simulations - opens the Start Page 'Search in Project' tab with the |

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| | 'Simulation > StateMachine Diagrams' search loaded for execution (click on the 'Run' arrow); you can change the search to locate Activities, Executable StateMachines, Interactions, BPSim configurations and other objects related to running simulations<br>• Recent StateMachines - opens the Start Page 'Search in Project' tab with the 'Simulation > Recent StateMachine Diagrams' search executed<br>• Recent Activity Graphs - opens the Start Page 'Search in Project' tab with the 'Simulation > Recent Activity Diagrams' search executed<br>• Apply Perspective - Displays the Model Builder, in which you select the Perspective to apply model structures appropriate to the simulations you intend to perform<br>• Apply Workspace - apply the Simulation Workspace, which opens all of the relevant windows (Simulation, Simulation Events, Local Variables, Call Stack and Execution Analyzer windows) for Dynamic Simulation, and arranges them around the screen for ease of use<br>• Help - display the *Dynamic* |

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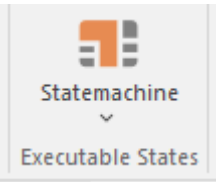
| | *Simulations* Help topic.<br>In the searches you can specify the time period (number of days prior to today) from which to draw the results. |
| Events | Click on this icon to open the Simulation Events window, to work with signals and triggers that are used as input to the currently active simulation. |
| 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. |

# Executable States Panel

Executable StateMachines provide a valuable 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 States' 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 |
|---|---|
| Statemachine | Click on the drop-down arrow to display a list of options for working with Executable StateMachine Artifacts to |

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| | configure, generate and run code-based simulations.<br>• Generate, Build and Run - generate, build and run the current Executable StateMachine Artifact, according to the Analyzer Script configuration<br>• Generate - generate the current Executable StateMachine Artifact, according to the Analyzer Script configuration<br>• Build - build the current Executable StateMachine Artifact, according to the Analyzer Script configuration<br>• Run - start a simulation of the current Executable StateMachine Artifact, according to the Analyzer Script configuration<br>• Find Executable Statemachines - run a pre-defined search to locate all Executable StateMachine Artifacts in the model<br>• View Source - view the source code generated for the current Executable StateMachine Artifact<br>• Analyzer Scripts - display the 'Execution Analyzer' dialog, where you can configure Analyzer Script options for the current Executable |

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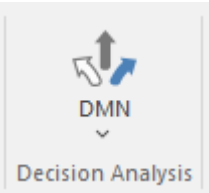
| | StateMachine Artifact<br>• Apply Perspective - apply the Perspective for Executable StateMachines to your modeling environment; the Model Builder dialog displays, presenting the Executable StateMachine Patterns<br>• Apply Workspace - apply the Simulation Workspace, which opens all of the relevant windows (Execution Analyzer, Simulation, Simulation Events, Locals and Call Stack windows) for Executable State simulation, and arranges them around the screen for ease of use<br>• Help - display Help information about Executable StateMachines |

# 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 Object Modeling Group (OMG). 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 Browser |

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| | window. If you have not selected any component, the window is blank. |
| 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. |
| Apply Perspective | Select this option to apply the Perspective for DMN to your modeling environment. The Model Builder dialog displays, presenting the DMN Patterns. |
| Apply Workspace | Select this option to apply the DMN Simulation Workspace, which opens the relevant windows (DMN Simulation, DMN Expression) for Decision Analysis simulation, and arranges them around the screen for ease of use |
| Help | Select this option to display the *DMN Decision Models* Help topic. |

# 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 | Click on the drop-down arrow to display a short menu providing these options:<br>• Open BPSim Manager - display the Configure BPSim window, through which you can configure, execute and analyze simulations of BPSim models<br>• Find BPSim Configuration Artifacts - open the Start Page 'Search in Project' tab 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<br>• Apply Perspective - apply the Perspective for BPSim to your |

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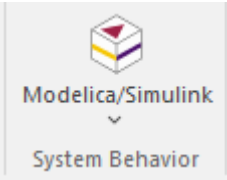
| | modeling environment; the 'Model Builder' dialog displays, presenting the BPSim Patterns<br>• Apply Workspace - apply the Process Analysis Simulation Workspace, which opens all of the relevant windows (Toolbox, Properties, Notes and Configure BPSim windows) for Process Analysis Simulation, and arranges them around the screen for ease of use<br>• Help - display the *BPSim Business Simulations* Help topic |

# 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/Simulink | 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.<br>• SysMLSim Configuration Manager - display the Configure SysML Simulation view to build and run simulations using SysML and OpenModelica or Simulink<br>• Find SysMLSim Configuration Artifacts - open the Start Page 'Search in Project' tab and load a pre-defined |

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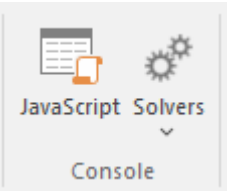
| | set of search parameters to find SysMLSim Configuration Artifacts<br>• Apply Perspective - apply the SysML Perspective to your modeling environment; the Model Builder dialog displays, presenting the SysML 1.5 Patterns, OpenModelica Case Studies and SysPhS elements<br>• Apply Workspace - apply the System Behavior Simulation Workspace, which opens all of the relevant windows (Toolbox, Properties, Notes and Configure SysML Simulation windows) for System Behavior Simulation, and arranges them around the screen for ease of use<br>• Help - display the (SysPhS Simulation) *Simulation* Help topic |

# Console Panel

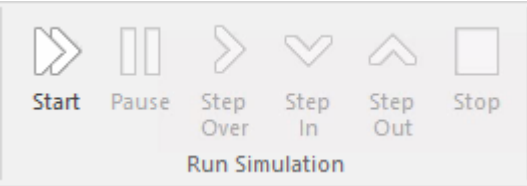
The 'Console' panel provides options for working on JavaScript code for Dynamic Simulation, and specifically on the code for MATLAB and Octave Solvers in Mathematical Simulation.




See the *Model Simulation* topics Dynamic Simulation with JavaScript and Solvers.

# Run Simulation Panel

The 'Run Simulation' 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 |
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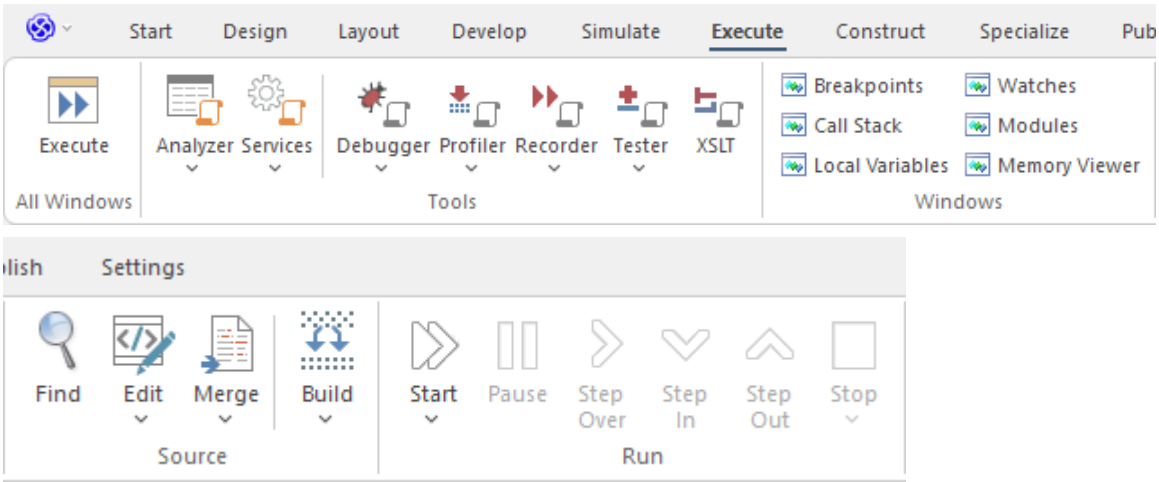
| Stop | Halt execution of the current simulation at the current execution point. |

# 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 |
|---|---|
| All Windows | You can use the 'All Windows' panel to access a range of Window Selectors to select and open a window or a workspace. |
| Tools | The 'Tools' panel brings together a collection of tools for analyzing the |

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| | 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. The 'Services' icon provides options to start, stop and test Satellite and Agent services, and to make use of the Code Miner. |
| 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. |
| Source | The 'Source' panel provides a set of buttons for building 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'. |
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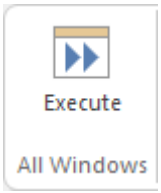
| Run | The 'Run' panel provides the commands for running an application that is being analyzed. You simply click on buttons to begin execution of the updated application, pausing or stepping through code as required. |

# All Windows Panel

You can use the 'All Windows' panel to access a range of Window Selectors to select and open a window or a workspace.

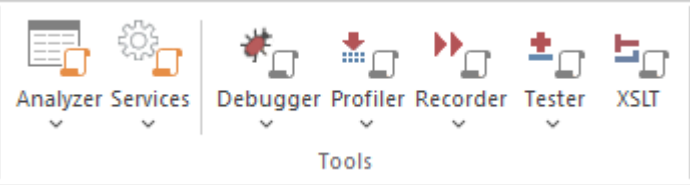



## Available Facilities

| Facility | Description |
|---|---|
| Execute | Click on this icon to display the Execute Window Selector. The Execute Window Selector provides access to the Simulation, Source Code, Visual Analysis and Process Execution windows and tabs. Click on the name of the required window to immediately open it. |

# Tools Panel

The 'Tools' panel brings together a collection of 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.




## Available Facilities

| Facility | Description |
|---|---|
| Analyzer | Displays 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. |

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| | The icon also provides access to the Job Queue window. This window streamlines the process of working with Analyzer Scripts; when an Analyzer Script context menu option is executed (for example, 'Build') it is placed in a job queue; multiple jobs can be queued, and other work performed while the jobs are processed. |
| Services | 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.<br>• View Status of all Services - displays a window that lists the status of each Enterprise Architect service named in the config file, and its state<br>• Satellite Service<br>- Start<br>- Stop<br>- Test (Satellite service status)<br>• Agent Service<br>- Start<br>- Stop<br>- Test (Agent service status)<br>• Code Miner Service<br>- Start - reads the current service configuration and starts services that |

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| | are configured to run<br>and stops services that are not configured<br>- Stop All - stops any services that are currently running<br>- Edit Configuration File - prompts for the service config file to use, then opens it in an<br>Enterprise Architect text editor<br>- Auto Start with EA - automatically starts services having the 'status:ON' attribute when<br>the model opens<br>- Auto Stop on Close - automatically stops running services when Enterprise Architect is closed |
| Debugger | Click on the drop-down arrow to display a list of options for starting and using the Debugger.<br>• 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<br>• Start Debugging - start the application, according to the debug options of the active analyzer script |

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| | • Attach to Process - display a list of executing processes - select and attach to a process for debugging purposes<br>• Create Stack Diagram - create an Interaction diagram based on the current execution stack; available only when execution is halted at a breakpoint<br>• Create marker set for class - creates a set of breakpoint markers for methods of the selected Class<br>• Switch to Profiler - switch dynamically from the Debugger to the Profiler, allowing performance monitoring and execution tracing<br>• Set as JIT Debugger - set Enterprise Architect as the default Just In Time debugger; for Windows systems only<br>• Set as JIT Model - set the current model as the default on which to perform Just In Time debugging; for Windows systems only<br>• Process First Chance Exceptions - enable processing of First Chance Exceptions<br>• Apply Debug Layout - apply a workspace layout containing windows useful for debugging, set out in a |

