Modeling Perspectives
Focused Toolset Modeling using Tools, Patterns and Diagrams
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Perspectives

Enterprise Architect is used by a wide range of teams, from executives and business architects who model organizational change and strategic direction at the highest level, down to technology architects who model infrastructure and implementation at the lowest level, with a large number of other disciplines in between. Some of these additional disciplines include business, process and requirements analysts; information, data, application and security architects; system and product engineers; testers; scrum masters and many more.

Enterprise Architect has a formidable compass of available features supporting these disciplines that, when seen together, could be quite overwhelming. To ensure a modeler can remain focused and concentrate on the role they are performing at a particular time, Perspectives have been created to bundle the features - including modeling languages and example patterns - into sets. This allows a person to effectively change roles and focus simply by switching to another Perspective - almost like putting on a different hat. When a Perspective is selected the tool instantly changes to hide the irrelevant features and only display the ones defined for that Perspective. Some modelers might select or be assigned a single Perspective for the lifetime of a role or project, whilst others might switch Perspectives five or six times a day.

The Perspectives are completely configurable, allowing fine grain inclusion (and thus exclusion) of language constructs and tool features; this can be done at a whole-model level, security group level or personal level.

Perspectives:
- Are selections of Technologies - some specific to one of the many modeling languages - and their model and diagram Patterns

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- 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 custom Perspectives either just for yourself or for all users of the model. 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 directly 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 Diagram Toolbox pages 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 modeling 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. As an example, the illustration in the 'System Perspectives' section below, shows the 'Strategy' set, where the Perspective 'Risk Analysis' has been selectively hidden.

Additionally, the model administrator can tailor the Perspectives and/or ribbons available to each User Security Group, as a Perspective Setting or Ribbon Set for each group. This filters the Perspectives available to a user according to their security group, rather than their personal choice. See the Perspectives for Security Groups Help topic.
Regardless of which Perspective you select, all of the coding languages, templates, RTF templates and images remain immediately available.

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 image 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 'Model-Based Sets' or 'Personal Sets' tabs. While the built-in, or system, Perspectives typically contain a single language or technology - for example the Business Process Model and Notation (BPMN) 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.
### Types of Perspective

There is a wide selection of built-in Perspectives provided within Enterprise Architect, each containing a suite of Patterns. The Perspectives themselves are organized into groups called Perspective Sets.

Extensive research has been conducted to define sets of Perspectives that are expertly tailored to meet the needs of modelers who work in a particular project discipline or team role. For example, there are Perspectives for strategists, enterprise and solution architects, requirement analysts, user experience designers, informaticians, systems engineers and many more, remembering that a user can switch to another available Perspective at any time when their role or modeling emphasis changes. You can select certain sets and hide others; effectively, it is like having access to fifty different tools, but all cleverly concealed when they are not required, allowing you to stay focused on the task at hand with the tools, workspaces, languages and features that are needed, including best practice patterns to get your modeling off to a flying start.

This *Types of Perspective* topic is a reference, describing each Perspective Set and Perspective. You can also create your own Personal Perspectives, which are included under the second item in the full list of Perspective Sets.

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

### Perspectives

<table>
<thead>
<tr>
<th>Category</th>
<th>Perspectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>This category lists every Perspective Set and Perspective available.</td>
</tr>
<tr>
<td>Personal</td>
<td>This category lists every custom Perspective that is available to you.</td>
</tr>
<tr>
<td>Specialized</td>
<td>This category lists all Perspectives provided by imported User Technologies (including the UML Technology).</td>
</tr>
<tr>
<td>UML</td>
<td>The UML category provides the Perspectives for normal UML modeling, including:</td>
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<tr>
<td></td>
<td>• All UML Modeling - all modeling tools and objects provided by the other Perspectives in this group</td>
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<td></td>
<td>• <strong>UML Structural Models</strong> - the modeling tools and objects for structural UML models, such as:</td>
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<td></td>
<td>- Package diagrams</td>
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<td>- Class diagrams</td>
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<td>- Object diagrams</td>
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<td>- Composite Structure diagrams</td>
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<td>- Component diagrams</td>
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<td>- Deployment diagrams</td>
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<td>• <strong>UML Behavioral Models</strong> - the modeling tools and objects for behavioral UML models, such as:</td>
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<td>- Use Case diagrams</td>
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<td>- Sequence diagrams</td>
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<td>- Communication diagrams</td>
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<td>- Timing diagrams</td>
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<td>- Interaction Overview diagrams</td>
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<td>- Activity diagrams</td>
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<td></td>
<td>- StateMachine diagrams</td>
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<tr>
<td>Strategy</td>
<td>The Strategy category provides Perspectives for:</td>
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<tr>
<td></td>
<td>• All Strategy - all modeling tools and objects provided by the other Perspectives in this group</td>
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</tbody>
</table>
### Analysis

