



Enterprise Architect

User Guide Series

Perspectives

What are Modeling Perspectives? In Sparx Systems Enterprise Architect, Perspectives are sets of modeling tools, facilities and model and diagram Patterns tailored to domain-specific modeling scenarios, helping users to work with a specific toolset.

Author: Sparx Systems

Date: 7/08/2019

Version: 1.0

Table of Contents

Perspectives 3

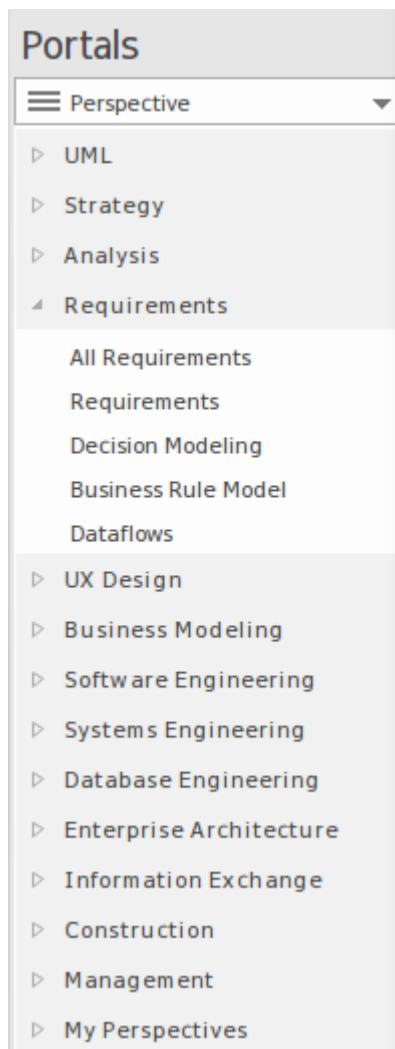
 Using Perspectives 7

 Customizing Perspectives 10

 Types of Perspective 14

Perspectives

Enterprise Architect provides a wide range of built-in modeling languages and technologies, and it can take time to identify the right tool or combination of tools to meet your exact modeling requirement or scenario. The Perspectives facility helps you to quickly and effectively filter the overall modeling capability to a Perspective Set of technologies that are relevant to a domain, such as Requirements modeling, and further refine the tools for more specific tasks within that domain, such as Business Rule modeling, in a Perspective.



Perspectives:

- Are selections of Technologies - some specific to one of the many modeling languages - and their model and diagram Patterns
- Are tailored to domain-specific modeling scenarios; when you work in a specific domain, you can apply a Perspective to expose appropriate facilities and hide all others
- Remove the significant distraction of having to identify and assess multiple technologies before proceeding with your work
- Help you to select and apply an environment of particular modeling languages or Technologies, enabling you to work effectively and efficiently on the task at hand
- Help you to switch easily and quickly between tools when your modeling focus changes; you simply select another Perspective from the list of Perspective Sets (which identify the domain they support) and Enterprise Architect then hides the features of the previous Technologies and applies the new environment

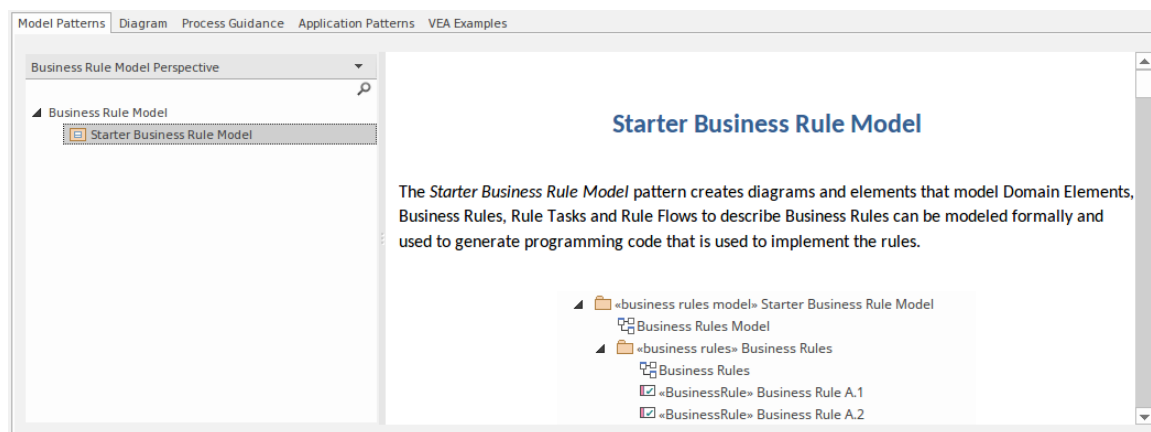
Initially you can select from the thirteen built-in Perspective Sets and the more than 80 Perspectives they provide. As your experience in modeling with Enterprise Architect develops and your work becomes more specific, you can create

your own custom Perspectives. This helps you work within a Technology that you might have recently imported and activated, or apply a combination of Technologies that are not associated in the built-in sets.