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| | convenient arrangement |
| Profiler | The Profiler is used to record stack trace information for an application that is being analyzed, at pre-determined sampling intervals.<br>Click on the drop-down arrow to display a list of commands for starting and working with the application Profiler.<br>• Open Profiler - open the Profiler window; this window provides a toolbar for controlling Profiler operations and displays a summary of the collected sample data<br>• 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<br>• Start - reattach the Profiler to the last profiled application process (where available), **otherwise** start the application specified in the debug options of the active analyzer script and attach the Profiler to that application process<br>• Resume - begin or resume collection of profiling data<br>• Stop - detach the Profiler from the |

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| | application process; the application process will continue to run - click on the Start button to re-attach to that process<br>• Switch to Debugger - dynamically switch from Profiling to Debugging to allow finer grained inspection of application behavior<br>• 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<br>• Load Report from File - load a profiler report from a saved file<br>• Save Report to File - save the collected profile data to a file<br>• Stop Process on Exit - an option to stop the application process when the Profiler is detached from that process<br>• Show Debug Output - optionally show debug output as the Profiler executes<br>• Discard Fragments - discard partial stacktraces from samples<br>• Discard Current Data - discard all collected sample data in preparation for a new run |

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| | • Apply Profiler Layout - apply a workspace layout containing windows useful for application profiling, set out in a convenient arrangement |
| Recorder | The Recorder is used to record information about function calls made by an application that is being analyzed.<br>Click on the drop-down arrow to display a list of commands for starting and working with the Recorder.<br>• Open Recorder - open the Record & 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<br>• Attach to Process - attach the Recorder to an executing process<br>• 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<br>• Stop Recording - stop recording the execution trace of the application |

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| | process; the application process will continue to run<br>• 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<br>• Manual Record - use the manual record functions to start and stop recording while stepping through source code in the Debugger<br>• Step Thru - step through executing code while recording an execution trace<br>• Save Recording to Model (Artifact) - save the recorded execution trace to a model artifact<br>• Save Recording to File - save the recorded execution trace to a file in the local file system<br>• Load Recording - load a recorded execution trace from a previously saved file<br>• Clear Recording Data - discard any recorded execution trace in preparation for recording a new trace<br>• Create Sequence Diagram - create a Sequence (Interaction) diagram from |

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| | the current execution trace; requires that model and code are synchronized<br>• Create Call Graph - create a Call Graph from the current execution trace; requires that model and code are synchronized<br>• Create Class Diagram - create a Class diagram using the elements that are instantiated and accessed in the current recording<br>• 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<br>• Synchronize Model to Source Code - synchronize the source code of the current application with the model, to ensure correct recording and creation of diagrams<br>• Show/Hide Execution Point - show or hide the current execution point during the recording process; hiding this results in a faster recording time<br>• Apply Recording Layout - apply a workspace layout optimized for use of the Recorder |
| | Test Points are a scheme by which rules |

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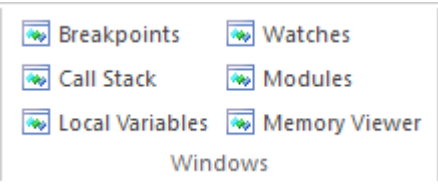
| Tester | and constraints governing the behavior of objects can be taken from the model to create Test Cases to verify the application.<br>Click on the drop-down arrow to display a list of options for working with Test Points and Test Cases.<br>• Show Testpoint Window - open the Test Points window to manage, configure and run Test Points and associated Test Cases, Sets and Suites<br>• 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<br>• Open Object Workbench - open a simple Object testing environment for Java and .Net; instantiate objects and dynamically call their methods |
| XSLT | Opens the XSLT Debugger, to debug an XSL Transformation. |

# 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. |
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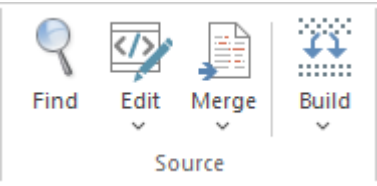
| Watches | Click on this icon to open the Watches window, which lists the customer variables by name when the application is at a breakpoint. |
| Modules | Click on this icon to open the Modules window, which lists the modules an application has loaded and is using at run time. |
| Memory Viewer | Click on this icon to open the Memory Viewer window to view a piece of memory when the application is paused at a breakpoint. |

# Source Panel

The 'Source' panel provides a set of buttons for building 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'.




## Available Facilities

| Facility | Description |
|---|---|
| Find | Open the Find in Files window to search the local file system for source files that contain particular text. |
| Edit | 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 |

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| | code file.<br>• Open Source File - display a 'File Chooser' dialog to browse for a source code file to open in the code editor window<br>• Search in Files - display the 'Find in Files window, to locate files of a selected type containing a specified code string<br>• Edit Element Source - open the code editor window and load the source code file associated with the currently selected element<br>• Edit New Source File - create and populate a new source code file<br>• Open in External Editor - launch the configured External Editor and load the source code file associated with the currently selected element |
| Merge | Click on this option to display a short menu of user-defined commands defined in the currently active Analyzer script, to integrate with your source Version Control provider. Click on the command type to execute the command and perform the defined operation:<br>• Merge |

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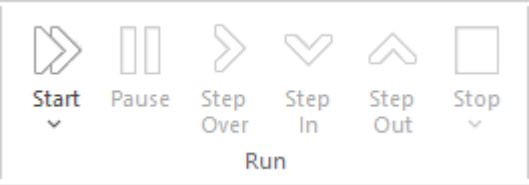
| | • Changes<br>• History<br>• Commit<br>• Working Copy<br>• Repository<br>If a command has not been defined, the option is grayed out. |
| Build | Click on the drop-down arrow to display a short menu of commands for building application source code:<br>• Build - build the current application, according to the currently active Analyzer script<br>• Deploy - execute the 'Deploy' command of the selected script.<br>• Clean - run the Analyzer Clean command to delete intermediate files from the current application<br>• Rebuild - run the Analyzer Clean and Build commands as defined in the currently active Analyzer script<br>• Cancel Build - cancel the currently executing build |

# 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 |
|---|---|
| Start | Click on the drop-down arrow to display a short menu of commands:<br>• Debug - start the application, according to the debug options of the active Analyzer Script<br>• Run - resume execution of the application process that is currently being debugged - if no process is currently being debugged, then start the |

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| | application specified in the debug options of the active Analyzer Script and attach the Debugger to that application process<br>• Attach to Process - display a list of executing processes, select and attach to a process for the purpose of debugging<br>• Test - execute the Test command configured in the current Analyzer Script<br>• Show Execution Point - display and highlight the line of source code that corresponds to the current execution point |
| Pause | Pause execution of the application being debugged. |
| Step Over | Execute the next line of source code, **without** 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 **before** executing the first executable line in the called method. |

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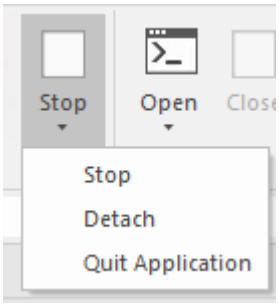
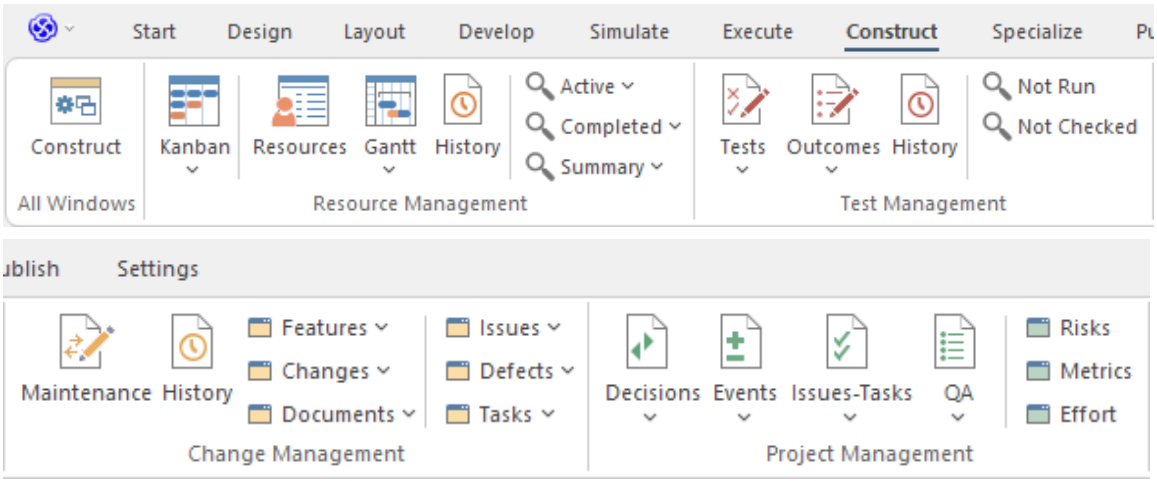
| | If source code for the called method is not available, the debugger will return immediately to the calling code. |
| Step Out | Automatically run to the end of the current context/method and return to the calling context. Execution will pause again, upon return to the calling context. |
| Stop | Clicking on the drop-down arrow displays a short menu providing options to terminate debugging the application.<br>  <br>• Stop - stops the Debugger and stops the process that is being debugged (the default when you just click on the ribbon icon)<br>• Detach - stops the Debugger but leaves the process running<br>• Quit Application - stops the Debugger and posts a WM_QUIT message to the main window of the process, if it has one |

# 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 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 |
|---|---|
| All Windows | You can use the 'All Windows' panel to access a range of Window Selectors to select and open a window or a workspace. |
| Resource | The 'Resource Management' panel is a |

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| Management | 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 Gantt charts show 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. |
| Test Management | The 'Test Management' panel is used for creating and managing all aspects of testing. The Test Cases 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 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. |

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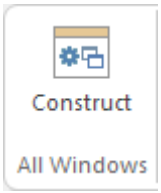
| Change Management | The 'Change Management' panel is used for define and record important items that apply to an element. Enterprise Architect is a platform for managing any initiative and can keep track of variations in the life time of any element. Regardless of the methods or processes that are being used, elements such as Requirements, User Stories, Business Rules, Components and others will change, have issues, require tasks and have defects. 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. |
| Project Management | The 'Project Management' panel provides facilities for managing project-level items such as issues, events, tasks and decisions, for defining project risks, effort and metrics, and for obtaining an overview of the project status, including Quality Assurance reports and project statistics. |

# All Windows Panel

You can use the 'All Windows' panel to access a range of Window Selectors to select and open a window or a workspace.