The Analysis category provides Perspectives for:
- 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
- MDG Technology for Microsoft Azure - a new Image library of graphics (icons and images) required to model Microsoft Azure deployments
- 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:
  - 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

The Requirements category provides Perspectives for:
- 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 to:
  - 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

The UX Design category provides a number of Perspectives for modeling user interfaces on various devices, including:
- 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

### Mind Mapping

- Mind Mapping - the basic Mind Map diagram

### Strategy modeling

- Strategy modeling, such as:
  - 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

- Risk Analysis - the Risk Taxonomy - Threat Community diagram
<table>
<thead>
<tr>
<th><strong>combo boxes</strong></th>
<th><strong>Business Modeling</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• An alternative simple user interface</td>
<td>The Business Modeling category provides these Perspectives:</td>
</tr>
<tr>
<td></td>
<td>• All Business Modeling - all modeling tools and objects provided by the other Perspectives in this group</td>
</tr>
<tr>
<td></td>
<td>• BPMN Models - Patterns for:</td>
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<tr>
<td></td>
<td>- BPMN 2.0 modeling</td>
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<td></td>
<td>- BPEL 2.0 Starter model</td>
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<tr>
<td></td>
<td>• BPSim Business Simulations - Patterns for BPMN 2.0 and BPEL 2.0 modeling, plus:</td>
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<tr>
<td></td>
<td>- Patterns for Business Process Simulation (BPSim) constructs and</td>
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<td></td>
<td>- Patterns for a number of BPSim Case Studies</td>
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<td></td>
<td>• Business Motivation Model</td>
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<td></td>
<td>• Business Model Patterns for Business Use Case models and Use Case Realization</td>
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<td></td>
<td>• Business Modeling/Interaction model Patterns</td>
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<tr>
<td></td>
<td>• BABOK - a wide range of Patterns supporting models for:</td>
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<td></td>
<td>- Strategies</td>
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<td>- Collaboration activities</td>
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<td>- Analyses</td>
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<td></td>
<td>- Business Processes</td>
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<td>- Project Management activities</td>
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<td>- Standard business documents</td>
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<td></td>
<td>• BIZBOK - Patterns for modeling BIZBOK activities</td>
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<td></td>
<td>• MDG Technology for VDML - Patterns for modeling in Value Data Markup Language</td>
</tr>
<tr>
<td><strong>Software Engineering</strong></td>
<td>The Software Engineering category provides Perspectives for software development, including:</td>
</tr>
<tr>
<td></td>
<td>• All Software Engineering - all modeling tools and objects provided by the other Perspectives in this group</td>
</tr>
<tr>
<td></td>
<td>• Code Engineering, modeling programs in a number of programming languages</td>
</tr>
<tr>
<td></td>
<td>• Service Oriented SOMF 2.1, for several Conceptual Association types</td>
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<tr>
<td></td>
<td>• SoaML, for modeling aspects of basic service provision</td>
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<tr>
<td></td>
<td>• XSLT Feature demonstrations, such as XSLT transforms and debugging</td>
</tr>
<tr>
<td></td>
<td>• WSDL - providing a complete WSDL template model</td>
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<td></td>
<td>• XML Schema - providing an XML Schema Package and diagram</td>
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<td></td>
<td>• ICONIX modeling</td>
</tr>
<tr>
<td></td>
<td>• GoF Patterns Patterns for Creational, Structural and Behavioral models</td>
</tr>
<tr>
<td><strong>Systems Engineering</strong></td>
<td>The Systems Engineering category provides Perspectives to support Systems Engineering projects under:</td>
</tr>
<tr>
<td></td>
<td>• All Systems Engineering - all modeling tools and objects provided by the other Perspectives in this group</td>
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<td></td>
<td>• Systems Modeling Language (SysML), with a wide range of Patterns for generating:</td>
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<td></td>
<td>- Project structures</td>
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<tr>
<td></td>
<td>- Requirements diagrams</td>
</tr>
<tr>
<td></td>
<td>- Use Case diagrams</td>
</tr>
</tbody>
</table>
- Activity diagrams
- Block Definition diagrams
- Internal Block diagrams
- Parametric diagrams
- StateMachine diagrams
- Libraries
- Model elements
- OpenModelica Case Studies

