



**POPKIN**  
S O F T W A R E

---

**System Architect**  
FSA-EAF  
**Encyclopedia Concepts**

## Loading System Architect

- Double click on the System Architect icon to start the application, or find System Architect under the Start, Program Files, Popkin Software menus.



### The Audit Id

If this is a fresh installation of System Architect then the **Audit Id** dialog will be displayed, otherwise the last Audit Id will be shown on the Status Bar.

To modify the Audit Id shown on the Status Bar, select the **Audit Id...** option from the **File** menu.

An ID of between 1 and 7 characters must be entered before the **OK** button becomes active.

System Architect will attach the Audit Id to every item within the encyclopedia, identifying the last user to make a change.



Figure 1 Audit Id dialog

- Enter an Audit Id.

- By default this is not a security feature, but may be used to restrict access to items within an encyclopedia that are 'checked out' to a particular Audit Id.*

System Architect will automatically open a Project Encyclopedia if it has been set to *Load at Startup*.

### Running System Architect for the First Time

If no Project Encyclopedia has been set to load at startup, then the Encyclopedia Open dialog will be displayed with the **Existing** tab active. This will indicate the last encyclopedia accessed, or the path that System Architect has been installed in.

The Directory Tree can now be searched to locate an existing encyclopedia, or the **Recent** tab can be used to select previously opened encyclopedias.

The **New** tab will allow new encyclopedias to be created.

- Press the **Cancel** button to abort the opening of an encyclopedia.

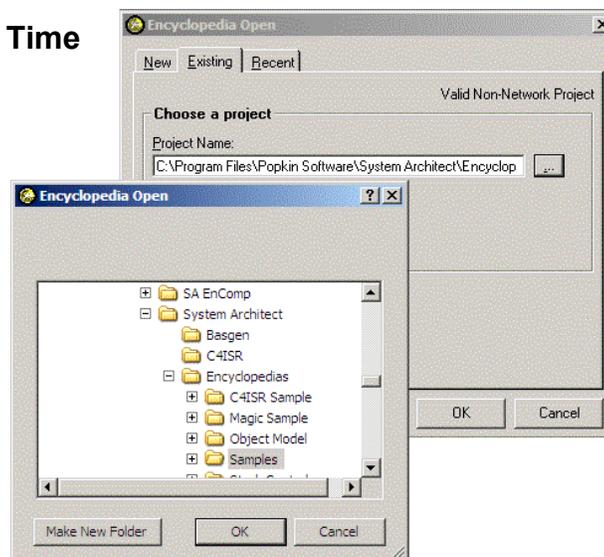


Figure 2 Encyclopedia Open dialog

## System Architect Window Components



**Figure 3** The System Architect Window Components

**Title Bar** A standard Title Bar displaying the application and the current encyclopedia path.

**Menu Bar** A dockable object containing a familiar set of menu options. Those 'greyed out' are currently unavailable.

The Menu Bar can be docked down both sides and at the bottom of the application window, or left to float.

☞ *Access to the menu options may be made using the **Alt** key.*

**Toolbars** The dockable Toolbars provide fast access to some of the menu options. The default Toolbars are; **Main Toolbar, Diagram Toolbar, Edit Toolbar, and Symbol Style Toolbar**. The 'greyed out' buttons are currently unavailable.

The Toolbars can be docked down both sides and at the bottom of the application window, or left to float.

☞ *Toolbars may also be created and customized.*

**Status Bar** Displays the name and location of a selected symbol as well as the current Audit Id.

(Not shown in Figure 3)

☞ *If a number of users share a workstation, the Status Bar should be checked to ensure that an incorrect Audit Id is not used.*



Maximize the System Architect window (if necessary.)

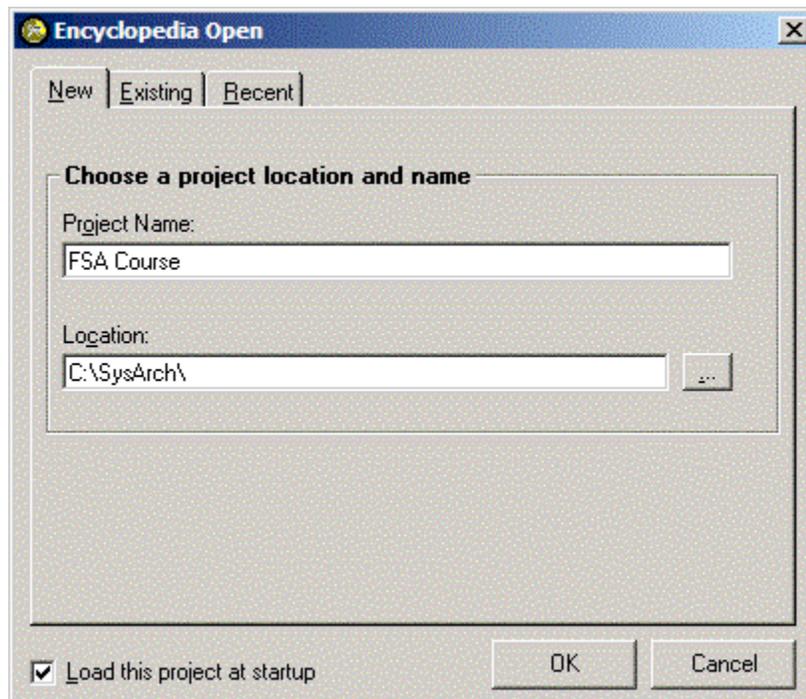
## Creating a New Encyclopedia

To open an existing encyclopedia, create a new encyclopedia, or to reopen the current encyclopedia, select the **Open Encyclopedia...** option from the **File** menu.

Alternatively use the Open Encyclopedia... button  on the Main ToolBar.

The **Encyclopedia Open** dialog will then be displayed.

 Access the Encyclopedia Open dialog and click on the **New** tab.



**Figure 4** The Encyclopedia Open dialog - New tab.

A path to the location of the New Encyclopedia may now be entered. The Browse button may be used to search for an existing path and to create new subdirectories.

 *System Architect can create multi-level directories.*

The **Load this project at startup** checkbox may be used to store the encyclopedia path in the SA2001.ini file. This encyclopedia will then automatically open the next time System Architect is started.

 Create an **FSA Course** Project as shown in **Figure 4** and ensure that it loads automatically next time System Architect is used.

The **Browse** and **Browse Detail** windows should appear docked on the left edge of the Application Window.