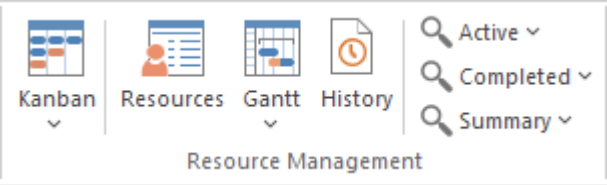



## Available Facilities

| Facility | Description |
|---|---|
| Construct | Click on this icon to display the Construct Window Selector. The Construct Window Selector gives access to tools for managing resources, changes, testing and project metrics. Click on the name of the required window to immediately open it. |

# Resource Management Panel

The 'Resource 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 | 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.<br>• 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 |

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| | open that Kanban diagram<br>• Open My Kanban - if a Kanban diagram has been set up with your work assignments and tasks, open that diagram<br>• Manage - (for user settings) provides these options:<br>- Set Current as Default - set the currently-open Kanban diagram as your user default<br>- Choose Default - display a browser through which you locate and select a Kanban<br>diagram to be your user default (you can also select <none> to clear the setting)<br>- Clear - clear the setting of the user default Kanban so that there is no user Kanban defined<br>• Open Project Kanban - if a Kanban diagram has been set up with the work assignments and tasks for the overall project, open that diagram<br>• Manage - (for model settings) provides these options:<br>- Set Current as Default - set the currently-open Kanban diagram as the Model<br>or Project Kanban diagram |

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| | - Choose Default - display a browser through which you locate and select a Kanban diagram to be your Model or Project Kanban diagram (you can also select <none> to clear the setting)<br>- Clear - clear the setting of the model default Kanban so that there is no model Kanban defined<br>• New Standard Kanban - create a new standard Kanban diagram to contain active work assignments and tasks, which you can customize as required<br>• New Backlog Kanban - create a new Kanban diagram to contain work assignments and tasks that have not yet been allocated to a resource<br>• New Iteration Kanban - create a new Kanban diagram to contain active work assignments and tasks associated with the current iteration or sprint<br>• 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<br>• One Stage Workflow - create a |

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| | single-stage Kanban workflow diagram from a Pattern<br>• Two Stage Workflow - create a two-stage Kanban workflow diagram from a Pattern, including a Backlog Kanban and an Iteration Kanban<br>• Three Stage Workflow - create a three-stage Kanban workflow diagram from a Pattern, including a Backlog Kanban, an Iteration Kanban and a Complete Kanban |
| 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 list options to display:<br>• Your personal Gantt view, showing the breakdown of work specifically assigned to you<br>• 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 |
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| Active | Click on this icon to display a short menu of options for searching for and charting tasks within the model.<br>• 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<br>• Chart of Active Tasks - create a Chart within the selected open diagram showing the currently active tasks<br>• Tasks Ending Today - open the Find in Project view and execute a pre-loaded search for tasks scheduled to complete today<br>• Tasks Starting Today - open the Find in Project view and execute a pre-loaded search for tasks scheduled to begin today<br>• Overdue Tasks - open the Find in Project view and execute a pre-loaded search for tasks that are now overdue<br>• Chart of Overdue Tasks - create a Chart within the selected open diagram showing the currently overdue tasks |
| Completed | Click on this icon to display a short menu of options for searching for and charting |

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| | completed tasks within the model.<br>• 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<br>• Chart of Completed Tasks - create a Chart within the currently-active diagram showing the recently-completed tasks<br>• Chart for Time Period - create a Chart within the currently-active diagram showing the tasks completed during a defined period<br>• All Completed - open the Find in Project view and execute a pre-loaded search for all tasks completed within the lifetime of the project |
| Summary | Click on this icon to display a menu of options for searching for and charting the deployment of resources over various periods of time.<br>• 30 Day Task Summary (Brief) - provide a brief summary of the tasks performed by resources over the previous month<br>• 30 Day Task Summary (Full) - provide |

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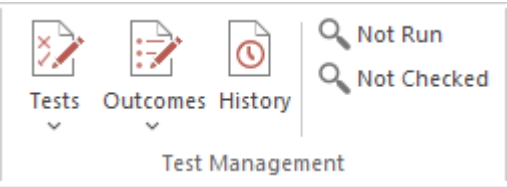
| | a full summary of the tasks performed by resources over the previous month<br>• 30 Day Resources - search the project for tasks that have started in the last 30 days where the resource name matches (fully or partially) the text in the <Search Term><br>• 30 Day Roles - search the project for tasks that have started in the last 30 days where the role name matches (fully or partially) the text in the <Search Term><br>• 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<br>• 30 Day Task Summary (Chart) - create a chart within the currently-active diagram showing the tasks started during the last month |

# Test Management Panel

The 'Test Management' panel is used for creating and managing all aspects of testing. The Test Cases 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 |
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| Tests | Click on this icon to display a menu of types of Test that you can define for the current element, using the Test Cases window.<br>• All - display the Test Cases window listing tests of any class; you might select this option if you are developing |

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| | a test but not yet certain of what type it should be, or if you are creating a suite of tests of different types<br>• Inspection - display the Test Cases window set to work on Inspection tests<br>• Unit - display the Test Cases window set to work on Unit tests<br>• Integration - display the Test Cases window set to work on Integration tests<br>• System - display the Test Cases window set to work on System tests<br>• Acceptance - display the Test Cases window set to work on Acceptance tests<br>• Scenario - display the Test Cases window set to work on Scenario tests |
| Outcomes | 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.<br>• 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<br>• Tests on Recently Modified Elements - open the Find in Project view and |

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| | execute a pre-loaded search for tests that have defined for recently-modified elements (defaulting to modification within the last 7 days)<br>• 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<br>• 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<br>• 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<br>• 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<br>• Test Results weekly summary - generate, in the currently-open diagram, a horizontal, stacked Bar Chart showing the test status statistics for each week of the current year |

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| | • 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<br>• 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<br>• 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<br>• 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. |
| 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 |

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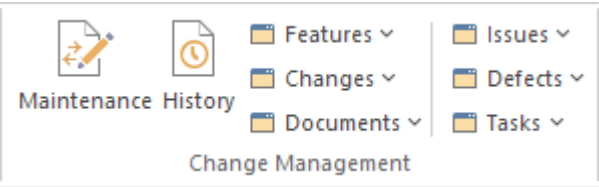
| | days. |

# Change Management Panel

The 'Change Management' panel is used for describing important model management items that apply to an element. Enterprise Architect is a 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 and have defects. 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 |
|---|---|
| Maintenance | Click on this icon to display the Maintenance Overview tab of the Maintenance window, listing all the current Maintenance items on the selected element. |
| Features | Click on the drop-down arrow to display |

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| | a menu of options for performing searches manage and visualize records of features against elements in the model.<br>• Show Features Window - display the Features window, which you use to record and manage specific features of the selected element<br>• New Features - open the Find in Project view and execute a pre-loaded search for elements that have new Feature items<br>• Last Week - open the Find in Project view and execute a pre-loaded search for elements having Feature items that have been recorded within the last 7 days<br>• Last Month - open the Find in Project view and execute a pre-loaded search for elements having Feature items that have been recorded within the last 30 days<br>• Last 90 days - open the Find in Project view and execute a pre-loaded search for elements having Feature items that have been recorded within the last 90 days<br>• Recently Completed Features - open the Find in Project view and execute a pre-loaded search for elements having |

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| | Change items that have been completed within the last 7 days<br>• Incomplete Features - open the Find in Project view and execute a pre-loaded search for Feature items that have not been completed |
| Changes | 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.<br>• Show Changes Window - display the Changes window, which you use to record and manage specific requests for changes to the selected element<br>• New Changes - open the Find in Project view and execute a pre-loaded search for elements that have new Change items<br>• Last Week - 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<br>• Last Month - open the Find in Project view and execute a pre-loaded search for elements having Change items that have been recorded within the last 30 |

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| | days<br>• Last 90 days - open the Find in Project view and execute a pre-loaded search for elements having Change items that have been recorded within the last 90 days<br>• Chart Requested Changes - create a chart in the currently-open diagram, showing recently-requested changes<br>• 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<br>• Chart Completed Changes - create a chart in the currently-open diagram, showing recently-completed changes<br>• Incomplete Changes - open the Find in Project view and execute a pre-loaded search for Change items that have not been completed |
| Documents | Click on the drop-down arrow to display a menu of options for performing searches to manage and visualize records of documents opened against elements in the model.<br>• Show Documents Window - display the Documents window, which you use |

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| | to record and manage specific documents of the selected element<br>• New Documents - open the Find in Project view and execute a pre-loaded search for elements that have new document items<br>• Last Week - open the Find in Project view and execute a pre-loaded search for elements having document items that have been recorded within the last 7 days<br>• Last Month - open the Find in Project view and execute a pre-loaded search for elements having document items that have been recorded within the last 30 days<br>• Last 90 days - open the Find in Project view and execute a pre-loaded search for elements having document items that have been recorded within the last 90 days<br>• Recently Requested Documents - open the Find in Project view and execute a pre-loaded search for elements having document items that have been requested within the last 7 days<br>• Recently Completed Documents - open the Find in Project view and execute a pre-loaded search for elements having |

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| | document items that have been completed within the last 7 days<br>• Incomplete Documents - open the Find in Project view and execute a pre-loaded search for Document items that have not been completed |
| Issues | 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.<br>• Show Issues Window - display the Issues window, which you use to record and manage specific reports of issues with the selected element<br>• New Issues - open the Find in Project view and execute a pre-loaded search for elements that have new Issue items<br>• Last Week - 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<br>• Last Month - open the Find in Project view and execute a pre-loaded search for elements having Issue items that have been recorded within the last 30 days |

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| | • Last 90 days - open the Find in Project view and execute a pre-loaded search for elements having Issue items that have been recorded within the last 90 days<br>• 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<br>• Chart Reported Issues - create a chart in the currently-open diagram, showing recently-reported Issue items<br>• 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<br>• Chart Resolved Issues - create a chart in the currently-open diagram, showing recently-resolved Issue items<br>• Unresolved Issues - open the Find in Project view and execute a pre-loaded search for Issue items that have not been resolved |
| Defects | Click on the drop-down arrow to display a menu of options for performing searches and generating charts to manage |

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| | and visualize records of defects raised against elements in the model.<br>• Show Defects Window - display the Defects window, which you use to record and manage specific reports of defects in the selected element<br>• New Defects - open the Find in Project view and execute a pre-loaded search for elements that have new Defect items<br>• Last Week - 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<br>• Last Month - open the Find in Project view and execute a pre-loaded search for elements having defect items that have been recorded within the last 30 days<br>• Last 90 days - open the Find in Project view and execute a pre-loaded search for elements having defect items that have been recorded within the last 90 days<br>• Recently Reported Defects - open the Find in Project view and execute a pre-loaded search for elements having Defect items that have been recorded |

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| | within the last 7 days<br>• Chart Reported Defects - create a chart in the currently-open diagram, showing recently-reported Defect items<br>• 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<br>• Chart Resolved Defects - create a chart in the currently-open diagram, showing recently-resolved Defect items<br>• Unresolved Defects - open the Find in Project view and execute a pre-loaded search for Defect items that have not been resolved |
| Tasks | 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.<br>• Show Tasks Window - display the Tasks window, which you use to record and manage specific reports of tasks opened against the selected element<br>• New Tasks - open the Find in Project view and execute a pre-loaded search |

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| | for elements that have new tasks<br>• Last Week - open the Find in Project view and execute a pre-loaded search for elements having task items that have been recorded within the last 7 days<br>• Last Month - open the Find in Project view and execute a pre-loaded search for elements having task items that have been recorded within the last 30 days<br>• Last 90 days - open the Find in Project view and execute a pre-loaded search for elements having task items that have been recorded within the last 90 days<br>• 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<br>• Chart Requested Tasks - create a chart in the currently-open diagram, showing recently-requested tasks<br>• 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 |

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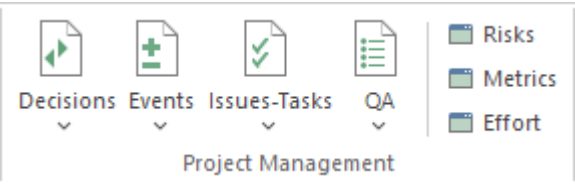
| | • Chart Completed Tasks - create a chart in the currently-open diagram, showing recently-completed tasks<br>• Incomplete Tasks - open the Find in Project view and execute a pre-loaded search for tasks that have not been completed |

# Project Management Panel

The 'Project Management' panel provides facilities for managing project-level items such as issues, events, tasks and decision, for defining project risks, effort and metrics, and for obtaining an overview of the project status, including Quality Assurance reports and project statistics.