Overview

You select and switch to the required Perspective through the 'Perspective' option at the top right of the screen, or through the 'Design > Model > Perspectives > Single Perspective' ribbon option, or through the Perspective Portal in the Portals window.

Selecting a built-in Perspective automatically brings up the Model Wizard, which provides a rich set of new model patterns and guidance notes, filtered to narrow down the available patterns, technologies, diagram types and other modeling constructs to the precise set required, with similar actions on the Toolbox and dialogs. This helps you to quickly build accurate, focused models with minimal 'noise' and maximum fidelity.



Applying a Perspective mainly takes effect through the Model Wizard, 'New Diagram' dialog, Diagram Toolbox and 'Stereotypes' dialog, for creating model structures. The windows and dialogs also allow for swapping Perspectives instantly, making it easy to find and change to the exact modeling tools required.

As a huge boost to models encompassing several disciplines and modeling domains, selecting a Perspective provides its Technology as an available development tool, whilst all existing model structures that make use of the *hidden* Technologies still render and work as normal. If you have a model that contains, say, a BPMN View and a SysML View, you might apply a Perspective to support the creation of BPMN structures and see only BPMN templates and Toolbox items in your BPMN development. But if you open a SysML diagram during this work, you will still see the SysML Toolbox pages, Properties pages and options that enable you to properly examine that diagram.

To further enhance your modeling experience, you can also use the Perspective Sets window to filter the Perspectives, hiding complete Perspective sets or individual Perspectives. This enables you to reduce the list of Perspectives offered for selection to just those you are likely to use.

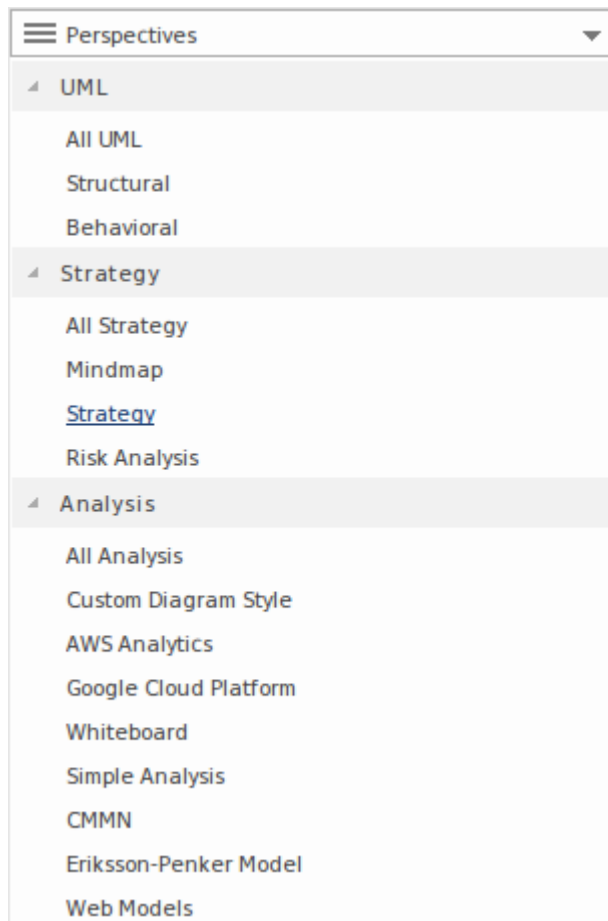
For specific instructions on using Perspectives, see the *Using Perspectives* Help topic.

System Perspectives

Enterprise Architect provides a rich set of more than 80 Perspectives built directly into the application, which have been crafted to align with the multitude of roles that modelers perform; these Perspectives are grouped into Sets that make finding the right Perspective quick and easy, and include:

- Business sets for Strategy, BPMN, Business Analysis and more, helping the business user focus on their current task
- SysML, MBSE, Software, Simulation and others, for the Systems Engineer and Software Engineer
- ArchiMate, TOGAF, Zachman Framework and GRA-UML, version-specific sets that provide the most common tools for the needs of Enterprise Architects
- SPEM, Process Guidance and MDG Technology Builder for Project Managers