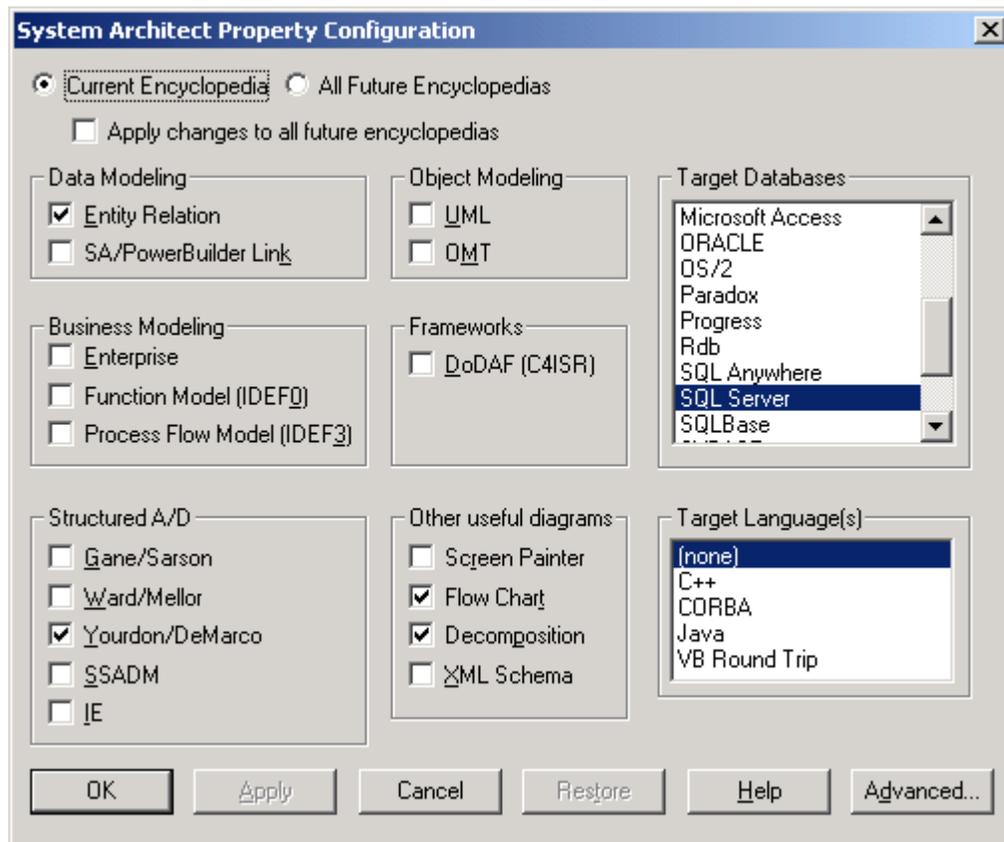
 *Normally, when creating a new encyclopedia, it will be necessary to accept or modify its 'Property Configuration'.*

## Selecting Diagrams and Property Sets

System Architect provides support for a vast array of diagrams and methodology notations. A Property Configuration dialog is provided that controls the diagrams and property sets that are made available within an encyclopedia.

## Customize Method Support

To change the list of available diagrams, select the **Customize Method Support** option from the **Tools** menu and then select the **Encyclopedia Configuration...** option.



**Figure 5** The Property Configuration dialog set for FSA based Encyclopedias



**Customize the current Encyclopedia to support the Methods and diagrams shown above.**



*If the **Apply changes to all future encyclopedias** checkbox is enabled, then the master `SAddeclar.cfg` file in the System Architect subdirectory will be changed as well as the copy in the encyclopedia's subdirectory.*

Diagram and Property Set selections may be customized further by clicking on the **Advanced...** Command Button.

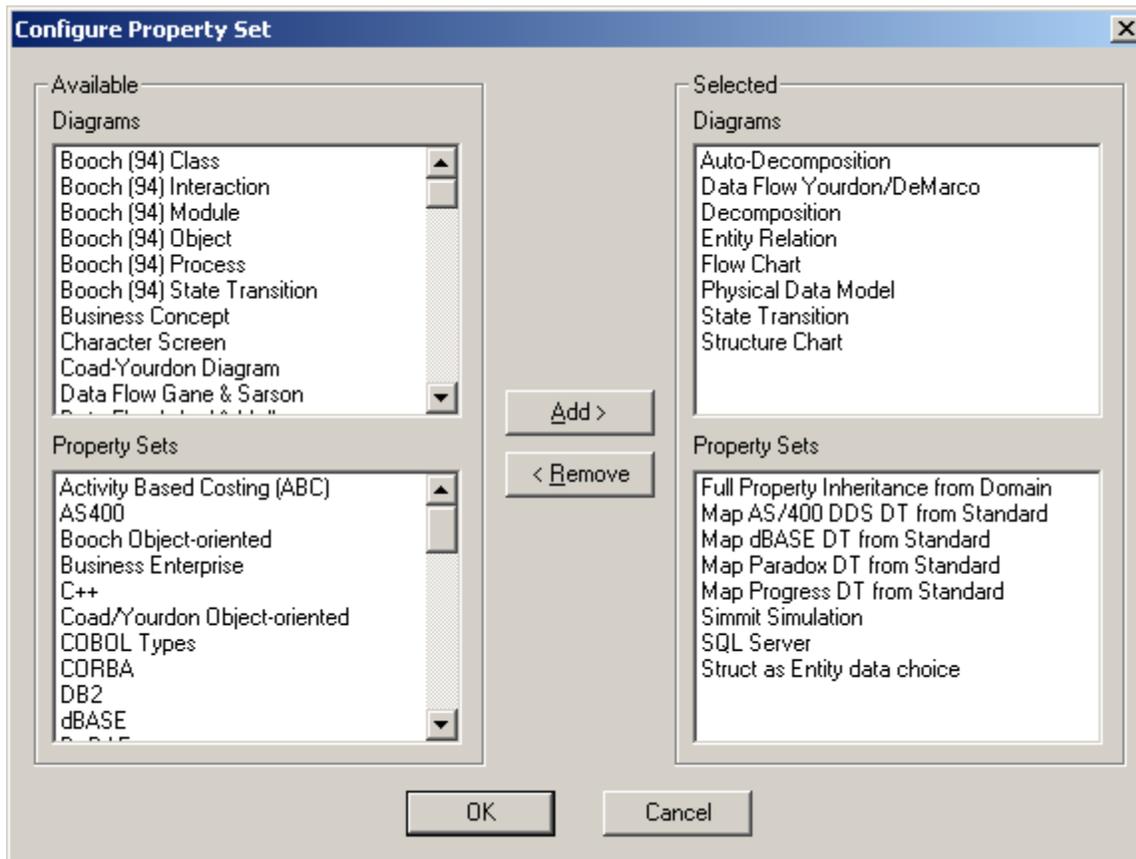


Figure 6 - Configure Diagrams and Property Sets dialogue

Changes made to the current encyclopedia will not be implemented until it has been reopened.

Exit out of the dialogues by selecting OK and re-open the **FSA Course** encyclopedia

# Enterprise Architecture Framework

## Framework Overview

Over the last few years, users of System Architect have become more aware of the growing need to develop integrated models of their business in order to remain competitive and flexible to change. To this end, interest in industry accepted Enterprise Architecture Frameworks has spiraled. Examples of these frameworks are:

- **The Zachman Framework**
- **The DoDaf C4ISR Architecture Framework (C4ISR)**
- **The Treasury Enterprise Architecture Framework (TEAF)**
- **The Federal Enterprise Architecture Framework (FEAF)**

The implementation of a framework will:

- **Provide a support structure for the modeling development**
- **Enhance users experience of the tool**
- **Increases buy in from senior management within the business**
- **Simplify some complexities of the tool by compartmentalizing items**
- **Enable a corporate branding of the tool**
- **Provide a focus for work effort**

To reduce the complexity and scope of developing and using an EA, it must be subdivided so that portions may be used independently or built incrementally in separate projects. The FSA Enterprise Architecture Framework (FSA-EAF) subdivides its EA into three segments:

- **Focus:** A representation of a whole system from the perspective of a related set of concerns
- **Perspectives:** A Point of view of the overall EA representing a particular role or organizational entity
- **Work products:** Essential and supporting products required to be produced for the enterprise

Review Figure 7 on the next page, FSA identifies resources and work products that provide direction for EA development, work products constituting the EA description, and work products documenting how to accomplish an EA implementation. This matrix like breakdown organizes the subdivisions of the EA description and demonstrates the relationships among them.