## Available Facilities

| Facility | Description |
|---|---|
| Decisions | 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.<br>• Show Decisions Window - display the Decisions window, which you use to record and manage specific records of decisions associated with the selected element<br>• Verified Decisions - open the Find in Project view and execute a pre-loaded search for elements having decisions |

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| | with the status 'Verified'<br>• New Decisions - open the Find in Project view and execute a pre-loaded search for elements that have new decisions<br>• 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<br>• Chart Created Decisions - create a chart in the currently-open diagram, showing recently-created decisions<br>• 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)<br>• Chart Effective Decisions - create a chart in the currently-open diagram, showing recently-effective decisions<br>• 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 |
| Events | Click on the drop-down arrow to display a menu of options for performing |

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| | searches and generating charts to manage and visualize records of events reported against elements in the model.<br>• Show Events Window - display the Events window, which you use to record and manage specific reports of events lodged against the selected element<br>• 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<br>• 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<br>• Chart Reported Events - create a chart in the currently-open diagram, showing recently-reported events<br>• 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<br>• Chart Completed Events - create a chart in the currently-open diagram, showing events that were recently marked as complete |

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| | • Open Events - open the Find in Project view and execute a pre-loaded search for events that are currently open |
| Issues-Tasks | Click on the drop-down arrow to display two menu options:<br>• Project Tasks - select this option to display the Project Tasks window, which provides a convenient 'To Do' list of major project work items that are not recorded elsewhere; it can be used to track events such as requests or corrections<br>• Project Issues - select this option to display the Project Issues window, on which you can record any identified issues against the current project |
| QA | Click on this icon to display two options:<br>• QA Reports<br>• Statistics<br><br>Select the first option '**QA Reports**' to display the QA Reports view, which has separate tabs that enable you to run and display these system-provided status reports:<br>• Testing Details |

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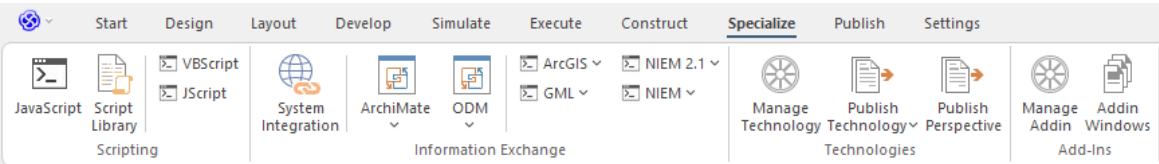
| | • Maintenance Details<br>• Dependency Details<br>• Implementation Details<br>• Use Case Metrics<br>Select the second option '**Statistics**' to display the 'Project Statistics' sheet, which lists the numbers of Packages, diagrams, elements, connectors, elements of each type and element features of each type in the project. 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. |
| Risks | 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. |
| Metrics | Click on this icon to display the Metrics window, on which you create and maintain records of metrics that have an influence on the work on an element. |
| Effort | Click on this icon to open the Effort window, on which you can create and maintain Effort records for the currently-selected element. |

# 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. 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 |
|---|---|
| Scripting | This panel provides access to the model Scripting window, which provides the |

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| | means to manage, create and edit automation scripts to work with your model. It also provides icons that will open scripting consoles for each of the supported scripting languages. |
| Information Exchange | This panel provides access to external data sources through the Cloud Server. Click on the 'System Integration' icon to display the 'External Data' window to access external data sources through the Cloud Server.<br>It also provides an icon for each enabled MDG Technology available in your installation of Enterprise Architect. Each Technology icon displays a drop-down list of options for working with the Technology. |
| Technologies | This panel provides the icons for managing and publishing MDG Technologies in Enterprise Architect<br>Click on the 'Manage Technology' 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.<br>Click on the 'Publish Technology' icon to |

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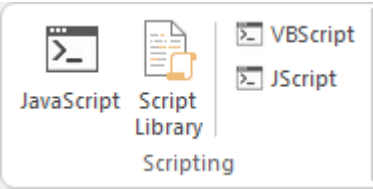
| | access options for working with MDG Technologies in general.<br>Click on 'Publish Perspective' to publish a Model Perspective. |
| Add-Ins | This panel provides two icons for enabling and configuring Add-Ins:<br>• Manage Addin - display the 'Manage Add-Ins' dialog, which you use to enable or disable 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<br>• Addin Windows - display the Add-In window containing any window that has been defined to display in this space, for the currently active Add-In<br>If your system includes unassigned Add-Ins, an icon for each one is also included in this panel. |

# Scripting Panel

The 'Scripting' panel provides access to the model Scripting window, which provides the means to manage, create and edit automation scripts to work with your model. It also provides icons that will open scripting consoles for each of the supported scripting languages.




## Available Facilities

| Facility | Description |
|---|---|
| JavaScript | Click on this icon to display the JavaScript console, a command line interpreter that accepts single line JavaScript commands that will be executed one at a time. |
| Script Library | 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. |
| VBScript | Click on this icon to display the VBScript console, a command line interpreter that |

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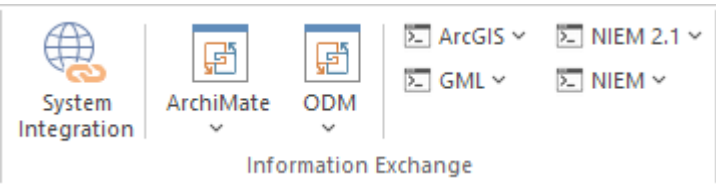
| | accepts single line VBScript commands that will be executed one at a time. |
| JScript | Click on this icon to display the JScript console, a command line interpreter that accepts single line JScript commands that will be executed one at a time. |

# Information Exchange Panel

The 'Information Exchange' panel provides an icon for displaying the 'External Data' window, through which you gain access to external data sources via the Cloud Server.

It also provides 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

Not all of these Technologies will be shown, and others

might be available in the panel.

| Facility | Description |
|---|---|
| System Integration | This icon opens the External Data facility for defining how the data from external sources is represented in Enterprise Architect.<br>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. Subsequently, you can check the pairings of data items from separate external tools, using the 'Show All Linked Items' menu option. |
| ArchiMate | Provides access to the facilities of ArchiMate 3, 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 |

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| | Object Management Group's Ontology Definition Metamodel (ODM) for Enterprise Architect, with ontology modeling capabilities that enable you to develop large-scale ontologies within the fully-integrated modeling environment, for your project domain. |
| ArcGIS | Provides access to facilities that help you create ArcGIS models; the ArcGIS system supports the development and management of geodatabases. |
| GML | Provides access to the facilities of Enterprise Architect's integration with the Open Geospatial Consortium's Geography Markup Language (GML) 3.3 application schemas, providing an XML grammar for geographical feature modeling capabilities. |
| NIEM 2.1 | Provides access to the facilities of the National Information Exchange Model (NIEM) release 2.1 in Enterprise Architect, which provides a common framework that is used to define how information can be shared between systems, government agencies and organizations. |

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| NIEM | Provides access to the facilities of National Information Exchange Model (NIEM), releases greater than 2.1, in Enterprise Architect. |
| Eclipse | 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.<br>• View Project Connections - display the 'Eclipse Connections' dialog, to review the connections between Enterprise Architect Packages and Eclipse Projects<br>• Options - display the 'Options' dialog on which you set up the Eclipse installation path for Enterprise Architect to use to access Eclipse<br>• Help - open the integrated Help for the MDG Link for Eclipse<br>• About - display a panel of information on your installation of the MDG Link for Eclipse |

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| Visual Studio | 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.<br>• View Project Connections - display the 'Visual Studio Connections' dialog, to review the connections between Enterprise Architect Packages and Visual Studio Projects<br>• 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)<br>• Import Build Scripts - import build scripts into Enterprise Architect from Visual Studio<br>• Export Linked Package List - export a linked-Package list from Enterprise Architect into Visual Studio<br>• Import Linked Package List - import a linked-Package list into Enterprise |

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| | Architect from Visual Studio<br>• Help - open the integrated Help for the MDG Link for Visual Studio<br>• About - display a panel of information on your installation of the MDG Link for Visual Studio |

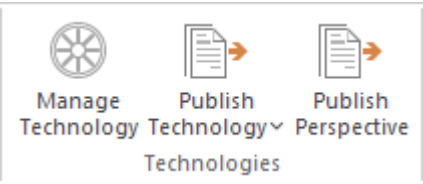
# Technologies Panel

The 'Technologies' panel provides the icons for managing and publishing MDG Technologies in Enterprise Architect

Click on the 'Manage Technology' 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.

Click on the 'Publish Technology' icon to access options for working with MDG Technologies in general.

Click on the 'Publish Perspective' icon to publish a Model Perspective.




## Available Facilities

| Facility | Description |
|---|---|
| Manage Technology | Click on the 'Manage Technology' 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 Technology' icon to |

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| Technology | access these options for working with MDG Technologies in general:<br>• Publish Diagram as Pattern - create a Pattern file from the currently-open diagram, using the 'Save Diagram as Pattern' dialog<br>• Publish Diagram as UML Profile - create and export a Profile file based on the currently-open diagram, using the 'Save UML Profile' dialog<br>• Publish Package as UML Profile - create and export a Profile file based on the current Package, using the 'Save UML Profile' dialog<br>• 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<br>• 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<br>• Import Package as UML Profile - generate a UML Profile from the selected <<profile>>package and import it into the current model as an |

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| | MDG Technology<br>• Import Package as MDG Technology - generate an MDG Technology from the selected <<mdg technology>> package and any <<profile>>, <<toolbox profile>> and <<diagram profile>> packages that it owns, and import it into the current model<br>• Save Package as MDG Technology - generate an MDG Technology from the selected <<mdg technology>> package and any <<profile>>, <<toolbox profile>> and <<diagram profile>> packages that it owns and save it as an XML file; the 'Save as' dialog displays |
| Publish Perspective | Click on the 'Publish Perspective' icon to open the Perspective Sets dialog. |

# Add-Ins Panel

The 'Add-Ins' 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 Addin | 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. |
| Addin 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' |

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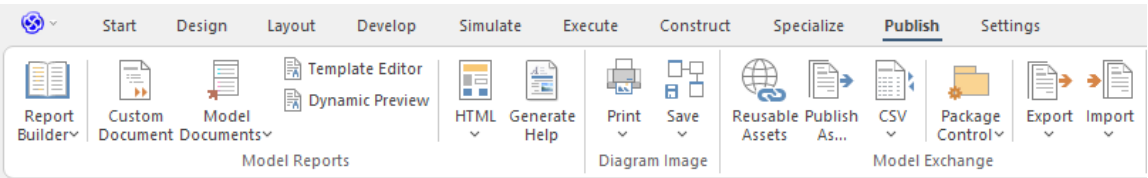
| | ribbon panel. |

# 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 |
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| Model Reports | The 'Model Reports' panel groups together a set of tools used to extract information from the model in a variety of useful formats, including customized documents and templates, Model Documents, docx, pdf and HTML. |
| Diagram Image | The 'Diagram Image' 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. |
| 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 XMI, 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.<br>The panel also provides options that 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 |