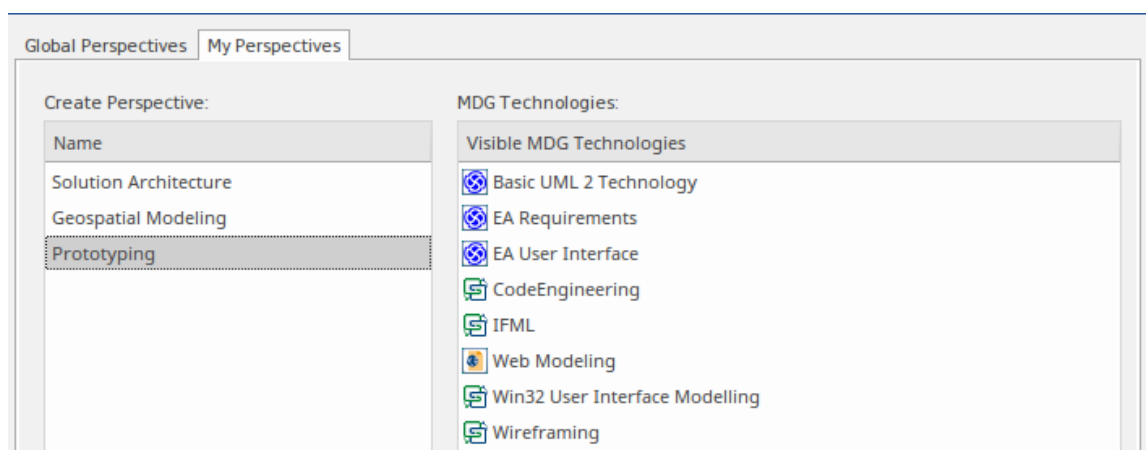
Each set contains a number of relevant and useful Perspectives. This diagram shows an example of three Perspective Sets, each of which contains a number of Perspectives.



For a more comprehensive description of the built-in Perspectives, see the *Types of Perspective* Help topic.

Custom Perspectives

In addition to the built-in Perspectives, you can create any number of your own Perspectives on the 'My Perspectives' tab. While the built-in, or system, Perspectives typically contain a single language or technology - for example the BPMN (Business Process Model and Notation) Perspective allows you to focus on just BPMN - custom Perspectives allow you to open a number of technologies at the same time. For example, if you regularly create prototypes you might want to create a 'Prototyping' Perspective that groups the technologies and modeling languages you use in that work.

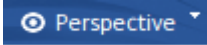


Custom Perspectives do not automatically open the Model Wizard.

These custom Perspectives can be created, modified and deleted as the roles you perform change over time. For information on creating custom Perspectives, see the *Customizing Perspectives* Help topic.

Using Perspectives

You can access both built-in and custom Perspectives from a number of different points. This makes it easy to start your work in the appropriate environment with the required Perspective from any point, and to quickly and smoothly switch to a different Perspective if the need arises.

Conversely, if you prefer to have a wider range of tools and languages immediately available to you, you can select the appropriate 'All <perspective group name>' option in the Model Wizard or  list to filter for all Perspectives for a domain.

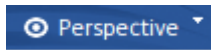

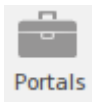
Note that if a 'Perspective for Security Group' has been set for the model and you are a member of the security group, you will not be able to change the visibility of Perspectives as that will be defined by the administrator for the group.

Access

Currently, selecting a built-in Perspective will take you to the Model Wizard. Some access paths first take you to the Perspectives Portal, and when you select a Perspective from there the Model Wizard opens and you choose the appropriate Patterns to use (if required).

Other paths take you directly to the Model Wizard, where you first select the Perspective and then the Patterns to use (if required).

Selecting a custom Perspective does not open the Model Wizard, because custom Perspectives generally expose combinations of Technologies and facilities, and the system cannot determine which Technology to open the Wizard at.

Ribbons	<p>Design > Model > Perspectives > Single Perspective (takes you to the Perspective Portal) > <perspective group> > <perspective></p> <p>Design > Model > Perspectives > Model Wizard > Model Patterns > Perspective</p> <p>Explore > Portals > Perspectives > <perspective group> > <perspective></p> <p>Design > Model > Add > Model Wizard > Model Patterns > Perspective</p>
Context Menu	Click on Package > Add a Model using Wizard > Model Patterns > Perspective
Other	<p>Start Page Open a Portal Perspective Portal > <perspective group> > <perspective></p> <p>(Top right corner of screen) >  > <perspective group> > <perspective> ('My Perspective' options just apply the custom Perspective)</p> <p>Navigator Toolbar :  :  > <perspective group> > <perspective></p> <p>In the 'New Diagram' dialog, click on the Select From button and select the required Perspective</p>

Use a Perspective


Having selected a Perspective, and depending on what Perspective that is, you would expect to see impacts on the Model Wizard, 'New Diagram' dialog, Diagram Toolbox and 'Stereotypes' dialog, each offering fewer options more specific to the Technology or operations you are working in. For Perspectives related to Code Engineering, the code editors and code generators might also have a narrower focus.