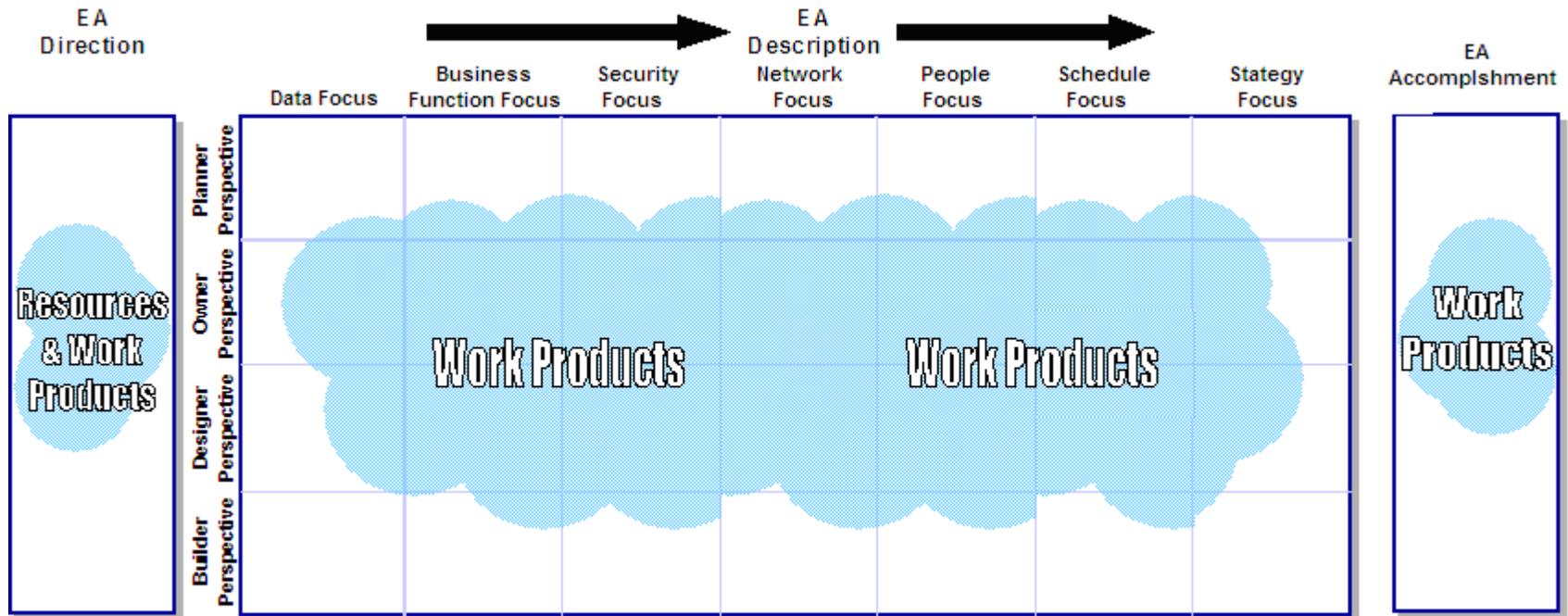
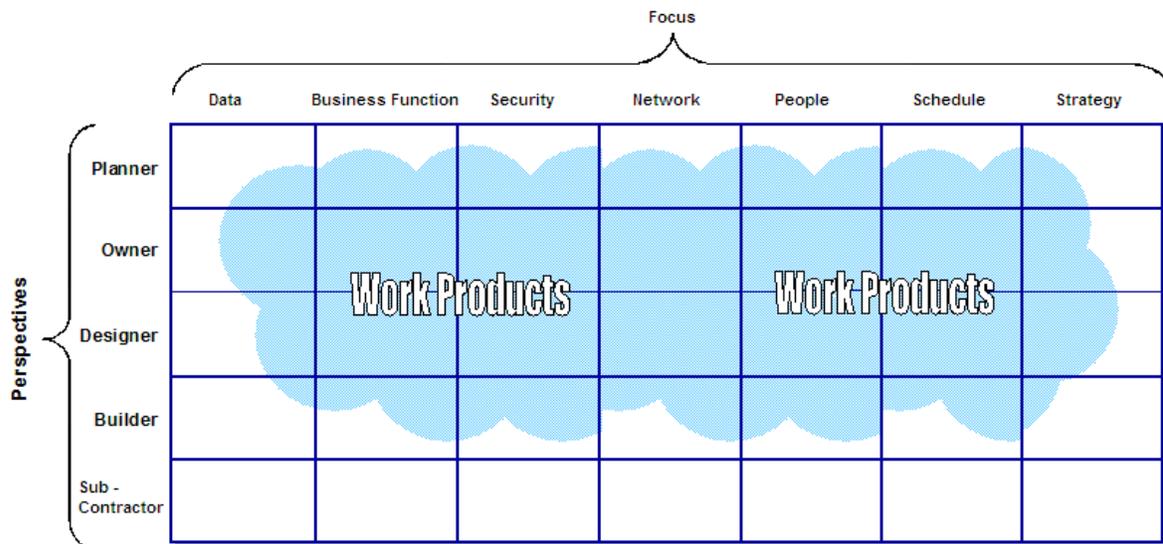


Figure 7 - Overview of EA Direction, Description, and Accomplishment

Each cell in the Enterprise Architecture Framework represents the intersection of a particular focus and a perspective. Each focus (the question what, how, where, who, when, and why) is depicted in a column and each perspective (point of view) in a row. When you ask or answer a question, your point of view determines the kind of information contained in the answer. It is the same with the perspectives in the Enterprise Architecture Framework. The perspective determines the kind of information that will be recorded in a row and/or cell. Without a proper perspective, information can never become knowledge. For example, eliminate any perspective or point of view from your mind and then try to describe "your network." What comes to mind? It could be any number of things: your network of friends and business associates, the locations of your business, the topology of the cables, routers, etc. that make up your LAN.

You can't describe your network in a useful way without a perspective. The perspectives define the point of view or the level of abstraction for the information contained in the cell. If you look across all of the cells in a single perspective, you will see all of the Enterprise's knowledge from that perspective. If the Framework is properly utilized the information and models within a single row will represent a complete description of the Enterprise from that perspective.

At the same time, each column captures all of the Enterprise's knowledge for the particular question being asked, i.e., the focus. You build the total Enterprise knowledge for each focus by isolating each focus and defining the artifacts for each perspective within it.



**Figure 8 - FSA Matrix / Views and Perspectives**

The five perspectives translate into five levels of abstraction:

- **Scope**
- **Enterprise Model**
- **System Model**
- **Technology Model**
- **Components**

When an EA description work product is shown within one cell of the FSA Matrix, it means that the main vantage points for developing that work product correspond to that column (view) and row (perspective). However, information from other views (and sometimes other perspectives) is needed to produce a work product.

		Focus						
		Data	Business Function	Security	Network	People	Schedule	Strategy
Perspectives	Scope							
	Enterprise Model	The content, structure, relationships, and business rules for the data used by the business processes, applications, and organization. It also considers the transformations needed to result in information and knowledge that the customer can use	What the customer does, how activities are carried out and in what sequence, what rules are followed, and the type of results obtained. Change in the business process domain is often a key driver for change in all the other domains	The security column is extracted from the natural origin of the business function row to address the business risks at FSA. By having a separate row for security FSA is able to keep FSA security plans private, because security should not be accessible to everyone.	Where the customer conducts business. This applies to physical facilities where people and technology reside, such as a branch office or data center, and to location types, including logical addresses such as user IDs. Locations may include customer and vendor sites as well as internal client sites		The schedule column describes the effects of time on the enterprise. It is difficult to describe or address this column in isolation from the others, especially column two.	Strategy column is business goals and strategies into specific ends and means. This can be expanded to include the entire set of constraints that apply to an enterprise's efforts.
	System Model							
	Technology Model							
	Components							

Figure 9 Views of the FSA Framework

		Focus						
		Data	Business Function	Security	Network	People	Schedule	Strategy
Perspectives	Scope	The perspective focusing on strategic plans, enterprise-level processes, key information and infrastructure important to the enterprise, and the structure of the organization and its operating locations						
	Enterprise Model	The perspective focusing on conceptual-level models of business processes, information, business logistics, and IT infrastructure						
	System Model	The perspective focusing on the logical business process design, logical information model, component and application design, and system distribution and deployment approach						
	Technology Model	The perspective considering the constraints of tools, technology, and materials. The builder must translate the designer's specifications into plans for physical implementation. The builder also focuses on integration and test.						
	Components	This is the sub-contractor's view. Here a particular language is chosen, and the program listings, database specifications, networks, and so forth are all produced.						

