Enterprise Architect 12.1

Ultimate Modelling/Lifecycle Platform

Announcing the release of Enterprise Architect 12.1, which includes hundreds of new enhancements and technologies.

Enhanced tools for Enterprise Architecture coding, database development, reporting and simulation for the Software Engineer
Take on the role of a Business Analyst or a Requirements Engineer as we introduce Enterprise Architect 12.1
For realtime and embedded Systems Engineers and Designers, Enterprise Architect is packed full of enhancements and features!

We invite you to preview this release of Enterprise Architect 12.1!

- Diagram Auto Coloring: A convenient method to convey model information using the automatic application of visual cues and colors.
- Analyse business priorities with Heat Maps: For easier decision making. Diagnose performance of business segments and architecture based on area and color.
- Connect with multiple external models: Concurrently to source Chart data from within the model. Enterprise Architect becomes the ultimate project dashboard and reporting center.
- Windows Phone wireframe: Model and design wireframes specifically tailored for Windows Phone.
- Enhanced Project Management: With customizable Roadmap Diagrams to expand enterprise planning and portfolio management, improved Kanban diagrams with sublanes for grouping and improved readability and Gantt Charts to cater for multi-year projects.
- Support for BPSim 1.0: For parameterization and exchange of process analysis data. Compare and reuse different simulation configurations stored in the model. Export for use in 3rd party engines. BPSim configuration screens for multiple perspectives.
- SysML 1.4 support added: This powerful systems engineering capability allows for quick and simple creation of SysML 1.4 models.

See inside for much more.........

Download Enterprise Architect 12.1 from:
www.sparxsystems.com/ea12.1
## Diagramming

- **Auto Coloring and easier visualisation with Diagram Legends**
  - Apply a legend to specific element
- **Color on element properties such as phase for a specific value or a range of values**
- **Specify which visual properties will be altered based on matching values including fill color, line color and line width.**
  - Apply a legend to any specific element or connector type for more flexibility in how diagrams are presented.
  - Differentiate between elements and connectors by setting fill color, line color and line thickness.
  - Diagram Legends can now match ranges when setting colors, e.g. phase 1..3 can be set to blue, 8..10 can be set to red.
- **Diagramming Enhancements**
  - Apply a tiled background image to the current diagram only
  - Improved Metafile rendering

## Info View

- **Virtualized Connector Ends**
  - Virtualize elements on a diagram to show a connected element multiple times on the one diagram, providing a cleaner layout when an element participates in many relationships.

## Wireframing for Windows Phone

- **Model and design wireframes** specifically tailored for Windows Phone.
- The toolbox provides a base illustration screen type that can be dropped onto a diagram. Add controls for text, images, buttons, hyperlinks, etc. to build your mockups.
- The properties dialog for each component gives you access to customization options including sizing, text, color, etc.
  - Link the wireframes with requirements and use cases to build up your complete Windows Phone experience at design time.

## Other Diagramming Enhancements

- Apply a tiled background image to the current diagram only
- Improved Metafile rendering

## Interoperability

### Schema Composer

- **Capabilities provide further automation and improved support for open standards such as CIM, NIEM and UN/CEFACT.**
  - **CIM**
    - CIM Schemas can now be reverse-engineered to create Schema Composer profiles.
    - When loading classes into the Schema Composer from Message Assemblies or from Class Diagrams, all classes referenced through inheritance and associations are also loaded, ensuring the inclusion of all classes required for generation of valid schemas.
  - **National Information Exchange Model (NIEM)**
    - Subset creation now automatically includes the target of a References relationship when adding a derived attribute and any supertypes that are part of the same namespace when adding a type.
  - **UN/CEFACT UML Profile for Core Components (UPCC)**
    - Schema generation of Business Data Types (BDTs) supports mapping of Supplementary Component (SUP) attributes.
    - Subset generation now creates basedOn relationships between BDT's and their source Core Data Type (CDTs) and also between Aggregate Business Information Entities (ABIEs) and their source Aggregate Core Components (ACCs).

## Project Management

### Roadmap Diagrams

- Expand enterprise planning and portfolio management
  - Visualize release cycles, state changes and project life cycles.
  - ‘Legend Auto Color’ adds a further dimension to the roadmaps.
  - Segment “fill” and line colors highlight element state progress on the one visual timeline.

### Kanban

- Improved Kanban diagrams with sublanes
  - Use sublanes to assist with grouping in each classification.
  - Split long columns into sublanes for greater readability.
  - Edit sublanes using the ‘Swimlanes, Matrix and Kanban’ dialog via the “right click” context menu on the Kanban lane.
  - Copy sublanes from one lane to another.

### Gantt

- New ability to cater for long term projects spanning many years
  - View time-scale from days to years or decades.
  - Visualize projects that run over extended periods of time.
  - Adjustable time scale.
Diagnose underperforming business segments or architecture, then develop and implement appropriate intervention strategies.

Communicate areas of importance to all key stakeholders before they appear on balance sheets or productivity reports.

Enterprise Architect’s Heat Maps can be populated using a package of elements, by a custom SQL statement or by directly entering comma separated values into its properties. Each Heat Map can have a custom color set applied, or use the auto-color option to let Enterprise Architect automatically generate the color palette.