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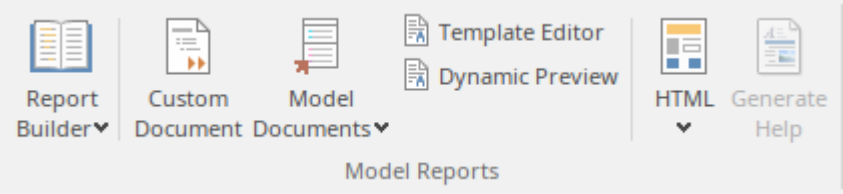
| | technologies and convert them for use in Enterprise Architect. |

# Model Reports Panel

The 'Model Reports' 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 |
|---|---|
| Report Builder | Click on this icon to access a short menu of documentation options:<br>• Generate Documentation - generate a document from the content of the model; generate rtf, pdf or docx format, from built-in or customized templates<br>• Generate Documentation from Selected Objects - generate a document from a selection of objects (Ctrl+click on each) in the Browser window or in a diagram<br>• Simple Diagram Report - generate a 'Diagram Only' report to capture images of all diagrams in the current Package - the 'Generate |

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| | Documentation' dialog displays, defaulted to a Diagram Report template; specify the 'Output to File' path, including the file extension to set the file format<br>• Open a Document File - open an existing document file in RTF or DOCX format, for manual editing<br>• Create a New Document File - create a new document for manual editing and export it in RTF or DOCX format |
| Custom Document | Click on this icon to start to generate a custom linked document, which can contain any of a range of document objects from the model, each formatted with their own document templates. |
| Model Documents | Click on this icon to access a short menu of Model Document options:<br>• New - create a new Model Document element using the 'New Element' dialog; the 'Toolset' and 'Type' fields default to the values for creating a Model Document element<br>• New from Pattern - create the Model Document from a base pattern, using the Model Builder dialog; the Document Publishing perspective is |

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| | displayed, and you can select the appropriate pattern from the list<br>• Find Model Documents - run a search in the Find in Project view, to locate all Model Documents existing in the model; you can use the context menu options to operate on one or more elements, including generating a documentation report<br>• Find Document Packages - run a search in the Find in Project view, to locate all Packages with the stereotypes 'Master Document' or 'Report Package', which are designed to contain Model Document elements; again, you can select context menu options to generate documentation from the contents of one or more Packages<br>• Help - select this option to display the *Model Documents* Help topic |
| Template Editor | Click on this icon to manage, create and modify the templates used in generating documents in RTF, PDF or DOCX format. |
| Dynamic Preview | Click on this icon to display the Dynamic Preview window, which displays a document instantly generated from the |

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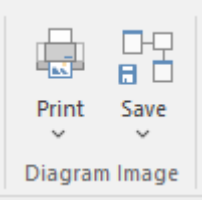
| | current element. |
| HTML | Click on this icon to select from two options for publishing documents on the web:<br>• Standard HTML Report - publish a document to an internal or internet website as static web pages, in standard HTML<br>• Publish to Joomla! - generate an HTML document to a Joomla! database, for internet distribution |
| Generate Help | Click on this icon to display the *Generate Help* dialog. From the *Generate Help* dialog, you can specify generation templates, output folders and other options for generating HTML pages, suitable for use on a web site.<br>This icon is enabled when a package with the stereotype <<HelpPackage>> or a class with the stereotype <<HelpTopic>> is selected in the Browser window. |

# Diagram Image Panel

The 'Diagram Image' 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 | Click on this icon to display a short menu of options for printing the diagram:<br>• Print - print the diagram directly on the default printer<br>• Preview - display an image of how the diagram will appear if it is printed<br>• 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<br>• Print to PDF - print the diagram to a PDF file instead of to a printer - a browser displays to select the PDF file |

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| | 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 |
| Save | Click on this icon to save an image of the current diagram. A small menu displays from which you can select to:<br>• Save to File - a browser displays in which you select where to save the file, and the format in which to save the file<br>• Save to Clipboard - the image is immediately saved to the Enterprise Architect clipboard<br>• Scale Image - a list displays of percentage scale options from 100% to 400%, to apply to the diagram images saved to file *in bitmap format*, with a tick beside the current setting (likely to be the default of 137%); 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 Images saved in any format other than bitmap are not scaled<br>On the 'Diagram' page of the 'Preferences' dialog, selecting the |

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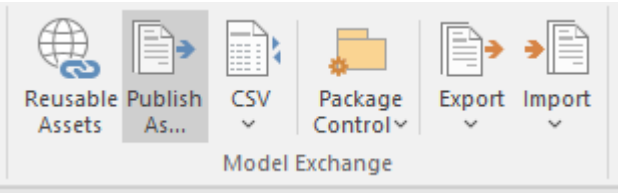
| | 'Apply scale to clipboard' checkbox also applies the selected scale to bitmap images saved to the clipboard |

# 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, 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 (RAS) view in the central work area. The RAS 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 Pro Cloud Server connection, making it accessible for distributed teams. |
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| 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, Enterprise Architect's Native XML, 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 | 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.<br>• Package Control - configure Package Control using the 'Package Control Options' dialog<br>• Save to File - save the Package to its configured XMI file (from the 'Package Control' option), using the 'Export to Native/XMI File' dialog<br>• Load from File - replace the Package |

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| | from its saved XMI file, using the 'Import Package from Native/XM File' dialog<br>• View XMI File for Controlled Package - review the content of the (exported) XMI file for the Package, in the Code Editor<br>• 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) |
| Export | Click on this icon to display options for exporting the current Package to a Native File or XMI file for use in other models and/or different modeling tools.<br>• Native Format (or XMI Format) - export the Package to a file in one of several Native or XMI formats, using the 'Export to Native/XMI File' dialog<br>• (Batch) Export Controlled Packages - export a number of controlled Packages to Native/XMI format in a batch process, using the 'Batch Export Controlled Packages' dialog<br>A range of other output formats is supported, and you can further tailor the output by including or excluding diagram |

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| | 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.<br>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. |
| Import | Click on this icon to display options for importing a Native/XMI file to update one or more Packages in the model.<br>• Native File, or XMI File - import a Package from a file in one of several Native/XMI formats, using the 'Import Package from Native/XMI File' dialog<br>• Merge Model XML into Current Package - import an XML file for the Package and merge the content of the file with the Package; you might do this with a sequence of XML files for the Package, such as when a number of people are working on the same |

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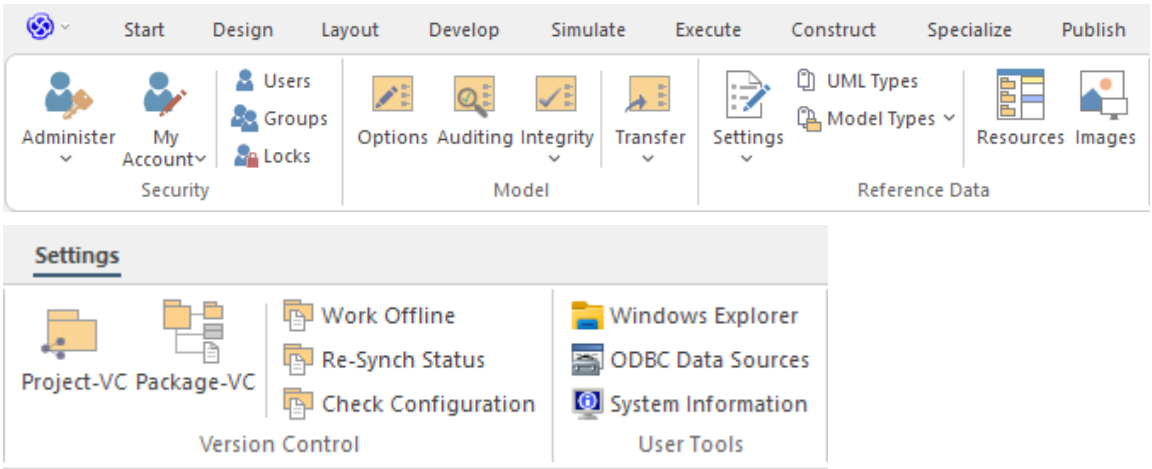
| | Package offline and storing their work in separate XML files<br>• Batch Import Controlled Packages - import model Packages from an import set for controlled Packages, using the 'Batch Import Controlled Packages' dialog<br>The menu provides options for importing XMI/XML from a variety of other formats. ArcGIS, EMX/UML2, Rhapsody, OWL/RDF, BPMN 2.0, DMN 1.1 and MDZIP are specifically supported, but a range of other tools' XML output can be imported into Enterprise Architect using the 'Other Tools/Formats' menu option. |

# Settings Ribbon

The 'Settings' ribbon is used for managing the way a repository is used, from setting up reference data, security and Version Control to audits and integrity checks. Enterprise Architect is a 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. |
| Model | The 'Model' panel provides facilities to configure options for the current model, |

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| | 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. |
| Version Control | The 'Version Control' panel is used for working with the Version Control facility in the tool, allowing you to manage |

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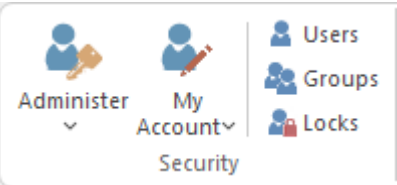
| | changes and versions of model content for individual Packages or the entire model. Version Control Configurations can be defined using the 'Project-VC' or 'Package-VC' options, and checked for all versioned Packages using the 'Check Configuration' option. There is a range of options to view the history 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. |
| 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. |

# 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 | Click on the drop-down arrow to display a selection of commands for configuring security in the model.<br>• Apply Locks to Connectors - extends all locks on source elements to the connectors owned by those elements, so that those connectors cannot be deleted and their properties cannot be |

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| | edited; new connectors cannot be created on those elements<br>• Require User Lock to Edit - enables '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<br>• Group Workflow - select to set up the workflow from one status to another, for each security group<br>• Enable Security - toggles (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<br>• Show User Avatars - displays (or, if unselected, hides) all user avatars in Chat and Discussion entries, in your work sessions |
| My Account | Click on the drop-down arrow to display a selection of commands for configuring security on your user ID.<br>• Manage My Locks - displays a dialog that lists all locks you have applied under your user ID; you can review and release locks using this dialog<br>• Remember Me - when set, this stores |

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| | your credentials and applies them automatically each time you log in<br>• Change Password - displays the 'Change Password' dialog in which you can change the password for your own, currently logged in, user ID<br>• Set Avatar - assigns an avatar image (from a selected Image Asset Artifact) to your user ID<br>• Hide OpenID login window - displays (unselected) or hides (selected) the 'OpenID Authentication' dialog; also resets the 'Don't show this window again' checkbox on the 'OpenID Authentication' dialog<br>• Login as Another User - displays the login dialog to enable you to log in to the Enterprise Architect project as another user<br>(Some of these options are also available from the <user name> drop-down in the top right corner of the Enterprise Architect screen.) |
| 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 |

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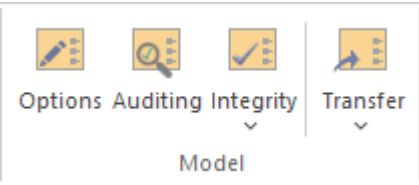
| | provides for import of user definitions from Windows Active Directory lists. |
| Groups | This command displays the 'Security Groups' dialog, where new User Groups can be created and users can be added to those groups. Permissions can be granted to User Groups using this dialog. |
| Locks | This 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. |

# 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 Model Options' dialog, through which you configure options for the current model, including required and restricted MDG Technologies, code generation and general options. |
| Auditing | Opens the Audit View to configure and view audit management information for the current model. |
| Integrity | Occurrences such as network crashes or failed XMI imports can sometimes |