- **UAF, with Patterns for:**
  - Strategic Views (St-xx)
  - Operational Views (Op-xx)
  - Services View (Sv-xx)
  - Personnel Views (Pr-xx)
  - Resources Views (Rs-xx)
  - Security Views (Sc-xx)
  - 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 OpenModelica Case Studies)

- **UPDM with Patterns for:**
  - 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 StateMachines, with various Patterns including a set to demonstrate case studies
- Simulation - sets of patterns for simulations of Activity diagrams and StateMachine diagrams
- AUTOSAR, by LieberLieber - sets of patterns for creating models in accordance with the AUTOSAR 4 Virtual Function Bus specification in LieberLieber AUTOSAR Engineer
- 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 | The 'Database Engineering' category provides sets of Perspectives for modeling a range of DBMS repositories, including:
|----------------------|---------------------------------------------------------------|
|                      | • 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

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Created with Enterprise Architect
### Enterprise Architecture

The Enterprise Architecture category provides a number of Perspectives for Enterprise Architecture frameworks, including:

- **All Enterprise Architecture** - all modeling tools and objects provided by the other Perspectives in this group
- **ArchiMate**, supplying Patterns for:
  - 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:
  - A Starter Model
  - The Architecture Development Method
  - The Enterprise Continuum
  - The Technical Reference Model
  - Catalogs
- **The Zachman Framework**
- **GRA-UML annotations library and starter model**

### Information Exchange

The Information Exchange category supports a number of built-in technologies, providing Perspectives and basic model Patterns for:

- **All Information Exchange** - all modeling tools and objects provided by the other Perspectives in this group
- **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 (UPCC)**
- **UMM 2.0 Profile**

### Publishing

The Publishing category provides Perspectives for communicating information on the model, including:

- **All Publishing** - all modeling tools and objects provided by the other Perspectives in this group
- **Document Reports**
- **Standard Charts**
- **Dynamic Charts**
- **Diagram Legends** to define how diagram legends are set up and used
- **Model Glossary**

### Construction

The Construction category provides these Perspectives:

- **All Construction** - all modeling tools and objects provided by the other
<table>
<thead>
<tr>
<th>Perspectives in this group</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Project Management, for Project Management and Roadmap diagrams</td>
</tr>
<tr>
<td>- Kanban Features workflows</td>
</tr>
<tr>
<td>- Reviews and Discussions to define the structure and function of these team collaboration activities</td>
</tr>
<tr>
<td>- 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</td>
</tr>
<tr>
<td>- Test Management to define how tests are planned and managed</td>
</tr>
<tr>
<td>- Change Management to define a model for managing issues and changes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Management category provides Perspectives to support:</td>
</tr>
<tr>
<td>- All Management - all modeling tools and objects provided by the other Perspectives in this group</td>
</tr>
<tr>
<td>- Data Miner</td>
</tr>
<tr>
<td>- SPEM</td>
</tr>
<tr>
<td>- Process Guidance - working up process templates</td>
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<tr>
<td>- The MDG Technology Builder</td>
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<tr>
<td>- Model Add-Ins</td>
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<tr>
<td>- Threat Modeling</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>My Perspectives</th>
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</thead>
<tbody>
<tr>
<td>The 'My Perspectives' category holds the Perspectives that you have created for yourself, using the 'Design &gt; Model &gt; Perspectives &gt; Manage Perspectives' option. For further details, see the Customizing Perspectives Help topic.</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Ribbons</th>
<th>Design &gt; Model &gt; Perspectives &gt; Single Perspective (takes you to the Perspective Portal) &gt; &lt;perspective group&gt; &gt; &lt;perspective&gt;</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Design &gt; Model &gt; Perspectives &gt; Model Wizard &gt; Model Patterns &gt; Perspective</td>
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<td></td>
<td>Explore &gt; Portals &gt; Perspectives &gt; &lt;perspective group&gt; &gt; &lt;perspective&gt;</td>
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<td></td>
<td>Design &gt; Model &gt; Add &gt; Model Wizard &gt; Model Patterns &gt; Perspective</td>
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<thead>
<tr>
<th>Context Menu</th>
<th>Right-click on Package &gt; Add a Model using Wizard &gt; Model Patterns &gt; Perspective</th>
</tr>
</thead>
</table>

| Other                                                                 | Start Page | Open a Portal | Perspective Portal | <perspective group> > <perspective>  |
|-----------------------------------------------------------------------|------------|---------------|--------------------|
|                                                                        | (Top right corner of screen) > <perspective group> > <perspective>  |
|                                                                        | Navigator Toolbar : > <perspective group> > <perspective>  |