As you develop models and/or engineer code, you will see the structures you require and not have to pick them out from

many other structures of no relevance to the work you are doing.

Filter Perspectives Available

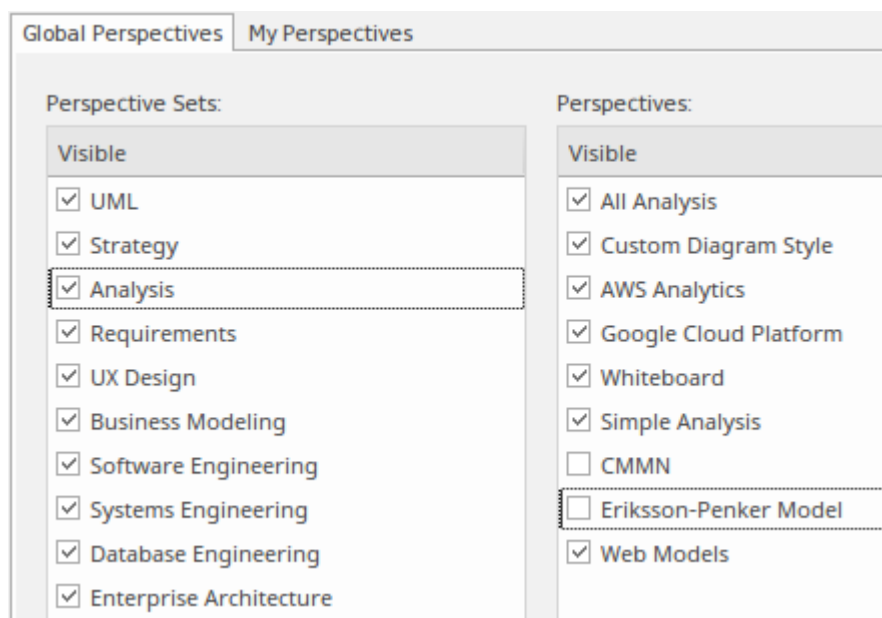
You are unlikely to use all the Perspectives available in Enterprise Architect, so if you prefer you can exclude Perspectives - or even whole Perspective Sets - that you do not need from display in the Model Wizard and

 Perspective selection lists. You do this using the 'Perspective Sets' dialog:

Design > Model > Perspectives > Manage Perspectives

The 'Perspective Sets' dialog displays, showing the 'Global Perspectives' tab. If you want to exclude a complete Perspective Set, deselect the checkbox against that category in the 'Perspective Sets' panel.

Otherwise, if you want to just exclude individual Perspectives, click on the parent Perspective Set name and deselect the checkbox against the Perspective name in the 'Perspectives' panel. In this illustration, the CMMN and Erikson-Penker Model Perspectives have been excluded from display.




Note that if you exclude a Perspective Set, the checkboxes against the individual member Perspectives remain selected. However, the Perspectives do not show in the selection lists in, say, the Model Wizard.

If you decide to show any excluded Perspectives again, return to the dialog and select the appropriate checkboxes. Alternatively, show all Perspectives as explained in *Revert to All Perspectives*.

Revert to All Perspectives

If you have filtered your list of Perspectives, or been working within a specialized Perspective such as Requirements or a customized Perspective, and you want to return to a non-specific environment, either:

- Select the 'Design > Model > Perspectives > Manage Perspectives' ribbon option, or
- Click on the Reset button on the 'Perspective Sets' dialog, or
- Select  Perspective > All

Notes

- A Perspective hides all Technologies that are not specifically associated with it; if you use custom Technologies in your work, add them to a custom Perspective with any built-in Technologies you want to use, so that all your specialized tools are available together
- An individual Technology might not present all facilities you need (for example, ICONIX does not have a diagram profile, so a Perspective that just exposes ICONIX does not allow you to create diagrams); select or create a custom Perspective that includes a Technology that adds the missing facilities (in this case, the UML Technology)
- In order to function when included in and presented by the Perspective, a Technology must remain enabled in the 'Manage Technologies' dialog

Customizing Perspectives

Whilst Enterprise Architect provides a huge range of Perspectives to select from, you might need to create others more specifically tailored to your area of work, or to expose Technologies that you have recently imported.

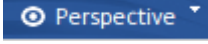
The methods for tailoring Perspectives to match your work environment are described here.