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| | compromise the integrity of information in the model database. Clicking on the 'Integrity' drop-down arrow displays a list of commands for addressing these kinds of issue and for general database maintenance.<br>• Project Integrity - displays the 'Project Integrity Check' dialog; used for examining database records to check for 'orphaned' records or inaccurate or unset identifiers<br>• Project Compare - displays the 'Project Compare' dialog, with which you can compare one model database against another, at a table record level<br>• Manage .QEA/.QEAX File - clicking on this item displays a pop-up menu with these options:<br>- Compact .QEA/.QEAX File - removes deleted records from the database tables<br>- Compact .QEA/.QEAX File to new file - removes deleted records from the database tables and stores the compacted model to a new file<br>• Manage .EAPX/.EAP File - clicking on this item displays a pop-up menu with these options:<br>- Repair .EAPX/.EAP File - use this |

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| | option to repair a .EAPX or .EAP file that has become damaged due to system or network outages<br>- Compact .EAPX/.EAP File - removes deleted records from the database tables<br>- Update .EAPX/.EAP File Indexes - updates the selected .EAPX or .EAP file to the latest set of indexes (schema 1558)<br>• Manage Firebird<br>- Update Index Statistics - optimize indexes on Firebird databases<br>• 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 |
| Transfer | Clicking on the drop-down arrow displays a menu of facilities for copying or sharing project data between one project and another.<br>• Full Project Transfer via Connection - display the 'Project Transfer' dialog; use this dialog to copy the tables and records of one project database to another<br>• Full Project Transfer via Native XML - |

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| | export or import a complete project in the native XML format<br>• Migrate EAP/EAPX Project to QEA - migrate a complete project from an EAP or EAPX file to another repository<br>• Copy QEA Project to Firebird (FEAP) - copy the project data from a .qea file (in Enterprise Architect release 16.0 upwards) to a legacy .FEAP file (for use in Release 15.2 or earlier)<br>• Perform project file replication work on either a .eap project file or a .qea project file:<br>- Make Design Master - prepare a .EAPX/.EAP file or a .QEA file for the creation of database replicas<br>- Create New Replica - create database replicas from the Design Master file<br>- Synchronize Replicas - merge the changes made to each replica with the Design Master<br>- Remove Replication - remove from the database the additional information that is required for managing database replication<br>- Resolve Replication Conflicts - where two users have made conflicting |

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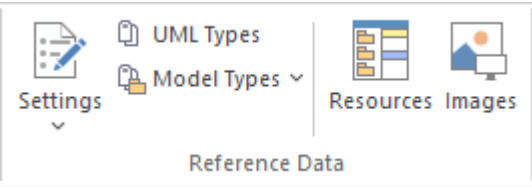
| | changes to the model database, manually decide which change will override the other (not for QEA Replication)<br>• Shared Repository - set up a shared repository for basic reference data to be shared between multiple implementation models<br>• Export Reference Data - display the 'Export Reference Data' dialog; used to select specific types of Reference Data for export to an XML file<br>• Import Reference Data - display the 'Import Reference Data' dialog; used to import Reference Data from an XML file into the current model |

# 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 | Click on the drop down arrow to display a menu of options for setting a wide range of project-level parameters.<br>• Auto Names and Counters - set up and manage the use of automatic name generation<br>• Project Template Package - specify a Package that holds diagrams and elements that will be used as templates for all new elements |

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| | • Database Datatypes - manage the list of Datatypes that are used in Database Engineering<br>• Namespace Roots - manage a list of Namespace roots for the current model; used mainly for code generation<br>• Coding Datatypes - manage the list of Datatypes that are used in Code Engineering<br>• Preprocessor Macros - manage a list of preprocessor macros that will be used when C and C++ code is imported into the model<br>• Colors - provides options to define and manage a set of standard colors for use in the current project<br>- Get Project Custom Colors<br>- Set Project Custom Colors |
| UML Types | Displays the 'UML Types' dialog, from which you can manage basic model information, such as Stereotypes, Tagged Value types and Cardinality settings. |
| Model Types | Provides a range of facilities for managing various Types of reference data used in a project.<br>• People - manage the list of people associated with the model, including |

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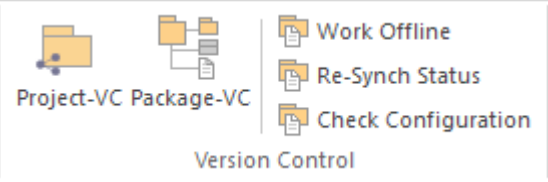
| | authors, resources, roles and clients<br>• General Types - manage project factors, such as Status types, Constraints, Difficulty and Priority<br>• Project Indicators - configure indicators such as Metric, Risk and Effort types<br>• Maintenance - define and manage Test types<br>• Estimation Factors - set up and manage a list of estimation factors used for Use Case Estimation |
| Resources | Click on this icon to display the 'Resources' tab of the Browser window, from which you can manage a variety of custom resources, model Patterns, templates and technologies. |
| Images | 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. |

# Version Control Panel

The 'Version Control' panel provides facilities for configuring and managing the Version Control facility in the tool. Version Control Configurations can be defined using the 'Project-VC' 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-VC | 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-VC | Configure a single Package for Version Control. Display the 'Package Control Options' dialog to specify the Version Control Configuration and the name of |

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| | 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'. |

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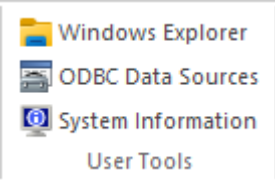
| Check Configuration | This command scans all Version Controlled Packages within a project, checking the validity of the Version Control settings for each Package. The validation process scans the model database and verifies that the Version Control Configuration associated with each Version Controlled 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. |

# 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'. |
| ODBC Data Sources | Launches the 'ODBC Data Source Administrator' dialog, from which you can set up ODBC drivers for various DBMSs, thereby enabling Enterprise Architect to connect to repositories hosted in the selected DBMS. |
| System | Displays System Information pertaining |

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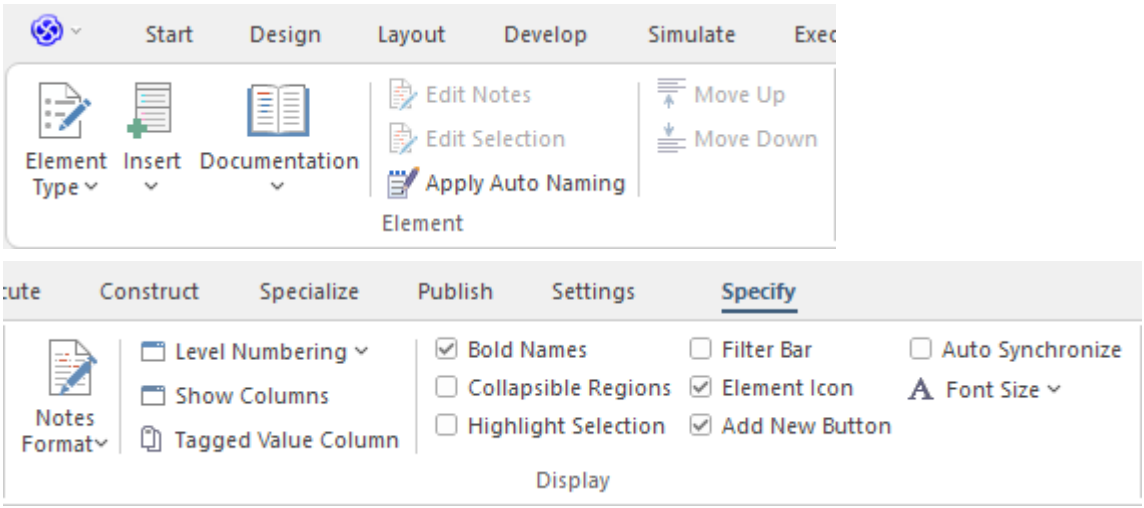
| Information | to your personal workstation. |

# 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 |

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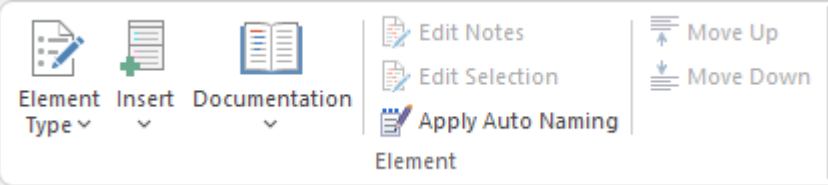
| | options that make it possible to tailor the appearance of the Specification Manager view, to better display the information you want to examine. There are options providing visual cues, such as highlighting the selected element and using bold fonts to emphasize element names, as well as options to 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 for generating documentation in a number of formats.




## Available Facilities

| Facility | Description |
|---|---|
| Element Type | 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):<br>• <Any> - 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<br>• Other - displays the full list of work sets from which you select a specific |

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| | element to add to the list in the <element types> section of the drop-down<br>• <element types> - 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<br>• Clear Recent Items - clears the <element types> list; a prompt displays to confirm the operation, as it can be a lengthy job to reconstruct the list of selected element types<br>Note that if you have a specific element type selected, that type is not cleared from the list; selecting the <Any> option allows you to clear the final element type from the list<br>• Use Last Created Type - sets the type of element created to the type of the last-created element<br>• Limit Display to Selected Type - filters the Specification Manager display to only show elements of the selected type |
| Insert | Click on the drop-down arrow to display a short menu of options for adding |

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| | elements:<br>• Add Default - add a new element of the default element type, which is the currently-selected type of those set using the 'Element Type > Other' option<br>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<br>• 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<br>• Repeat Previous - repeat the previous element insertion action, creating a new element of the same type, as a sibling to the previously inserted element<br>• 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 Toobox to create elements in the Specification Manager, |

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| | switching to other Toolbox pages if necessary<br>• Add Other - display the 'New Element' dialog, prompting you to choose an element type and create an element of that type<br>• Add Multiple Elements - display the 'Create Multiple Elements' dialog, through which you can add several elements to the Specification Manager in one operation |
| Documentation | 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.<br>• 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 |

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| | style sheets, and specify the file output path and file format<br>• 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<br>• 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<br>• 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 |

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| | • 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<br>• 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 |
| Edit Notes | 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. |
| Edit Selection | Click on this button to begin editing the current element's name. With the element |

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| | selected, the Enter key can be used as a keyboard shortcut to begin editing. |
| Apply Auto Naming | 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 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 Browser window. |
| Move Down | Click on this button to move the selected element down one place in the |

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| | Specification Manager list. The element's position is also reflected in the Browser window. |

# 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 | Click on the drop-down arrow, to a display a brief menu of commands for customizing the visibility and style of displayed element notes:<br>• Preview - show the Notes in Preview mode; this limits the Notes displayed to a maximum size and uses the Notes window for editing<br>• Full Notes Inlined - show the complete Notes text for each element underneath the element name; in this mode you can |

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| | create, edit and delete Notes text in the Specification Manager and perform the same operations as are available in the Notes window context menu<br>• 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'<br>• Document View - columns are hidden and Notes are displayed inline; use the Enter key as a keyboard shortcut to begin editing.<br>• Hide - show no Notes at all; to edit or view the Notes, open the Properties window or docked Notes window |
| Level Numbering | Clicking the drop-down arrow displays options for applying level numbering and indenting notes for elements contained within the current Package.<br>• Enable - toggle the display of automatically applied level numbering within the Specification Manager and the Browser window, for elements within the currently displayed Package<br>• Indent Description - if you have enabled level numbering, this option is available to indent the element |