In the 'New Diagram' dialog, click on the Select From button and select the required Perspective

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 the individual Perspectives - or complete Perspective Sets - that you do not need from display in the Model Wizard and selection lists. You do this using the 'Perspective Sets' dialog:

Design > Model > Perspectives > Manage Perspectives

The 'Perspective Sets' dialog defaults to the 'System' 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, in the 'Perspectives' panel, deselect the checkbox against the Perspective name. 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 to display the 'Perspective Sets' dialog, and click on the Reset All button or
- Select ➤ 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 boasts a wide range of system (built-in) Perspectives, as users and teams gain more experience with the huge number of technologies and features in the tool, or their roles change, they might want to create their own personal or model based Perspectives more specifically tailored to their area of work, or to expose Technologies they have recently imported. Enterprise Architect provides the ability for Perspectives to be completely customized down to the level of the items that appear on a technology Toolbox page, and these definitions can be created once and then reused by different team members or even across different repositories.

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.

You can create custom Perspectives for your own personal use, or for all model users, and move or copy individual Perspectives between the two levels. You can also publish custom Perspectives, exporting them as a set from one model and importing them as a set into other models.

The procedures for working with personal custom Perspectives and model-level custom Perspectives are the same, except where specifically stated in this topic.

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.
Create Custom Perspective

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click on the New button. The 'Create Perspective' dialog displays, prompting you for the name of the new Perspective. Type in the Perspective name.</td>
</tr>
<tr>
<td></td>
<td>In your Perspective, you can restrict the creation of constructs (types of diagram, element, connector and Pattern) from within other Technologies. (See the Restrict Custom Perspective section later in this topic.)</td>
</tr>
<tr>
<td></td>
<td>If you want to do this, select the 'Strict' checkbox.</td>
</tr>
<tr>
<td></td>
<td>Click on the OK button. The name is added to the 'Perspective' panel.</td>
</tr>
<tr>
<td></td>
<td>If you have selected the 'Strict' checkbox for a Perspective, the word 'Yes' displays in the 'Strict' column and the Restrict button is enabled.</td>
</tr>
</tbody>
</table>
2. Click on the Perspective name, and then on the + button. The 'Select MDG Technologies' dialog displays.

3. Select the 'Add' checkbox against each MDG Technology to include in the Perspective Set. You can click on the All button and then deselect the checkbox against each Technology to omit, or click on the None button to clear all selected checkboxes and then re-select those against Technologies you want to keep.

4. If you want to group your selections by Technology, click on the 'Group Categories by Technology' checkbox.

5. When you have added the necessary Technologies to the Perspective, click on the OK button. The Technologies in the new custom Perspective are listed in the 'Technologies' panel in alphanumerical order.

5. If you prefer to:
   - 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 Perspective name and click on the red X button to redisplay the 'Select MDG Technologies' dialog, listing just the Technologies that are in the Perspective; clear the 'Add' checkbox against each 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

   You can also edit the Perspective name, and clear or select the 'Strict' checkbox; right-click on the Perspective name and select the 'Edit' option. The 'Edit Perspective' dialog displays, on which you can overtype the name and/or alter the checkbox selection. Then click on the OK button.

6. Click on the Save button and, if you have finished setting up or changing a Perspective, click on the Close button.
Restrict a Custom Perspective

Enterprise Architect is a tool for all seasons and is used to create models for initiatives of all sizes, from small endeavors such as a website for a small retail store right up to highly complex systems used in aerospace missions. Many of the supported languages and technologies also have this dimension, defining mechanisms for simple grammars through to extremely complex mechanisms for modeling large real-time systems.