Validation of the current XML doc against a schema and formatting available in context menu

Identify business areas that will provide the best return on investment in terms of human and financial resources.

Heat Maps are ideally suited to improving management and allocation of resources.

Heat Maps can be used to visualize model elements, custom SQL or CSV data in an easy to read format. Use simple visual cues, such as color and relative size, to convey information that can facilitate decision making, identify risk and improve analysis.

Specification Manager

Specification Manager enhancements simplify editing, navigation and usability. The Project Browser selection is now synchronized with the Specification Manager selection, making it easier to open specific packages within the Specification Manager. The management of hyperlinks within notes and scrolling behavior has also been significantly improved. An updated context menu brings new flexibility to how you can use the Specification Manager. Use the Specification Manager to change font color, add bullets and numbering or even add Tagged Value columns.

Model Wizard

Customized Patterns

Conveniently set up new models, especially when setting up large complex structures where each Pattern contains numerous packages and sub-packages. ‘Select Packages’ dialog offers greater control over the selection of Packages to add to your model, providing increased customization when building your project.

For multi Pattern selection the dialog displays for each Pattern in turn - if no Package checkboxes are selected, all Packages in each Pattern will be imported into the model.

Project Security

Support for synchronization between the Enterprise Architect Security Groups and Active Directory Groups.

New team members added to an Active Directory Group can be synchronized into the project Security Group where Security Group Management presents permissions and member details, showing group associations and allowing "sort by date".

Database Engineering

Capability enhancements across a range of popular DBMSs.

- New functionality in the Database Builder improves usability and performance
- DDL Generation dialog now supports sorting objects by stereotype and name
- Inclusion of unique DBMS structure types for MySQL, PostgreSQL and Oracle
- Introduction of reverse engineering capability for MSAccess 2013

Refinement of Reporting

More than 35 updates including reporting tagged values specific to packages and options for specific elements to be omitted from associated documentation. Document script fragments can now also be utilized within the Enterprise Architect Document Generator to produce fragment contents as RTF, thus increasing customization capabilities of document reports.

Other Reporting refinements include:

- Customization of heading levels within Table of Contents
- Inclusion of Element Status colors within documents

Improved Automation Interface

Tighter integration and a more streamlined approach to creating customized extensions.

Additional style properties have been exposed through the API, giving extensions access to set colors, line widths and display properties for DiagramObjects and DiagramLinks

New Get and Set methods within the DocumentGenerator API, streamline access to project constants.

The DocumentGenerator now supports inclusion (insertion) of existing documents into the generated document.
SysML 1.4 Support

Through its integrated MDG Technology for SysML 12.1 allows for quick and simple creation of SysML 1.4 models.

Support for earlier versions of SysML has also been enhanced, with additional features and functionality. Multiplicity for SysML 1.2 and 1.3 ports displayed in a compartment on their parent block.

On Parametric diagrams, SysML 1.3 Properties owned by constraint blocks or constraint properties are now drawn as a small box with an external label.

The ID and Text values of SysML requirements can now be displayed in the Summary window and can now be edited from within the Specification Manager.

Behavior of copies of SysML requirements updated such that Text tagged value on copies is pinned and updated as the original is updated.

NIEM 3

Enterprise Architect 12.1 supports and implements the NIEM 3 UML profile based on the OMG NIEM-UML 1.1 Specification. Model Package Descriptions (MPDs) are now defined instances of predefined classes and the relationships between them:

- Provides a much more flexible approach to define common properties between multiple MPDs whose properties are specified by any combination of connected objects and child objects.
- Model Wizard includes package containing standard MPO classes and template MPD description to use as a base for your own definitions.

Model Framework Patterns Updated:

- NIEM 3.1 Framework model now available
- NIEM 3.0 and 2.1 Framework models updated to improve Schema Composer usage

Schema Generation of both NIEM 2 and 3 improved:

- Generated schema will now match the targeted version conventions and imports
- NIEM schema import added:
  - Imports a NIEM XML schema with dependencies using conventions for NIEM Platform Independent Model Schema Composer updated to copy subsets relationships between attributes of Property Holders to the subset model

Generated schema.

BPSim 1.0 Support

BPSim is a specification for parameterization and exchange of process analysis data, allowing the creation, comparison and reuse of different simulation configurations stored within the model. It takes into account a wide range of runtime information such as statistical information, random variations, queuing, scheduling and resources. BPSim configurations can be exported from Enterprise Architect for consumption in a 3rd party simulation engine.

The BPSim toolset provides flexibility in assigning operating information to a model, and in assessing the quality of the solution based on results from a compliant BPSim engine.

The BPSim configuration screens have been divided into multiple perspectives, each focusing on one aspect of the setup process at a time. The Control Perspective defines how activity flows through the process, moderated by the likelihood of a sequence of events and the priorities of certain events. The Temporal Perspective defines how the duration of one or more phases in the processing of an Activity influences the business process. The Resource Perspective defines the involvement of workers and other resources along with their types, roles, required numbers, costs and availability.