Figure 10 Perspectives of the FSA Framework

## System Architect Framework Support

### Introduction

To support the growing need of framework compliance, the System Architect Framework Browser has been developed to enable users to view and use both existing and user defined frameworks. User Defined frameworks are created through Userprop customizations and by using the System Architect Framework Editor.

### SA Framework Browser

The System Architect Framework Browser is a utility that enables users of System Architect to view frameworks that have been developed using the System Architect Framework Editor. The following is an example of the FSA Framework interface that users can interact with in the System Architect environment.

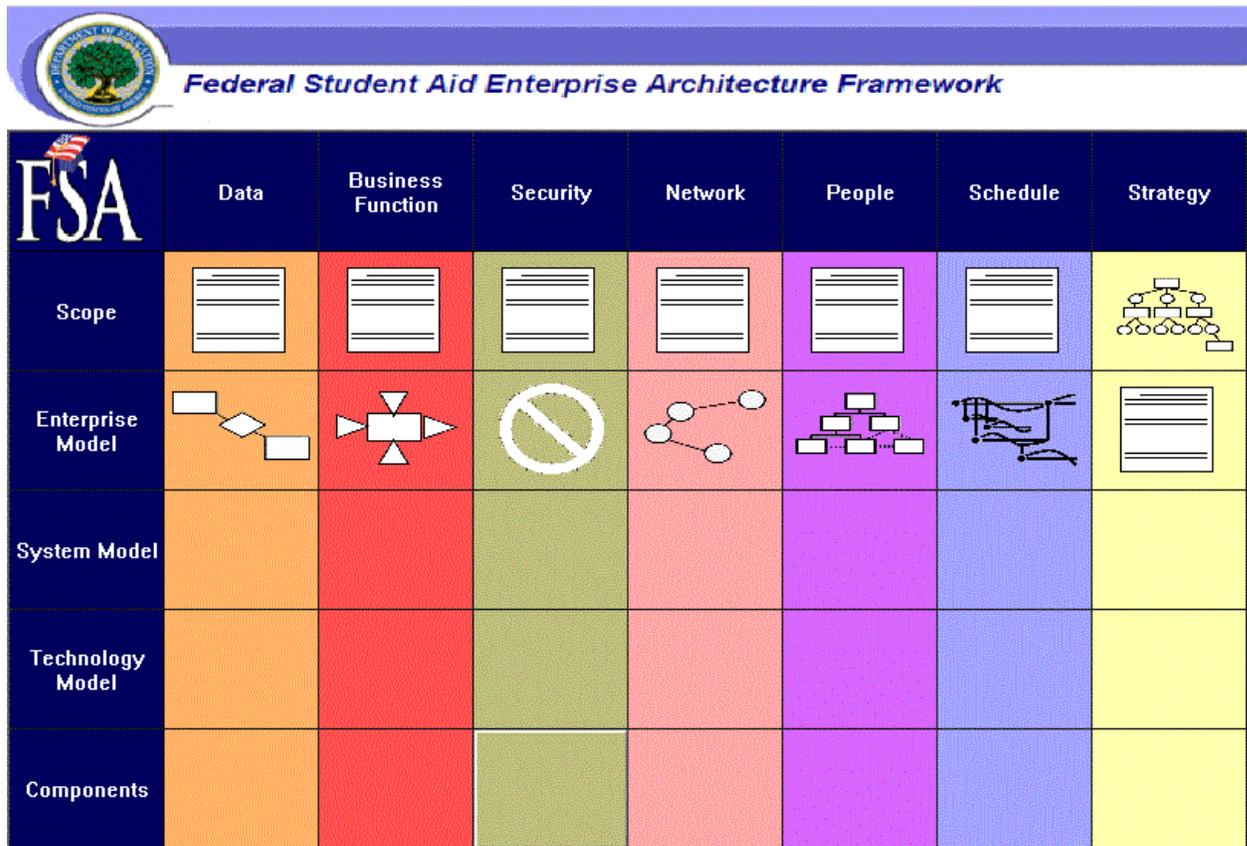


Figure 11 Example FSA Framework, created via the System Architect Framework Editor

## SA Framework Browser Interface Overview

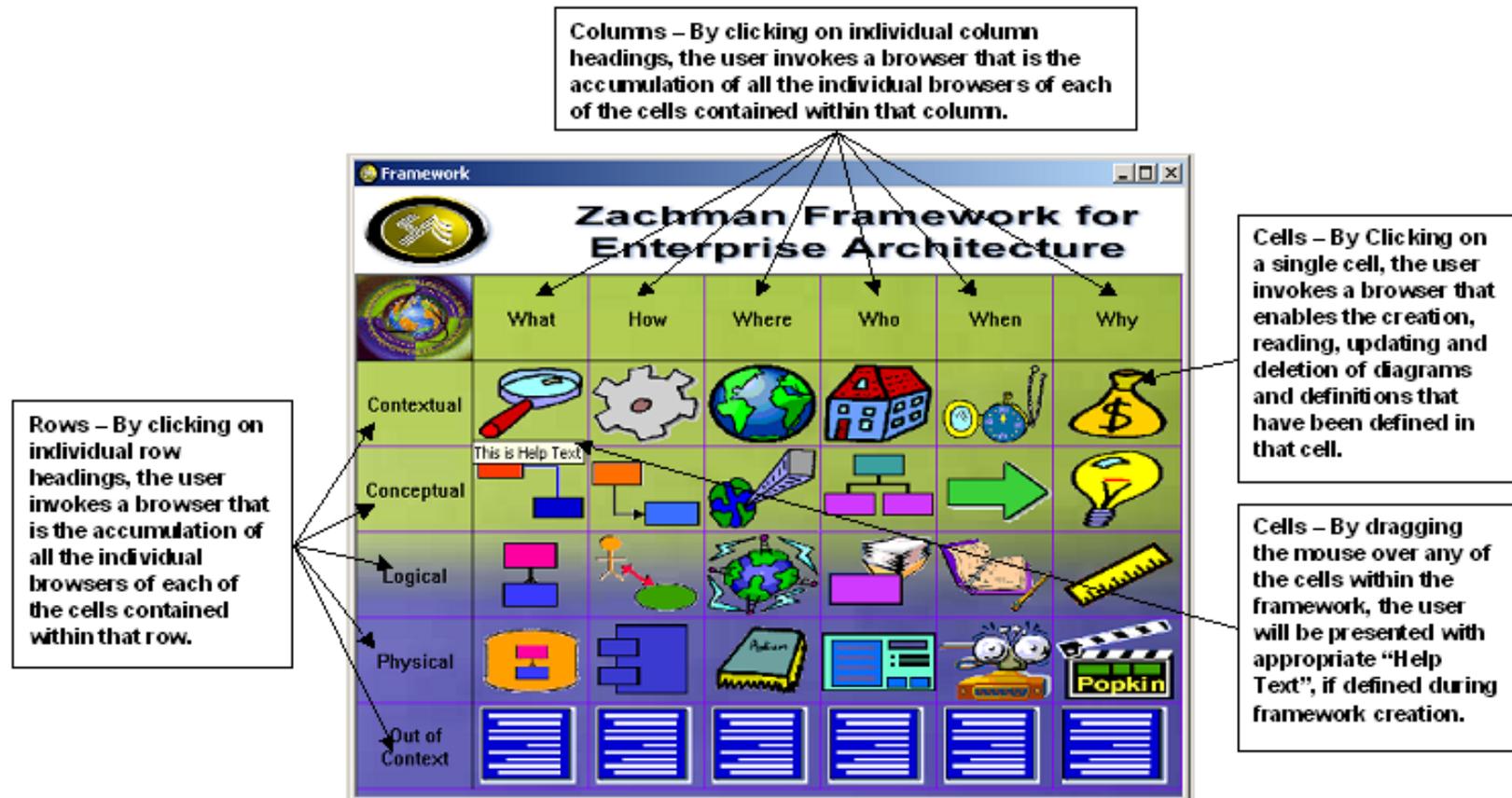
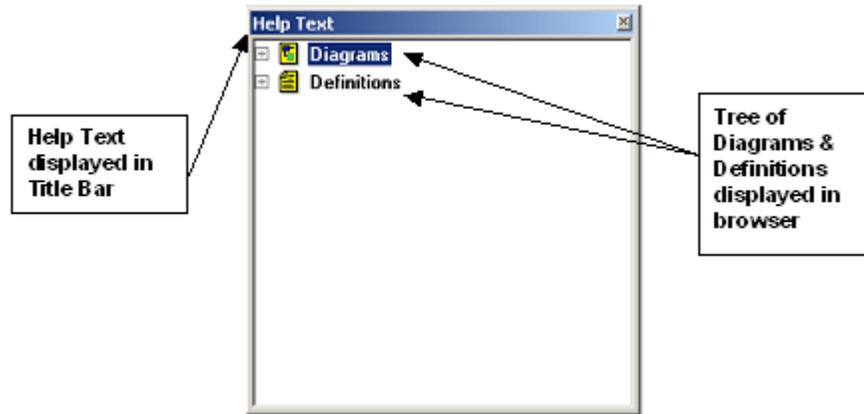