Enterprise Architect provides the Strict Perspectives as a mechanism to restrict users to just the subset of the technology and the tool that they need to undertake their modeling tasks. For example, there might be a group of strategic modelers who just need to model straight-through processing. They only need access to the basic BPMN modeling palette such as Activities and Control Flows, and are not concerned about Pools, Lanes Gateways and Message Flows, for example, and certainly don't want to see Choreography diagrams. The librarian could set up a Strict Perspective restricted to just these modeling elements, connectors and diagrams.

To set a custom Perspective to 'Strict', click on the Perspective name and click on the Restrict button. The 'Modeling Permissions/Restrictions' dialog displays, listing the constructs (diagram, element, connector and Pattern) of each Technology in the Perspective.

Click on the type of construct for each Technology in turn, and in the lists in the right-hand panel select the checkbox against each type of element, relationship, diagram, link rule or Pattern to allow in the Perspective. If it makes the process easier, use the All button or None button to select all checkboxes or clear all checkboxes before checking or clearing individual entries.

When you have finished setting the allowed constructs, click on the OK button to return to the 'Perspective Sets' dialog.

Publish Custom Perspectives
If you have custom Perspectives in one model, you can publish them by exporting them as a set to file and importing them into other models.

1. On the appropriate tab ('Model-Based Sets' or 'Personal Sets'), click on the Publish button to display the 'Publish Perspectives' dialog.

   ![Publish Perspectives dialog]

2. In the 'File Path' field, type in or browse for the location of the external file:
   - From which to import previously-captured custom Perspectives, or
   - Into which to export the current set of custom Perspectives

3. Select the appropriate radio button for the import or export operation you are performing.

4. If you are importing Perspectives from the file, and they might clash with existing Perspectives in your model, select the 'Generate new perspective id' checkbox to give each imported Perspective a different ID.

5. Click on the OK button. The exported Perspectives are copied to the specified file. Imported Perspectives are listed on the 'Perspective' panel of the 'Model-Based Sets' or 'Personal Sets' tab, as appropriate.

**Move or Copy Custom Perspectives**

If you have created a Perspective in either the 'Model-Based Sets' tab or the 'Personal Sets' tab, you can move or copy that Perspective from its source tab to the other. You might move a Perspective to make yours available to other users, or to restrict a model Perspective to your own use, or copy the Perspective and edit it to create a variant for general or personal use.

Right-click on the selected Perspective to move or copy that Perspective, or click in the white space of the 'Perspective' panel to move or copy all Perspectives in the list. A short menu provides options to move or copy the Perspective to the alternative group - 'Model-Based Sets' or 'Personal Sets'. Click on the appropriate option; the move or copy takes place immediately and the Perspective name is displayed in the target panel.

**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 'Model-Based Sets' or 'Personal Sets' 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.
Perspectives can be integrated with User Security, allowing administrators and librarians to define the set of Perspectives available to a given security user group. This ensures that users in the group have all the tools and languages they need, whilst helping them focus on their work by completely hiding any irrelevant tools that might otherwise be distracting. This results in productivity gains, while still allowing the modelers to switch between Perspectives that have been assigned to them. So, for example, a security group called Strategic Process Modelers could be defined and an administrator could assign to it the entire Strategy Perspective set and the Decision Modeling Perspective from the Requirement set. All users assigned to this group would have access to, and be able to switch between, the individual Perspectives or, by selecting All, would be able to access the technologies in all their Perspectives. Users who have been assigned as members of a number of groups will have available to them the amalgam (union) of all their groups' Perspectives.

An administrator or librarian who has defined fine-grained technologies using the strict and restricted feature can apply these restricted Perspectives to any group, thus ensuring that the members of the group have only the restricted set of elements, connectors and diagrams from the specified technology. For example, there might be a group of strategic modelers who just need to model straight-through processing. They only need access to the basic BPMN modeling palette such as Activities and Control Flows, and are not concerned about Pools, Lanes, Gateways and Message Flows, for example, and certainly don't want to see Choreography diagrams. The librarian could set up a Strict Perspective restricted to just these modeling elements and connectors and diagrams. They then apply it to the group Strategic Process Modelers and ensure the users are made part of that group using the 'Security Users' dialog, available from the 'Configure' ribbon. This gives an administrator fine grained control of what parts of the language their project team can use, resulting in boosts in productivity and outputs.

The model administrator can similarly tailor the ribbons available to each user security group, as a Ribbon Set for each group, so that particular ribbons can be hidden to further customize and focus the modelers' workspace.