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| | description under each element name, to align with the element name |
| Show Columns | 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. |
| Tagged Value Column | 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 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 | Use this option to turn on or off, the use of Bold element names in the Specification Manager view.<br>When on, all element names, including the names of child elements, are displayed using bold font. |
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| Collapsible Regions | Use this option to enable the use of Expansion boxes on parent elements.<br>If an element has child elements, you can configure the Specification Manager to either:<br>• 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<br>• Automatically display the child elements indented underneath the parent element (deselect the 'Collapsible Regions' option) |
| Highlight Selection | 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. |
| Filter Bar | Use this option to show or hide the Filter Bar, which allows filtering of the visible items in the Specification Manager view. |

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| | 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. |
| Element Icon | 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 Browser window. Deselect the checkbox to hide the element icons. |
| Add New Button | 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. |
| Auto Synchronize | Select this checkbox to automatically synchronize the Specification Manager display to the Package selected in the Browser Window. As you click on |

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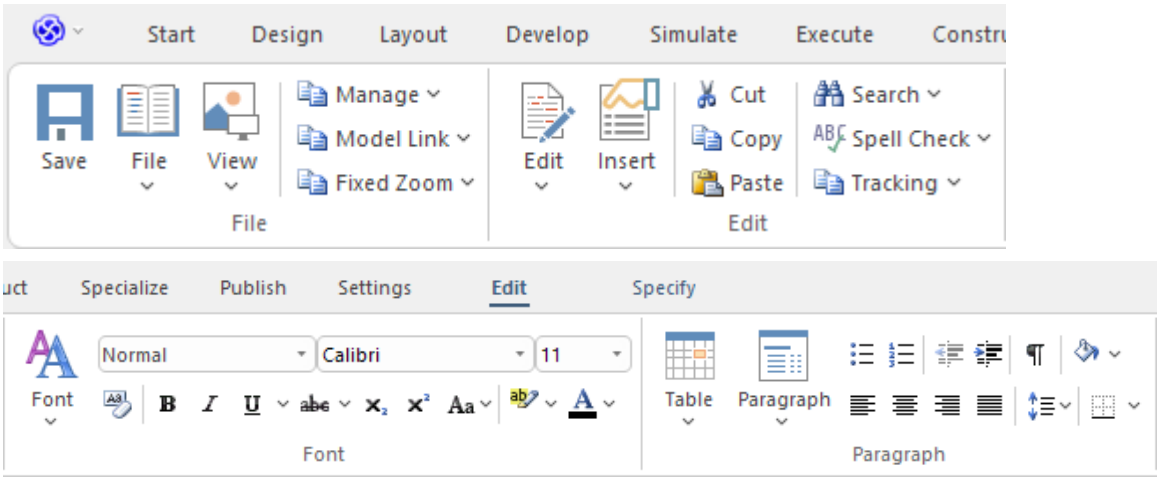
| | different Packages in the Browser window, the Specification Manager changes to display the content of the currently-selected Package.<br>If you do not select the checkbox and you move around the model structure the Package displayed remains as the one originally selected by clicking on the 'Design > Package > Specification View' option. |
| Font Size | 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.<br>Specify the default font size based on preference:<br>• Small<br>• Medium<br>• Large |

# 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 |

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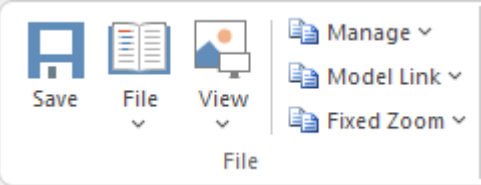
| | the content for specific text strings. It also provides facilities for tracking and managing document changes. |
| Font | The 'Font' panel helps you to completely control the Fonts in a document, including setting Bold, Italics and font types and size. The color of text and background can be altered 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 |
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| 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 | Click on the drop-down arrow and select from a number of options for manipulating the file contents as a whole.<br>• Import File - import the contents of an existing document into the current file<br>• Save As (Export to File) - save your document to a different document file<br>• New (Clear Document) - clear the current contents of the document for redesign |

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| | • Reload from Repository - reload the file contents from the previously-saved version<br>• Page Layout - display the 'Page Setup' dialog and set the page margins for the file<br>• 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<br>• Print - display the 'Print' dialog to define the print job for the document<br>• Print Preview - display the document as it would appear when printed |
| View | Click on the drop-down arrow to display options for displaying the document content on the screen.<br>• Page Mode - display a full-screen view of the content as pages with borders<br>• Page Mode - Borderless - display a full-screen view of the content with no borders<br>• Fitted Mode - fit the document to the display area<br>• Horizontal Ruler - display or hide the ruler at the top of the page, showing tab |

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| | stops and paragraph indentation marks<br>• 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<br>• 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<br>• Hidden Text - show text marked as 'Hidden' using the 'Font \| Hidden Text' option<br>• Field Names - toggle between displaying field names in the text and displaying the field values<br>• Hyperlink Cursor - toggle the cursor icon when you 'mouse over' a hyperlink, between the default image (a line or arrow) and a pointing hand<br>• Page Header/Footer - display or hide the text of page headers and footers |
| Manage | 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 |

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| | and then protect either the whole document or a selected block of text.<br>• 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<br>• Text Selection Lock - remove the lock against setting protection on the text of the document<br>• 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<br>• Watermark Picture - display an image file browser and select an image to use as a watermark in the document<br>• Remove Unused Lists - clear unused list formats from the file when you save it, to reduce file size |
| Model Link | 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.<br>• Glossary Definition - display the 'Glossary Detail' dialog, to create a Project Glossary entry for the |

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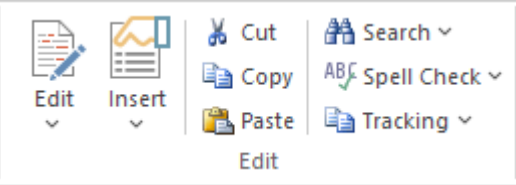
| | highlighted text string<br>• New Model Element - display a short list of types of object to create (or select the 'Other' option to access a wider range of object types) to generate an object of that type from the highlighted text string, in the current Package; the object is linked to the highlighted text in the document<br>• 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<br>• 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 |
| Fixed Zoom | Click on this icon to display a list of page magnification options between 75% and 400%, and an option to set a custom magnification of the page anywhere between 10% and 500%. |

# 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

| Facility | Description |
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| Edit | 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.<br>• Cut - remove a highlighted text string and hold it in the clipboard<br>• Copy - copy a highlighted text string and hold it in the clipboard<br>• Paste - paste a text string from the clipboard into the document at the cursor position<br>• Paste Special - paste a specially-formatted object from the |

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| | clipboard into the document, such as formatted text or an OLE object<br>• Edit Picture - open the appropriate graphics editor for the selected image, to edit the image<br>• Undo - roll back the last unsaved change made; you can undo a succession of unsaved changes<br>• Redo - re-establish the last unsaved change that has been undone; you can redo a succession of undone changes<br>• Select All - highlight the text of the whole document for performing an operation on it<br>• Repaginate - repaginate the document, and update the 'Page Number' and 'Page Count' fields and the Table of Contents<br>• Edit Section - display the 'Section Parameters' dialog, on which you set up the document properties to apply to the text between two section breaks<br>• Edit Style - display the 'Edit Stylesheet' dialog, through which you create and edit styles to apply to either paragraphs of text or characters<br>• Edit Input Field - display the 'Input Field Parameters' dialog, through |

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| | which you create or edit a field at the cursor position in the document, for the document users to enter data in<br>• 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<br>• List and Overrides - display a list of options for setting up paragraph numbering list items, overrides and levels<br>• Page Header/Footer - display a hierarchy of menus for creating, editing and deleting the page headers and footers of the document<br>• Edit Footnote/Endnote - select to add or edit either an end-note or the footnotes of the current page<br>• Edit OLE Object - open the appropriate editor to edit the embedded OLE object<br>• 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) |

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| | • 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 |
| Insert | 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.<br>• Insert Break - display a short menu from which you select to insert a page break, section break or column break<br>• Embed Picture - insert an image file as a picture in the document<br>• Link Picture - insert a link to an image file in the document<br>• OLE Object - display the 'Insert Object' dialog, from which you can select the appropriate application to create the OLE object in the document<br>• Insert RTF File - insert the complete contents of another document file<br>• Frame - inserts a small frame at the cursor position, which you can then drag to the appropriate size<br>• Drawing Object - display the 'Select |

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| | Drawing Object' dialog and select to insert a text box, rectangle or line, which you can then drag to the appropriate size<br>• Page Number - insert a page number field at the cursor position<br>• Page Count - insert a page count field at the cursor position<br>• 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<br>• 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<br>• Bookmark - display the 'Bookmark' dialog, which you can use to create, locate and delete bookmarks in your document<br>• 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 |

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| | Contents generates<br>• 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<br>• 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<br>• Checkbox Field -display the 'Checkbox Field Parameters' dialog, in which you define a checkbox that the document users can select or clear<br>• 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<br>• 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<br>• 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 |

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| | words linked by the space are kept together<br>• 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<br>• Optional Hyphen - insert a hyphen at the cursor position |
| 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 | Click on this icon to display a short menu of options for locating a text string in the document.<br>• Search - open the 'Search Text' dialog, to specify the text string to locate and the initial search parameters<br>• Search Forward - continue the search |

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| | forwards towards the end of the document, to the next occurrence of the defined text string<br>• Search Backward - continue the search back towards the start of the document, to the next occurrence of the defined text string<br>• Replace - open the 'Replace Text' dialog to search for a text string and replace it with another, in selected text or throughout the document<br>• Go to Line - display a short dialog in which you specify the number of a line in the document to 'jump' the cursor to |
| Spell Check | Click on this icon to display a set of simple options for checking the spelling in the document.<br>• Spell Check - start a spell check on the document, and respond to all apparent spelling errors<br>• 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<br>• Thesaurus - display the 'Thesaurus' dialog in which you can check for alternative or opposite terms for the |

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| | selected text string<br>• 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 |
| Tracking | Click on this icon to display a menu of options for enabling and using Change Tracking in the document. These options include:<br>• Enable Tracking - turn Change Tracking on and off<br>• Find Next Change - locate and highlight the next tracked change, moving towards the end of the document<br>• Find Previous Change - locate and highlight the previous tracked change, moving towards the start of the document<br>• Accept Change - update the document with the currently-selected change<br>• Accept All Changes - update the document with all changes<br>• Reject Change - remove the change from the document |

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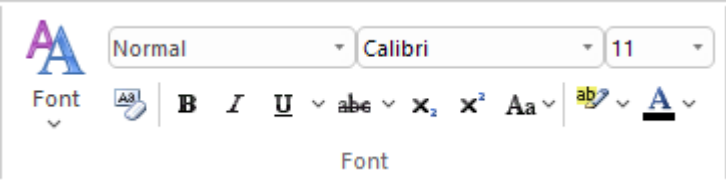
| | • Reject All Changes - remove all changes from the document<br>• Hide Changes - hides or reveals deleted text and the highlighting on added text in the document<br>• Apply Comment - helps you create a comment on the selected text, which displays in the outside page margin |

# 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.

| Facility | Description |
|---|---|
| Font | Click on this icon to display a list of options for changing the appearance of a selected string of characters. These options include:<br>• Normal - return changed text to the Normal, unformatted style<br>• Bold - display and print the selected text in bold<br>• Underline - underline the selected text with a single line<br>• Double Underline - underline the |