Before starting, review the Technologies available to you in Enterprise Architect and identify and enable those you want to apply in a Perspective, either individually or in combination. This is particularly important for any custom Technologies you have, as selecting a Perspective makes available only those Technologies it specifically contains and hides all others - including your custom Technologies.

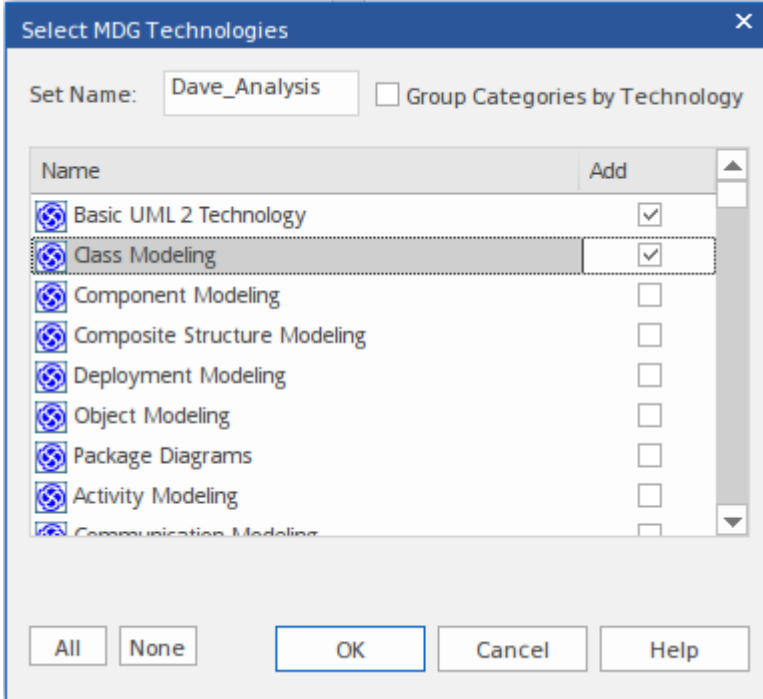
If you have user security enabled on a model or project, as an administrator you can also set up Perspective Settings that identify the Perspectives available to users in each of the defined security groups. See the *Perspectives for Security Groups* Help topic.