Figure 12 Framework Browser Overview Information

## How to use SA Framework Browser

The framework browser is, in essence, a grid of buttons (cells) arranged in rows and columns. Each button activates one or more browser(s) that display a focused subset of the diagrams and definitions contained within the default System Architect browser. The particular diagrams and definitions displayed, depends on the definition of each cell. More than one browser may launch if the cell contains items with different model perspectives.

The browser of each cell acts in the same way as the default browser for System Architect.



**Figure 13** Typical Cell Browser

Therefore, all actions that can be performed in the default browser are available to the individual cell browsers.

For example:

- Users can navigate the tree of diagrams / definitions by clicking on the plus sign to the left to the headings.
- Diagrams / definitions may be opened by a double click on the name or by drag and drop.
- By right clicking in the browser, the same floating menu is enabled, similar to the same action in the default System Architect browser.

Most importantly, any changes made to the contents of the encyclopaedia are updated in the default browser on refresh.

## Advanced Features

### Rows / Columns

The SA Framework Browser also enables users to select entire columns, or rows. This causes the display of a browser, which contains the accumulated content of all the individual cells contained within the column or row.

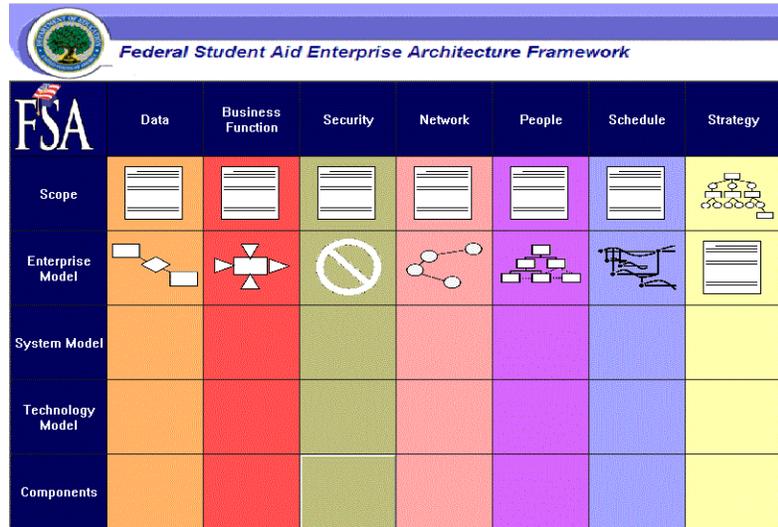


Figure 14 FSA Framework

### Special Browsers

System Architect’s browser contains a number of tabs, which delimits the view of the encyclopedia contents. The Data Modeling and UML tabs are unique in that they also implement the concept of Models and Packages respectively.

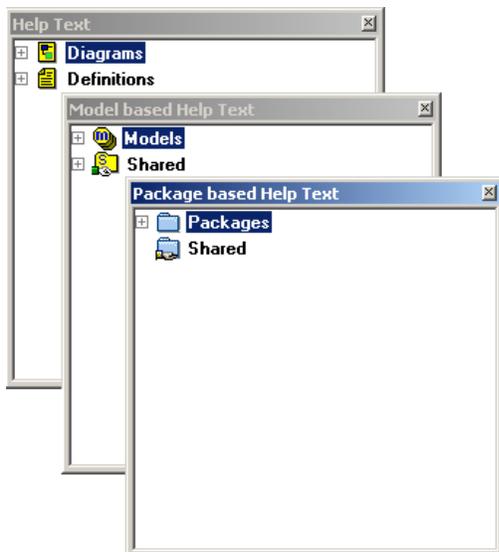


Figure 15 Multiple Browsers

This functionality is enabled within the browsers presented within the SA Framework Browser.

If a specific cell contains definitions that relate to Packages or Models, then the user will be presented with additional browsers.

## The System Architect Browser

When an encyclopedia opens the Browser will automatically appear, docked on the left hand side of the System Architect window.

The Browser is normally made up of both the **Browse** and **Browse Detail** windows.

### Moving the Browser

The Browser can be moved by selecting the title bar and dragging the browser to the desired location. It may be dropped and left to float, or docked at the top, bottom or right edges of the System Architect window.

Right clicking over the Title Bar will give access to available docking options.

### Resizing the Browser

If the Browser is floating then its window may be resized by dragging its borders. If it is docked, its free edge may be moved by selecting this edge and dragging to the desired size.

### Closing the Browser

If the Browser is not being used it may be closed to leave more room for diagrams.

The **Browser** option from the **File** menu or the Main ToolBar, or the  button can be used to close (or open) the Browser windows.



Close the Browser.

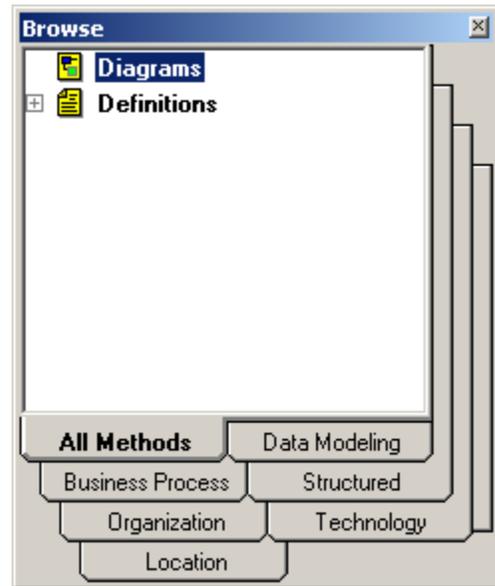


Figure 16 The Browse window

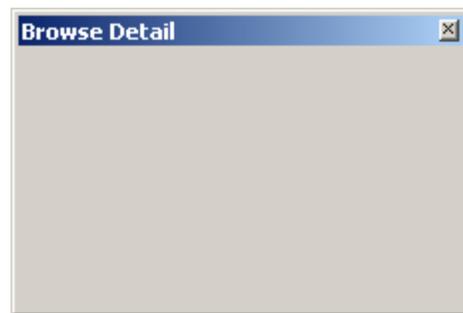


Figure 17 The Browse Detail window

## Setting Preferences

There are a number of automatic features, and a few control settings, that affect the way in which System Architect reacts during the creation and modification of diagrams.

