

Enterprise Architect

User Guide Series

The Model Builder

How to create a model quickly? In Sparx Systems Enterprise Architect, the Model Wizard provides Patterns from a wide range of technologies, to help you quickly generate basic models, diagrams, processes, starter projects and execution analysis models.

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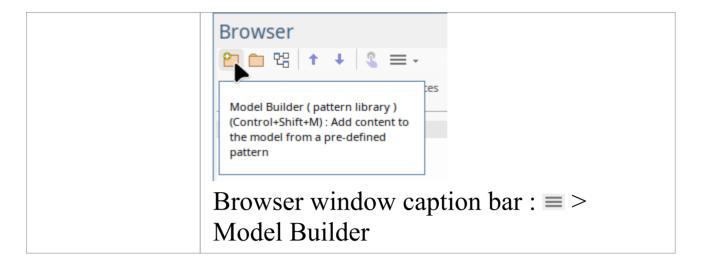
The Model Builder

The Model Builder provides Patterns from a wide range of technologies, which you can use to quickly generate new models in your project both when you first create the project and over time. From the Model Patterns you can create basic models that you can develop further as components of your project. You click on the \equiv menu icon at the top of the left-hand panel and select a Perspective Set from the drop-down list, which then shows a list of Pattern groups and the Patterns they contain. If you click on a Pattern, a description displays in the right-hand panel of the window, showing a type diagram (where appropriate) and an explanation of what the Pattern is and what it does. This description is drawn from an RTF file paired with the Pattern's source XML file.

arent: Model	ombine with Parent Create Model Help	
Sehavioral E Sequence Diagrams	Activity with Actions and Control Flows	
Interaction Overview Diagrams		
- Timing Diagrams	The Activity with Actions and Control Flows pattern creates elements and diagrams that describe the	
State Machine Diagrams	structure of an Activity and the parameters that it contains. An Activity diagram shows the sequence	
Activity Diagrams	Flows between Actions (invocations of the Activities) and Object Flows that connect Action Pins that	
Starter Activity Diagram	represent the Parameters of the owning Activity.	
Basic Activity Diagram with Decisions		
Basic Activity Diagram with Partitions		
Basic Activity Diagram with Fork and Join		
Basic Activity Diagram with Flow Final	1.0 Activity	
Basic Activity Diagram with Pins		
Basic Activity Diagram with Datastore	ActivityInitial	
Basic Activity Diagram with Central Buffer		
Basic Activity Diagram with Exception Hand	1.1 Action	
Basic Activity Diagram with Interruptible Re	p1: p1: p3: p3: p1: p3: p1: p3: p1: p1: p3: p3: p1: p3: p1: p3: p1: p1: p3: p1: p1: p3: p1: p3: p1: p1: p1: p1: p3: p1: p1: p1: p3: p1: p1: p1: p1: p1: p1: p1: p1: p1: p1	
Complete Activity Diagrams with Activities	Integer the Vateger Integer	
Executable State Machine Patterns		

Access

Ribbon	 Design > Package > Model Builder Start > Personal > Model Builder The Model Builder can be displayed as a main view or modal dialog. To display Model Builder Options, click on the drop-down arrow beside "Start > Personal > Model Builder": Start > Personal > Model Builder > Show Builder as Dialog Start > Personal > Model Builder > Show Builder Page in Main View Start > Personal > Model Builder > Show Builder Page on Startup
Context Menu	Right-click on Package Model Builder Right-click on any Main View tab area Show Model Builder
Keyboard Shortcuts	Ctrl+Shift+M
Other	Browser window caption bar :



Generate a New Model

Field/Button	Action
Perspective	When you open the Model Builder window, the Pattern groups and Patterns available for the current Perspective are listed. Initially, the current Perspective is the one shown in the [•] isted. Initially, the current Perspective is the one shown in the [•] perspectivename> icon at the top right of the application screen.If you click on the <perspective name=""> button or the [■] button, a list of all the Perspective groups displays. As you mouse-over an option in the list, the Perspectives available in that group also display. When you click on a Perspective to select it, the panel is updated with the</perspective>