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| | selected text with a double line<br>• Italic - italicize the selected text<br>• Subscript - make the selected text a subscript on the immediately preceding text<br>• Superscript - make the selected text a superscript on the immediately preceding text<br>• Strike - run a single line through the selected text<br>• Double Strike - run a double line through the selected text<br>• All Caps - change all selected characters to upper case<br>• Small Caps - change all selected characters to small capitals<br>• Fonts - display the 'Font Selection' dialog, from which you select the typeface and point size to apply to the selected characters<br>• Style - display the 'Select a Style' dialog, from which you select a defined style to apply to the selected characters<br>• Text Highlight - display the 'Color' dialog from which you select and apply a background highlight color for the selected text string<br>• Spacing - display the 'Character |

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| | 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<br>• 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%<br>• Hidden - hide the selected text and close up the remaining text; you can reveal the hidden text using the 'View > Hidden Text' option on the 'File' panel<br>• Boxed - place a simple rectangular frame around the selected text<br>• Protect - prevent any changes to the selected text; available if the 'Manage > Protection Lock' option is deselected on the 'File' panel<br>• Hyperlink - make the selected text into a hyperlink |
| <style> field | Click on the drop-down arrow and click on the text style to apply to the selected text. |
| <typeface> field | Click on the drop-down arrow and click on the name of the typeface to apply to |

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| | 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:<br>• Double Underline - underline the selected text with two lines, or to remove the double underline<br>• Underline Color - display a color palette from which you can select a color for the *existing* underlines, or define a color not presented in the |

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| | palette |
| 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 text. |
| Character Case | Click on the drop-down arrow and select an option for changing the case of the selected text:<br>• lowercase - convert all characters of the selected text to lower case<br>• UPPER CASE - convert all characters of the selected text to upper case |
| 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 |

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| | 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 to help make the text look attractive and comfortable to read. Formatting options include left, right and center alignment and justification, text indentation, bullets and numbered lists, line spacing, document styles and defining table borders.

## 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.

| Facility | Description |
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| Table | 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.<br>• Insert Table - display the 'New Table' dialog and specify how many rows and |

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| | columns to create; the table defaults to showing the gridlines<br>• Insert Row - add a row above the current row, with the same row properties<br>• Insert Column - add a column to the left of the current column, with the same column properties<br>• Merge Cells - merge the selected cells into one cell, across or down the table, or both<br>• Split Cell Horizontally - split the selected cell into two columns within the row<br>• Split Cell Vertically - split the selected cell into two rows within the column<br>• 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<br>• 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 |

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| | • 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<br>• 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<br>• Keep Row Together - set the selected rows to stay together if the table would be split by an automatic page break at those rows<br>• 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<br>• Cell Width - display the 'Set Cell Width' dialog, on which you specify |

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| | the width of the selected cells and the indent of text within the cells, in Twips<br>• 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<br>• 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<br>• 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)<br>• 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<br>• 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 |

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| | baseline of the lowest top line of text (if you have applied special formatting to a cell within the selection)<br>• 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<br>• Select Current Column - select the whole column containing the currently-active cell<br>• 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 |
| Paragraph | Click on this icon to display a list of facilities for formatting the selected paragraphs of text in your document. |

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| | • Normal - align the text so that new lines begin parallel with the left margin of the page and flow to the right<br>• 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<br>• Right Justify - align the text so that new lines begin parallel with the right margin of the page and flow to the left<br>• Justify Both - align the text so that lines begin and end parallel with the left and right margins respectively<br>• Double Space - separate the lines within the selected paragraph with double line spacing<br>• Indent Left - indent the selected paragraph one tab space in from the left margin; each selection indents the text one more tab space<br>• Indent Right - indent the selected paragraph one tab space in from the right margin; each selection indents the text one more tab space<br>• Hanging Indent - indent the paragraph except for the first line one tab space<br>• Keep Together - if there is a possibility that the selected text will be split by a |

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| | page break, set the text to be moved to the top of the next page as a single unit<br>• 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<br>• 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<br>• Page Break Before - set the selected paragraph to print at the top of a new page<br>• 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 |

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| | • 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<br>• 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<br>• Bullet - convert the selected lines of text to a bullet list, or to convert a bulleted list to unbulleted paragraphs<br>• Numbering - convert the selected lines of text to a numbered list, or to convert a numbered list to un-numbered paragraphs<br>• Increase Level - increase the indent of the selected text and move it further in from the left margin<br>• Decrease Level - if the selected text is indented from the left margin, reduce |

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| | the indent and draw the text closer to the margin<br>• 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<br>• 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<br>• Clear Tab - display the 'Clear a Tab Position' dialog and select a single tab from the list to clear<br>• Clear All Tabs - clear all tab settings from the document<br>• Style - display the 'Select a Style' dialog, on which you select a pre-set style to apply to the selected text<br>• 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 |
| Bullets | Click on this icon to convert the selected lines of text to a bullet list, or to convert a |

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| | bulleted list to unbulleted paragraphs. |
| Numbers | 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. |
| Decrease Indent | 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. |
| Increase Indent | Click on this icon to increase the indent of the selected text and move it further in from the left margin. |
| Show Paragraph Markers | Click on this icon to toggle the display of paragraph markers (¶) throughout the document. |
| Fill | 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 'Default 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. |

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| Left Alignment | Click on this icon to align the left ends of the selected lines of text with the left margin of the page. |
| Center Alignment | Click on this icon to align the centers of the selected lines of text with the vertical center of the page. |
| Right Alignment | Click on this icon to align the right ends of the selected lines of text with the right margin of the page. |
| Left and Right Alignment | Click on this icon to align the ends of the selected lines of text with the left and right margins of the page. |
| Line Spacing | Click on this icon to display a list of conventional line spacings, and options to customize line spacing and paragraph spacing.<br>• 1.0 )<br>• 1.5 ) set the line spacing in the highlighted text to the selected value<br>• 2.0 )<br>• 3.0 )<br>• Line Spacing Options - display the 'Paragraph Spacing' dialog, on which |

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| | 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 |
| Borders and Shading | 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.<br>• Bottom Border - convert the gridline to a black border along the bottom of the selected cell(s)<br>• Top Border - convert the gridline to a black border along the top of the selected cell(s)<br>• Left Border - convert the gridline to a black border along the left edge of the selected cell(s)<br>• Right Border - convert the gridline to a black border along the right edge of the selected cell(s)<br>• No Border - remove any borders around and between the selected cells |

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| | • All Borders - convert the gridline to a black border around the selected cell(s) and - for multiple cells - between the selected cells<br>• Outside Borders - convert the gridline to a black border around but not between the selected cells<br>• Inside Borders - convert the gridline to a black border between but not around the selected cells<br>• 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 defaults to showing the gridlines<br>• 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<br>• 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 |

# 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 expanded in the ribbon bar by default. You can also set a different ribbon to be the default expanded on opening the system.

If you have user security enabled on a model or project, as an administrator you can also define sets of ribbons to be shown or hidden for other users in each of the security user groups. See the *Perspectives for Security Groups* Help topic.

## Access

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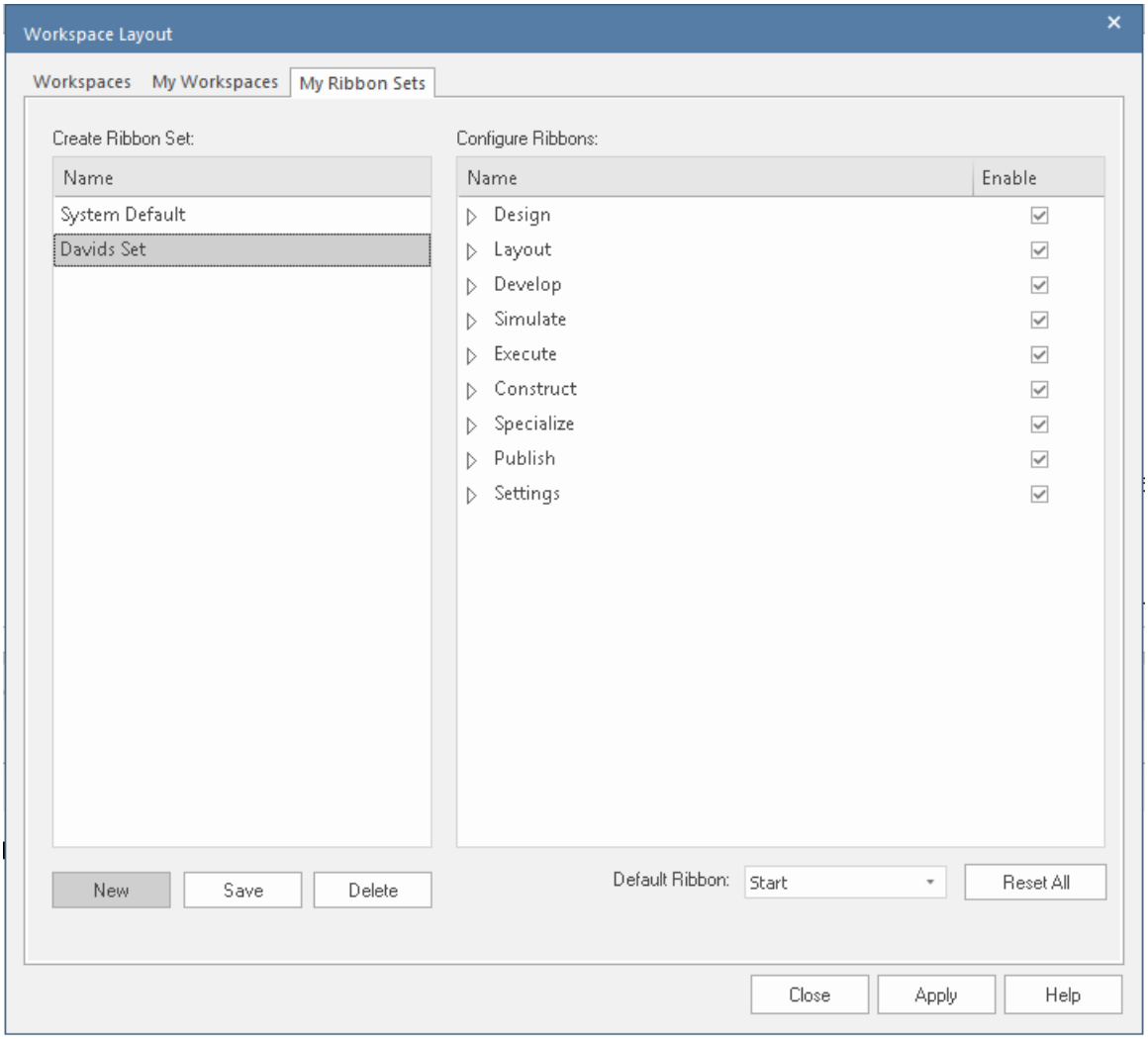
| Ribbon | Start > All Windows > Workspace > Workspace Tools > My Ribbon Sets |

## Create a Ribbon Set




| Step | Action |
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| 1 | On the 'My Ribbon Sets' tab of the Workspace Layout window, 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.<br>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. |

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| 3 | To hide a complete ribbon, clear the 'Enable' checkbox against the ribbon name.<br>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.<br>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.<br>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 All button. |
| 5 | If you want to change the default ribbon expanded 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.<br>If you have hidden a complete ribbon in the 'Configure Ribbons' panel, that ribbon is not |

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| | available for selection in the 'Default Ribbon' field.<br>The Reset All 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 Workspace Layout 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