### Preferences...

Selecting the **Preferences...** option from the **Tools** menu, will display the Preferences dialog.

During the initial stages of drawing a diagram, it may prove inconvenient to be prompted for the Associative Properties and Definitions of symbols.



Ensure that the **Associate** Checkbox is disabled.

Most symbols will require a Name to give them an identity, and it makes sense to automate the naming of symbols.



Ensure that the **Name** and **Define** checkboxes are enabled



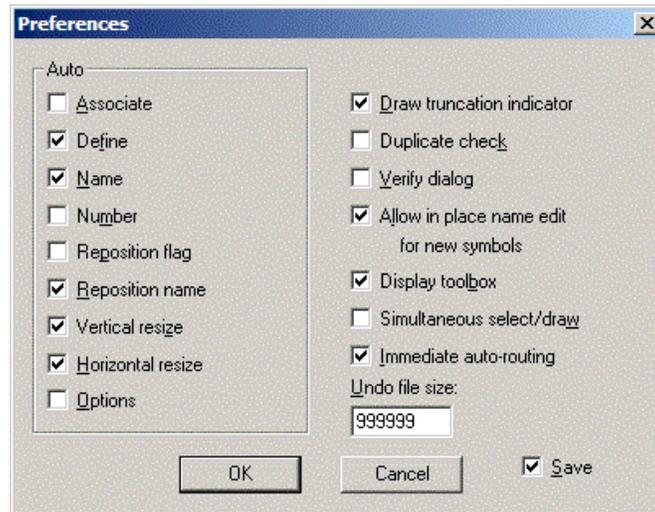
*A name will be required before most symbols can be defined..*



Also ensure that the **Simultaneous Select/Draw** is disabled and the **Immediate Auto-Routing** is enabled.



*The **Save** checkbox can be enabled to store any new changes in the SA2001.ini file, to establish them as defaults.*



**Figure 18** The Preferences dialog

## Working with Diagrams

Diagrams are an important part of the encyclopedia, (though it is possible to populate the Data Dictionary without using diagrams). System Architect supports the Creation, Saving, Closing and Deletion of any diagram that is currently selected in the Method Support.

### Creating a New Diagram

To create a new diagram from the default browser, perform one of the following:

- Select the **New Diagram** option from the **File** menu,
- Select the **New Diagram** option from the Diagram toolbar,
- Open the Browser, highlight the Diagrams option, right-click to access its floating menu and select **New**,
- Drag the diagram icon and drop it over a blank area of the application window.

 Create a **Business Process** Diagram and name it “**Diagram 1**”

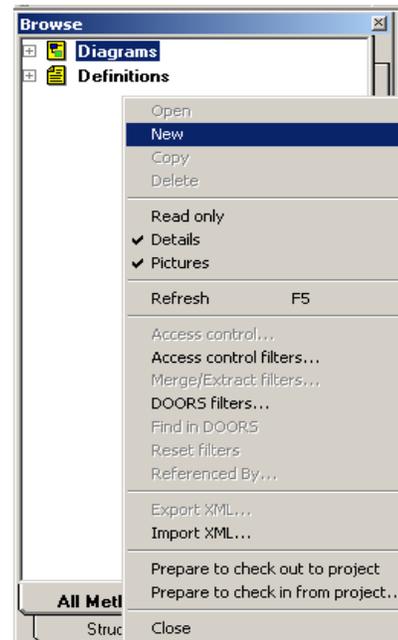


Figure 19 Browser's Floating Menu

### The Select new type window.

Either select a diagram type and press **Enter** or double-click an available Diagram Type and then enter an appropriate name.

A diagram **Name** of between 1 and 80 characters can then be provided. It may include spaces but it is wise to avoid non-alphabetic characters.

The diagram name must be unique for each diagram type.

 *Names within System Architect are Case Sensitive.*

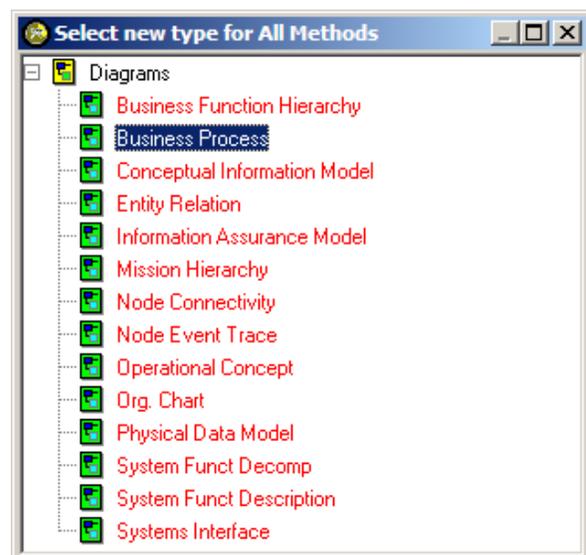


Figure 20 Select new type window

## Diagrams, Symbols and Definitions

Diagrams will normally contain Symbols. Symbols may be named, and Definitions provided to describe them. The properties in the definitions will depend upon the Method Support selected in the Property Configuration dialog.

### To understand the association between Diagrams, Symbols and Definitions:

Hand icon: Navigate back to **Diagram 1** and set the mode on the draw tool bar by selecting the **Event** symbol. Click in the white space of the diagram area to create an Event symbol.

Hand icon: Name the symbol "**Account Inquiry**".

Hand icon: *Symbol Names follow the same rules as Diagram Names.*

Hand icon: Create a new Elementary Business Process definition by right clicking **Definitions** in the Browser and selecting **Elementary Business Process** from the menu. Assign "**Retrieve Account Information**" to the name field and close the definition.