Pattern groups and Patterns provided by
the selected Perspective. As you click on
a Pattern in the list, a description is
provided in the right-hand panel.
Note that selecting a Perspective from the <perspective name=""> button list does not change the current 'global' Perspective shown in the <pre>o</pre><pre>shown in the <pre>o</pre><pre>spective name> icon. If you want to re-set the Model Builder Perspective to the global Perspective, simply click on the <pre>perspective name> button and select 'Active'.</pre></pre></pre></perspective>
It is possible to make available every Pattern Group and Pattern available in the model; click on the button and select the 'All' option.
Conversely, you can restrict the list of Patterns shown by typing a text string in the Filter Bar underneath the button. Only Patterns that have that text string in their name are listed. This is also a useful tool for locating specific Patterns when you are not sure where they are held - select 'All' Perspectives and type the Pattern name in the Filter Bar field. The panel lists each Pattern that has the text string in its name
If you are a Technology Developer you can create and import your own MDG

	Technology, and distribute one or more custom Model Patterns from that Technology through the Model Builder; the name of your Technology (or Technology categories) is added to the selection list under 'Specialized' for your users to access the Technology Patterns. To select a Model Pattern, simply click on it. If you want to select more than one Pattern, hold the Ctrl key down while you click on each Pattern.
Create Model	Click on this button to import a model structure derived from the Pattern(s) you have selected. The 'Importing Model Templates' dialog displays whilst the import is in progress, and any problems with the import are reported in the System Output window. The generated model structure displays under your selected Package in the Browser window.
Parent	Displays the name of the Parent package you have selected in the Browser window. If you need to change the package under which the model will be generated, click on the icon and browse for the correct Parent package on the 'Navigator'

	browser.
Combine with Parent	Select this option to import the contents of the Pattern into the selected Package. When creating a Pattern, Enterprise Architect will normally create a new Package to represent the Pattern, as a child of the selected Package. If you select this checkbox, no new Package is created and instead the contents of the Pattern are added to the selected Package (provided that the selected Package is not a root node).
Customize on import	A Pattern can contain several Packages; select this checkbox to indicate that you will import only some of these Packages from the Pattern into your model. After you click on the Create Model(s) button, the 'Select Packages' dialog displays on which you specify which of the Packages to import. If you select more than one Pattern, the 'Select Packages' dialog displays for each Pattern in turn. If you do not select the checkbox, all Packages in each Pattern will be imported into the model. The option is disabled if there are too few

Packages to select from, or if it is not logical to import only some of the Packages.

Notes

• The 'Select Package(s)' dialog does not display for some of the Simple Template and Basic Template Patterns, even if the 'Customize Pattern on import' option is selected

Customize Model Content

When you set up a project by importing models using the Model Builder, you can generate the model structures from Patterns that you select in the Builder. Each Pattern can contain a number of Packages and sub-Packages, and it is possible to select which of these Packages to add to your model and which to omit, using the 'Select Packages' dialog. This is especially useful when setting up a new model with a reasonably complex structure, such as the TOGAF framework model. Being able to select which Packages are included and which are omitted is a good way to customize the level of implementation necessary for the current project.

Access

Ribbon	Design > Package > Model Builder > Select 'Customize Pattern on import' checkbox : Create Model button
Context Menu	Browser window Right-click on a Package node Model Builder (pattern library) Select 'Customize Pattern on import' : Create Model button
Keyboard	Ctrl+Shift+M Select 'Customize Pattern

Shortcuts	on import' : Create Model button
Other	Browser window caption bar menu Model Builder (pattern library) Select 'Customize Pattern on import' : Create Model button

Select Package(s) dialog

Option	Description
Select Package(s) to import from <pattern></pattern>	Shows the hierarchy of Packages contained in the Pattern, with a checkbox to the left of each item. The checkboxes are selected by default.
	 Deselect the checkbox against each Package that you do not want to import. Deselecting a Package automatically deselects all its child Packages
	• Re-selecting a Package automatically selects all its ancestor Packages
ОК	Click on this button to import the selected Packages from the current Pattern.
Cancel	Click on this button to abort the creation

of model structures from the current
Pattern.