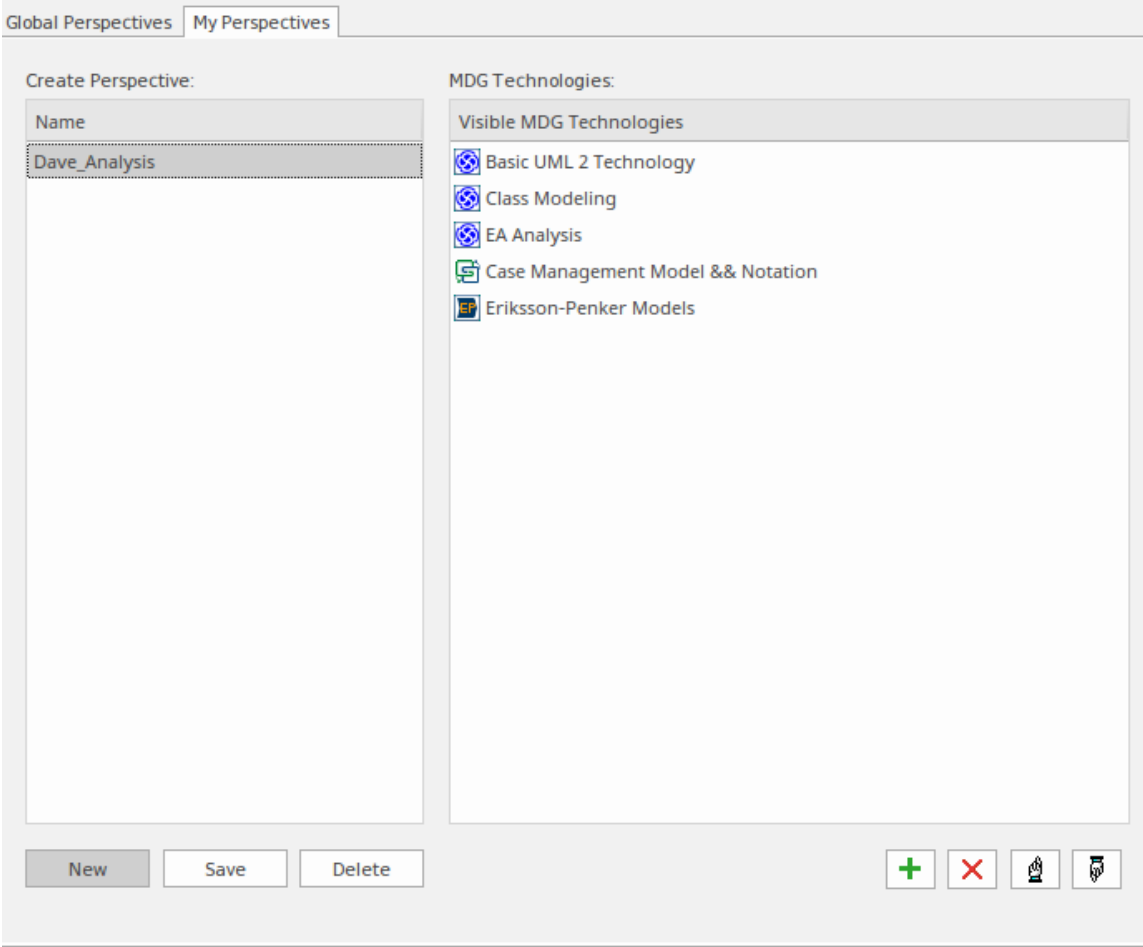
Access

These access options display the 'Perspective Sets' dialog, through which you can create customized Perspectives.

Ribbon	Design > Model > Perspectives > Manage Perspectives > My Perspectives
Other	(Top right corner of screen) >  Perspective > Manage > Customize > My Perspectives

Create Custom Perspective

Step	Action
1	<p>Click on the New button. The 'Select MDG Technologies' dialog displays.</p> 
2	<p>In the 'Set Name' field, type a name for the custom Perspective. Then select the 'Add' checkbox against each MDG Technology to make visible.</p> <p>You can click on the All button and then deselect the checkbox against each Technology to hide, or click on the None button to clear all selected checkboxes and then re-select those against Technologies you want to keep visible.</p> <p>If you want to group your selections by Technology, click on the 'Group Categories by Technology' checkbox.</p>
3	<p>When you have added the necessary Technologies to the Perspective, click on the OK button. The Perspective name displays in the 'Create Perspective' panel, and the Technologies in the Perspective are listed in the 'MDG Technologies' panel in alphabetical order.</p> <p>Notice that all buttons at the bottom of the window are now enabled.</p>

	
4	<p>If you prefer to:</p> <ul style="list-style-type: none"> List the Technologies in the Perspective in a different sequence, click on each Technology name in turn and use the Up Hand button or Down Hand button to move the Technology name to the correct position in the sequence Remove a Technology from the Perspective, click on the Technology name and click on the X button to redisplay the 'Select MDG Technologies' dialog, listing just the Technologies that are in the Perspective; clear the 'Add' checkbox against the Technology to be removed, and click on the OK button Add another Technology to the Perspective, click on the + button to redisplay the 'Select MDG Technologies' dialog, listing the Technologies that are not already in the set; select the 'Add' checkbox against the required Technology, and click on the OK button
5	<p>Click on the Save button and, if you have finished setting up or changing a Perspective, click on the Close button.</p>

Delete a Custom Perspective

If you no longer want to use a custom Perspective, you can delete it from the list of those available.

On the 'My Perspectives' tab of the 'Perspective Sets' dialog, click on the custom Perspective name and then on the Delete button.

In response to the confirmation prompt, click on the Yes button.

Types of Perspective

There is a wide selection of built-in Perspectives provided within Enterprise Architect, each containing a suite of Patterns. This topic is a reference, describing each Perspective Set and Perspective. You can also create your own custom Perspectives, which are included as the last item in the list of Perspective Sets.

To select and apply any of these Perspectives, see the [Using Perspectives](#) Help topic.

Perspectives

Category	Perspectives
All	This category lists every Perspective Set and Perspective available.
Specialized	This category lists all Perspectives provided by imported User Technologies.
UML	<p>The UML category provides the Perspectives for normal UML modeling, including:</p> <ul style="list-style-type: none"> • All UML Modeling - all modeling tools and objects provided by the other Perspectives in this group • UML Structural Models - the modeling tools and objects for structural UML models, such as: <ul style="list-style-type: none"> - Package diagrams - Class diagrams - Object diagrams - Composite Structure diagrams - Component diagrams - Deployment diagrams • UML Behavioral Models - the modeling tools and objects for behavioral UML models, such as: <ul style="list-style-type: none"> - Use Case diagrams - Sequence diagrams - Communication diagrams - Timing diagrams - Interaction Overview diagrams - Activity diagrams - StateMachine diagrams
Strategy	<p>The Strategy category provides Perspectives for:</p> <ul style="list-style-type: none"> • All Strategy - all modeling tools and objects provided by the other Perspectives in this group • Mind Mapping - the basic Mind Map diagram • Strategy modeling, such as: <ul style="list-style-type: none"> - Organizational Chart - Value Chain - Strategy Map - Balanced Scorecard - One-level and Two-level Flow Chart - Decision Analyses with Decision Tree and with Decision Models - SWOT Analysis • Risk Analysis - the Risk Taxonomy - Threat Community diagram
Analysis	The Analysis category provides Perspectives for:

	<ul style="list-style-type: none"> • All Analysis - all modeling tools and objects provided by the other Perspectives in this group • Custom Diagram Style - the 'Simple Style' diagram rendering for presentations and non-technical display of information • AWS Architecture Icons - for creating Amazon/AWS diagrams in Enterprise Architect • Google Cloud Platform (GCP) Icons - for creating Google Cloud Platform diagrams • Whiteboards - diagram structures in Whiteboard and/or Hand-drawn mode • Simple Analysis, based on a Two Activity Process • MDG Technology for CMMN analysis, with a: <ul style="list-style-type: none"> - Claims Management example - Basic 5-Task Plan - Three Choice Tasks Pattern - Two Phase Case Plan • Eriksson-Penker Extensions modeling, the basic business process • Web Stereotypes, based on a simple Java Server Page (JSP) model
Requirements	<p>The Requirements category provides Perspectives for:</p> <ul style="list-style-type: none"> • All Requirements - all modeling tools and objects provided by the other Perspectives in this group • Creating a range of Requirement Hierarchy diagrams, and a Requirement Specification View • Working with DMN Modeling and Simulation to: <ul style="list-style-type: none"> - Create a simple Decision diagram with a Decision Table - Set up a DMN Business Knowledge Model - Model a DMN Decision • Setting up a Modeling Business Rules model • Setting up one-level and two-level Data Flow Diagrams models
UX Design	<p>The UX Design category provides a number of Perspectives for modeling user interfaces on various devices, including:</p> <ul style="list-style-type: none"> • All UX Design - all modeling tools and objects provided by the other Perspectives in this group • Wireframe Models for various phone and tablet devices • MDG Technology for IFML Interaction flows on desktop applications, information entry, interaction on wireframe devices, and information searches • A basic Enterprise Architect user interface model for a window with lists and combo boxes • An alternative simple user interface • Win32 UI Technology
Business Modeling	<p>The Business Modeling category provides these Perspectives:</p> <ul style="list-style-type: none"> • All Business Modeling - all modeling tools and objects provided by the other Perspectives in this group • BPMN Models - Patterns for: <ul style="list-style-type: none"> - BPMN 2.0 modeling - BPEL 2.0 Starter model • Business Process Simulation (BPSim) - Patterns for BPMN 2.0 and BPEL 2.0 modeling, plus: <ul style="list-style-type: none"> - Patterns for Business Process Simulation (BPSim) constructs and

	<ul style="list-style-type: none"> - Patterns for a number of BPSim Case Studies • Business Motivation Model • Business Model Patterns for Business Use Case models and Use Case Realization • Business Modeling/Interaction model Patterns • BABOK - a wide range of Patterns supporting models for: <ul style="list-style-type: none"> - Strategies - Collaboration activities - Analyses - Business Processes - Project Management activities - Standard business documents • BIZBOK - Patterns for modeling BIZBOK activities • MDG Technology for VDML - Patterns for modeling in Value Data Markup Language
Software Engineering	<p>The Software Engineering category provides Perspectives for software development, including:</p> <ul style="list-style-type: none"> • All Software Engineering - all modeling tools and objects provided by the other Perspectives in this group • Code Engineering, modeling programs in a number of programming languages • Service Oriented SOMF 2.1, for several Conceptual Association types • SoaML, for modeling aspects of basic service provision • XSLT Feature demonstrations, such as XSLT transforms and debugging • WSDL - providing a complete WSDL template model • XML Schema - providing an XML Schema Package and diagram • ICONIX modeling • GoF Patterns Patterns for Creational, Structural and Behavioral models
Systems Engineering	<p>The Systems Engineering category provides Perspectives to support systems Engineering projects under:</p> <ul style="list-style-type: none"> • All Systems Engineering - all modeling tools and objects provided by the other Perspectives in this group • Systems Modeling Language (SysML), with a wide range of Patterns for generating: <ul style="list-style-type: none"> - Project structures - Requirements diagrams - Use Case diagrams - Activity diagrams - Block Definition diagrams - Internal Block diagrams - Parametric diagrams - State Machine diagrams - Libraries - Model elements - Modelica Case Studies • UAF, with Patterns for: <ul style="list-style-type: none"> - Strategic Views (St-xx) - Operational Views (Op-xx) - Services View (Sv-xx) - Personnel Views (Pr-xx) - Resources Views (Rs-xx) - Security Views (Sc-xx)