It is important to note that the 'hidden' technologies are not disabled - the model is still logically correct and fully supported for every underlying technology; it is simply that a particular security group will not be able to model using the hidden technologies.

This feature is available in the Corporate, Unified and Ultimate Editions of Enterprise Architect, from Release 15.0.

### Access

<table>
<thead>
<tr>
<th>Ribbon</th>
<th>Design &gt; Model &gt; Perspectives &gt; Manage Perspectives &gt; Group Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On the 'Perspective Sets' screen, The 'Perspective Settings for Security Groups' panel displays, listing the existing security groups for which Perspective Sets have been defined. (Existing security groups that do not have a Perspective Setting will show in the list if the 'Hide Unconfigured' checkbox is deselected.)</td>
</tr>
</tbody>
</table>
Notice that in the 'Perspective Set' column against the security group 'Authors' the value 'Authors' indicates the Perspective Setting that exists for that group.

At the top of the list is the group '<Model Default>', which enables you to refine the Perspectives and ribbons available to all users of this model - it is effectively an 'all model users' security group.

Create or Edit a Perspective Setting for a Security Group

1. Click on the required security group name, then click on the icon on the right of the field in the 'Perspective Set' column. The 'Perspectives for Security Group' dialog displays.
The dialog lists all of the Perspective Sets available in Enterprise Architect and, when you click on the name of a Perspective Set, all of the Perspectives available in the selected set (as shown for the ‘Analysis’ Set). All Sets and Perspectives have checkboxes, which initially are all selected.

2. To make a complete Perspective Set unavailable to users in the security group, click on the corresponding checkbox to clear it.

3. To make individual Perspectives unavailable within an active Perspective Set, click on the corresponding checkboxes to clear them.

4. Work through all the Perspective Sets to define all the Perspectives that are not available to the users in the security group. If you want to reset all unselected checkboxes to selected, click on the Reset All button.

5. When you have defined the Perspective Setting, click on the 'Perspective Group Name' field and type in a name for the Perspective Setting for the security group.

6. Click on the OK button. The 'Perspective Settings for Security Groups' tab of the 'Perspective Sets' screen redispays, with the name of the Perspective Setting in the 'Perspective Set' field for the selected security group.

7. You can repeat the process for another user security group.

8. When you have set up your Perspective Settings for the security groups, click on the Close button to close the 'Perspective Sets' screen.

Create a Ribbon Set for a Security Group

This process is similar to that for creating a Perspective Setting for a security group.

1. Click on the required security group name, then click on the ... icon on the right of the field in the 'Ribbon Set'
column. The 'Ribbon Set for Security Group' dialog displays.

![Ribbon Set for Security Group dialog]

The dialog lists all of the ribbons available in Enterprise Architect and, when you expand the name of a ribbon, all of the option panels available in the selected ribbon (as shown for the 'Design' ribbon). All ribbons and panels have checkboxes, which initially are all selected.

2. To make a complete ribbon unavailable to users in the security group, click on the corresponding checkbox to clear it.

3. To make individual option panels unavailable within an active ribbon, click on the corresponding checkboxes to clear them. Clearing all the panel checkboxes for a ribbon also hides the complete ribbon (you cannot display an empty ribbon).

4. Work through all the ribbons to define all the option panels that are not available to the users in the security group. If you want to reset all unselected checkboxes to selected, click on the Reset All button.

5. When you have defined the Ribbon Set, you can also identify one ribbon as being the default that is shown whenever users in the selected security group open Enterprise Architect. Click on the drop-down arrow in the 'Default Ribbon' field, and select the required ribbon name.

6. Click on the OK button. The 'Perspective Settings for Security Groups' tab of the 'Perspective Sets' screen redisplays, with the name of the Ribbon Set in the 'Ribbon Set' field for the selected security group.

7. You can repeat the process for another user security group.

8. When you have set up your ribbon sets for the security groups, click on the Close button to close the 'Perspective Sets' screen.

Notes
• Only model administrators can edit these settings
• You cannot hide the 'Start' ribbon, 'Specification - Specify' ribbon or 'Document - Edit' ribbon, or any panels that they contain
• If the 'Configure' ribbon is hidden, the Model Administrator's login overrides that to ensure that the administrator can administer the model
• Using the Reset All button for a Perspective Setting or Ribbon Set effectively cancels any special settings for the security group, and gives the member users access to all Perspectives and ribbons