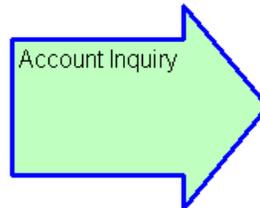


Figure 21 An Event Symbol

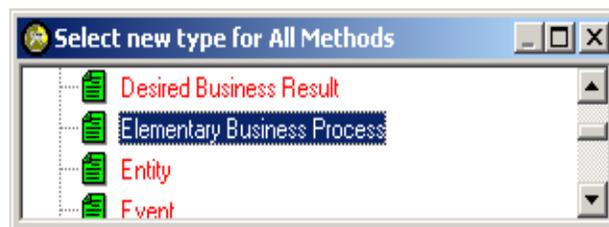


Figure 22 EBP Definition Creation

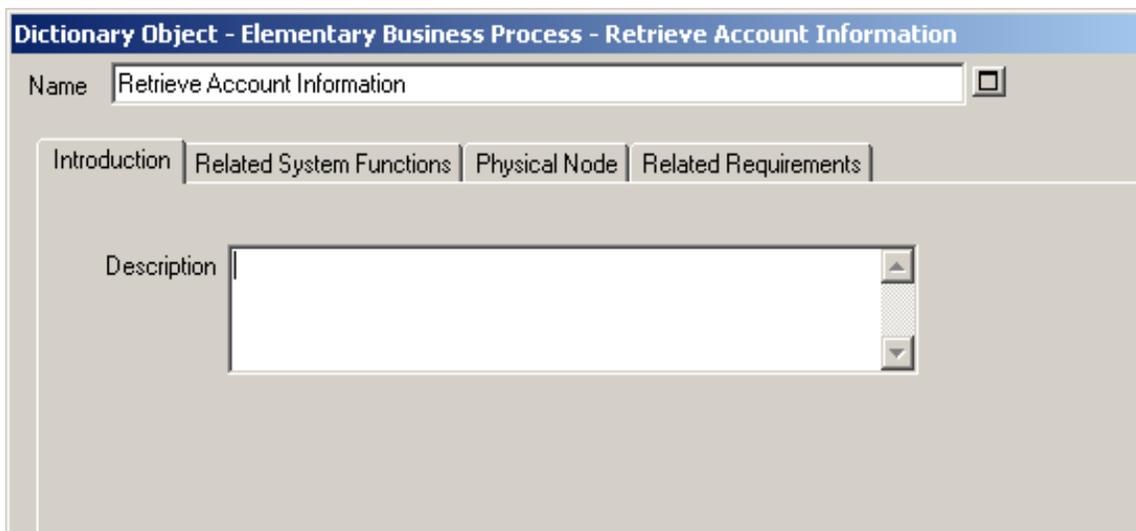
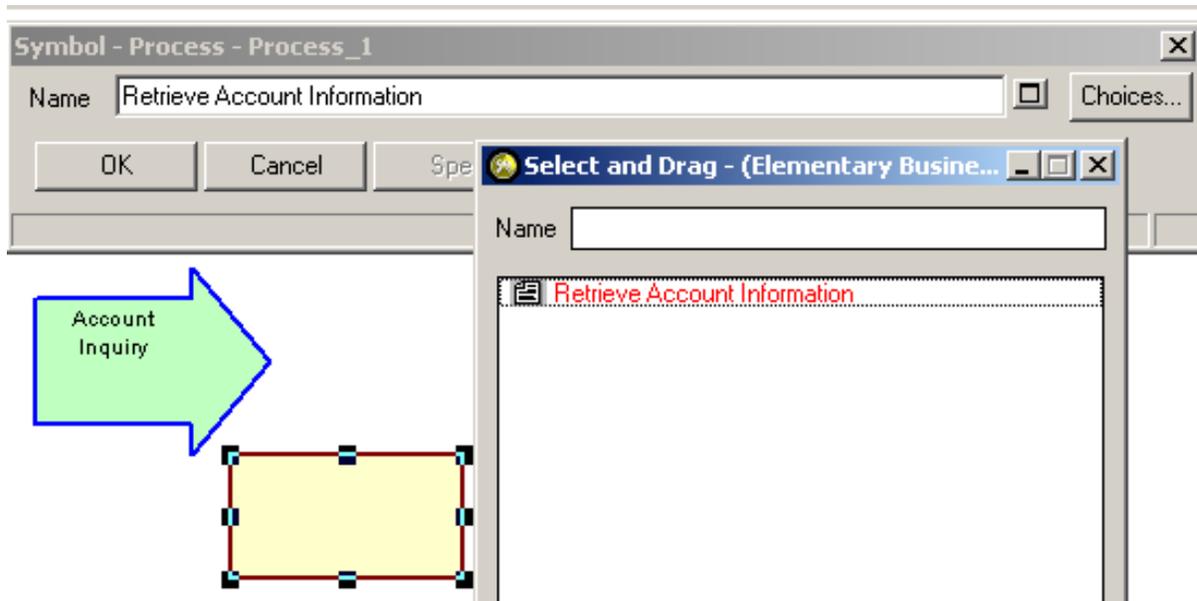


Figure 23 EBP Definition Dialog

- ✎ Again set the mode on the draw toolbar by selecting the **Process** symbol and create a new **Process**.
- ☞ *It is possible to reuse the definition of “**Retrieve Account Information**” by clicking on the **Choices...** button and dragging it into the Name property text box.*



**Figure 24** Drag and Drop Elementary Business Process Definition into Process Symbol Name

- ☞ *This behavior will only be present if the user has the following deselected in the ‘Preferences’ found under the Tools menu:*

- **Allow In place name edit for symbols (unchecked)**



**Figure 25** Preference

- ✎ Save **Diagram 1** and navigate back to the Framework Browser by selecting ‘**Show Framework**’ from the File Menu.



**Figure 26** Show Framework Selection



Use the Framework Browser to create a new **Process Flow** Diagram named “**Diagram 2**”. The diagram is created by clicking at the intersection of the “Enterprise Model” Row and the “Business Function”. **After depressing this button one or more browsers may appear. Each has been filtered for the cell the user activated in the framework.** Create the additional Process Flow Diagram and name it “**Diagram 2**”.

The screenshot displays the FSA-EAF Framework Browser interface. At the top, the FSA logo and the text "Federal Student Aid Enterprise Architecture Framework" are visible. Below this is a grid with columns representing different domains: Data, Business Function, Security, Network, People, Schedule, and Strategy. The rows represent different levels of the architecture: Scope, Enterprise Model, System Model, Technology Model, and Components. Each cell in the grid contains a small icon representing a diagram or document. A "New Diagram" dialog box is open in the foreground, showing the name "Diagram 2" and the business process "Business Process Model, Business Conte...". Other dialog boxes are visible in the background, including "Business Functions to Drivers" and "Business Functions to Locations".

Figure 27 Building Diagrams from the Framework

☞ *The Browser windows from the framework should still be visible after diagram creation.*

☞ Use the open browse window from above to reuse the items created on the previous diagram. Drag and drop the Event and Elementary Business Process definitions onto **Diagram 2** from the browser under the 'Definition' section. (Ctrl-click can be used to multi select items)

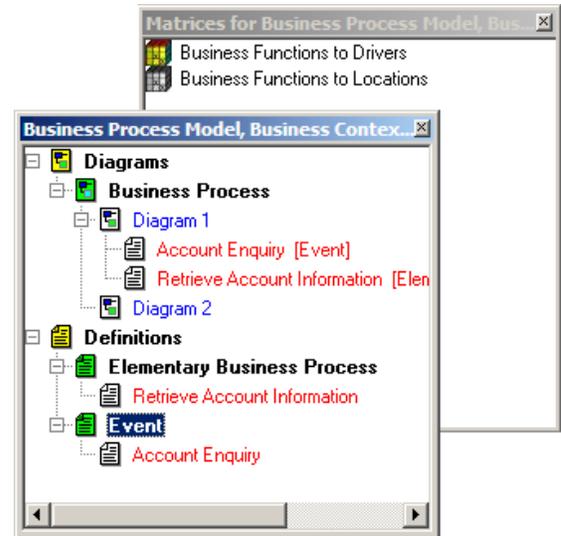


Figure 28 Creating Symbols using Definitions

☞ Close the browsers and Framework. (how do I close the framework window? Found how to minimize it by right-clicking on child window title, selecting MDI Child As, and selecting Minimized) Select the **Tile Horizontally** option from the **Window** menu.