	<ul style="list-style-type: none"> - Projects Views (Pj-xx) - Standards Views (Sd-xx) - Actual Resources Views (Ar-xx) - Dictionary View (Dc) - Requirements View (Rq) - Summary and Overview (SmOv) - Information View (If) - Parameters Views (Pm-xx) - The SysML 1.5 sets (as listed, except for Modelica Case Studies) <ul style="list-style-type: none"> • UPDM with Patterns for: <ul style="list-style-type: none"> - UPDM Frameworks (DoDAF and MODAF) - DoDAF All Viewpoints (AV-n) - DoDAF Capability Viewpoints (CV-n) - DoDAF Data and Information Viewpoints (DIV-n) - DoDAF Operational Viewpoints (OV-n) - DoDAF Project Viewpoints (PV-n) - DoDAF Services Viewpoints (SvcV-n) - DoDAF Standard Viewpoints (StdV-n) - DoDAF Systems Viewpoints (SV-n) - MODAF All Views (AV-n) Viewpoints - MODAF Acquisition (AcV-n) Viewpoints - MODAF Operational (OV-n) Viewpoints - MODAF Service Oriented Views (SOV-n) Viewpoints - MODAF Strategic Views (StV-n) Viewpoints - MODAF System Viewpoints (SV-n) - MODAF Technical Standards Views (TV-n) Viewpoints • Executable State Machines, with various Patterns including a set to demonstrate case studies • Simulation - sets of patterns for simulations of Activity diagrams and StateMachine diagrams • MARTE - a range of UML-type Patterns for creating diagrams under the 'Modeling and Analysis of Real Time and Embedded systems' profile from the OMG
Database Engineering	<p>The 'Database Engineering' category provides sets of Perspectives for modeling a range of DBMS repositories, including:</p> <ul style="list-style-type: none"> • All Database Engineering - all modeling tools and objects provided by the other Perspectives in this group • Starter Model and Model Structure Patterns for each of the main DBMSs supported by Enterprise Architect • Patterns for simple Entity Relationship Diagrams (ERDs) models • Patterns for simple Geodatabase Design for ArcGIS projects and workspaces
Enterprise Architecture	<p>The Enterprise Architecture category provides a number of Perspectives for Enterprise Architecture frameworks, including:</p> <ul style="list-style-type: none"> • All Enterprise Architecture - all modeling tools and objects provided by the other Perspectives in this group • ArchiMate, supplying Patterns for: <ul style="list-style-type: none"> - Basic viewpoints such as Organization, Application Usage and Service Realization - Motivation Viewpoints such as for Stakeholders, Principles and Requirements Realization - Strategy Viewpoints - Implementation and Migration Viewpoints • TOGAF, with Patterns for: <ul style="list-style-type: none"> - A Starter Model

	<ul style="list-style-type: none"> - The Architecture Development Method - The Enterprise Continuum - The Technical Reference Model - Catalogs • The Zachman Framework • GRA-UML annotations library and starter model
Information Exchange	<p>The Information Exchange category supports a number of built-in technologies, providing Perspectives and basic model Patterns for:</p> <ul style="list-style-type: none"> • All Information Exchange - all modeling tools and objects provided by the other Perspectives in this group • MDG Technology for ODM • MDG Technology For GML • MDG Technology for AML • NIEM 4.0 3.0, 3.1, 3.2 and 4.0 Reference Models and NIEM 3 and 4 starter models • SIMF • Universal Business Language (UBL) • UML Profile for Core Components • UMM 2.0 Profile
Construction	<p>The Construction category provides these Perspectives:</p> <ul style="list-style-type: none"> • All Construction - all modeling tools and objects provided by the other Perspectives in this group • Project Management, for Project Management and Roadmap diagrams • Kanban Features workflows • Document Publishing for types of Project document • Dashboards and Charts for various scenarios • Reviews and Discussions to define the structure and function of these team collaboration activities • Construction View to show a simple Construction rendering of an element with its management items, and more complex diagrams that include the elements related to the Construction element • Test Management to define how tests are planned and managed • Change Management to define a model for managing issues and changes • Legends to define how diagram legends are set up and used
Management	<p>The Management category provides Perspectives to support:</p> <ul style="list-style-type: none"> • All Management - all modeling tools and objects provided by the other Perspectives in this group • Data Miner • SPEM • Process Guidance - working up process templates • The MDG Technology Builder
My Perspectives	<p>The 'My Perspectives' category holds the Perspectives that you have created for yourself, using the 'Design > Model > Perspectives > Manage Perspectives' option. For further details, see the <i>Customizing Perspectives</i> Help topic.</p>