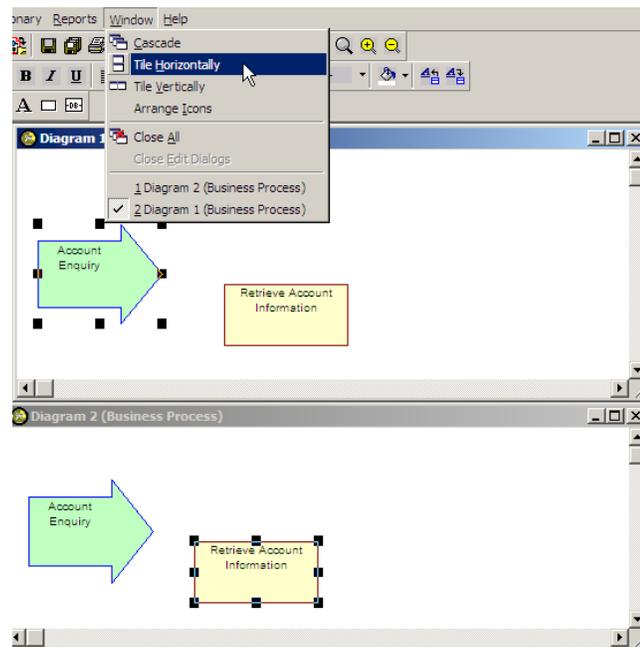


Figure 29 Tile Diagrams Horizontal or Vertical

☞ Click the Pointer in the toolbar to return to Select Mode and double-click on the Process symbol from Diagram 1 to display the **Model Object – Elementary Business Process** dialog.

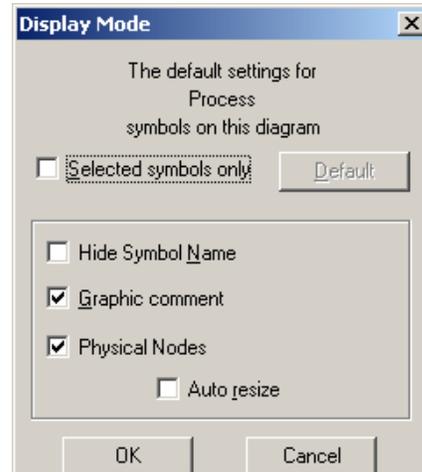
Click on the Related Requirements tab (if not active) and enter **Requirement 1** in the Name column. Hit the enter key.

Click on the Symbol tab and enter the Graphic Comment: **This symbol has been defined.**

Click on the **OK** button to accept the Symbol Definition.

*The changes to the EBP definition are saved to the Data Dictionary at this point, and when two symbols of the same type have the same name, they will share the same definition. However detail on the Symbol tab of a definition will not be shared.*

*A Graphical Comment is also a displayable property and can be turned on or off through the 'Display Mode' options found when right clicking the appropriate symbol.*



**Figure 30** Displayable Properties

Select either Process symbol on either diagram and **modify** its name.

Edit the name of the EBP from **“Retrieve Account Information”** to **“Access Account Information”**. View the changes to the diagrams.

## Saving a Diagram

To save the changes made to a diagram select the **Save Diagram** option from the **File** menu or the Diagram toolbar.

If the diagram had been modified since the last save, a dialog requesting confirmation will be displayed. This dialog will also appear when closing a diagram, closing an encyclopedia, or closing System Architect.

Save **Diagram 1 and 2.**

*When a diagram is saved, the symbols contained on the diagram are saved. It is possible to have created a definition for a symbol but not to have saved the symbol itself.*

The **Save Diagram As...** option in the **File** menu can be used to create a new diagram from the active diagram.

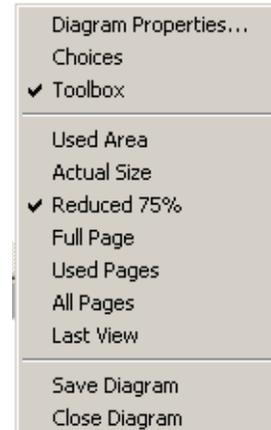
## Closing a Diagram

To close a diagram either select the **Close Diagram** option from the **File** menu, the Diagram toolbar or the diagram's floating menu.

 *The floating menu may be accessed by right-clicking anywhere in white space on the diagram.*

 **Close Diagram 2.**

 *Unsaved changes to the diagram will cause the Save prompt to appear.*

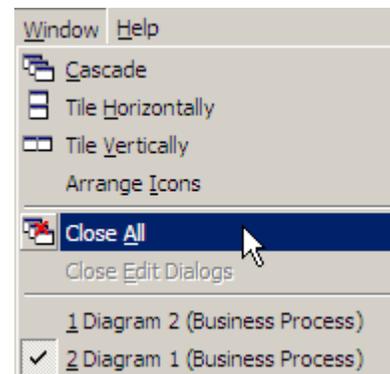


**Figure 31** A diagram's Floating Menu

## Closing All Diagrams

To close every open diagram select the **Close All** option from the **Window** menu.

 Close all windows.



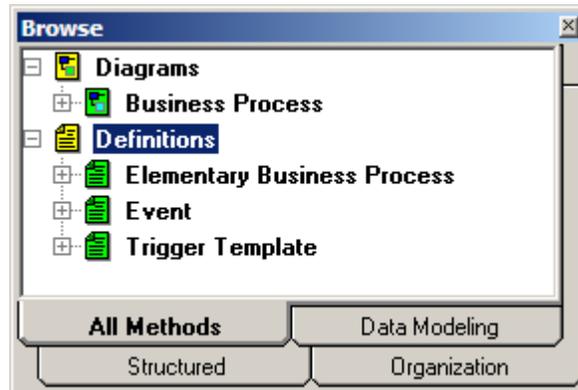
**Figure 32** The Window menu

## Opening a Diagram

Diagrams can be opened from the Browse window. When the Browser is opened it refreshes its contents; displaying the **All Methods** tab and the Diagrams and Definitions groups.

*If the Browser is open the **Refresh** option in its floating menu can be used to update the contents.*

The Diagrams branch of the Browser can be expanded to reveal a list of **Types** of diagrams that exist in the current encyclopedia.

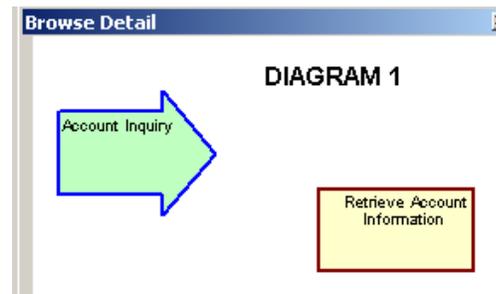


**Figure 33** Using the Browser

Each Type branch can then be expanded to reveal an alphabetical list of diagrams.

Clicking on a diagram name within the list will normally display its picture in the Browse Detail window, however a textual description of the diagram could be displayed if preferred.

Several diagrams may be selected at the same time by using **Shift** and **Ctrl**.



**Figure 34** Diagram Picture Detail

## Open

Diagrams may be opened by using one of three methods:

- Using the **Open** option in the floating menu.
- By double-clicking on the diagram name.
- By dragging the diagram name beyond the Browser.



Re-open Diagram 1.

## Other Browser Options

By accessing the Browser's Floating Menu it is possible to;

- **Copy** a selected definition
- **Delete** a selected diagram or definition. The item cannot be deleted if currently open.
- Open diagrams and definitions in **Read Only** mode. This option will open all selected diagrams and definitions in read-only mode. This prevents the user from locking the items they open so others can still access the items for edit. The user setting their browser into read-only mode will get read-only copies of the selected items they open after setting this option.
- Display (or close) the Detail Window with the **Details** option.
- Preview a diagram before opening it with **Pictures**. A diagram's description will be given, if Pictures are switched off. Definitions are unaffected by the Pictures switch.
- Provide Access Control and then Filter the Browser's list.

## Access Control and Filters

It is possible to maintain different access rights to items within an encyclopedia. Items may be Checked Out to individual Audit Ids or Frozen. This provides an effective mechanism for controlling access to diagrams and definitions within a multi-user environment.

<b>Check in/Check out</b>	Checked out items are accessible on a read only basis by other users, but the owner can modify and delete.
<b>Unlock locked item</b>	Allows a user to release a diagram or definition that has been locked within a network encyclopedia. This will be due to an unusual termination of System Architect.
<b>Freeze/Unfreeze</b>	Allows access on a read only basis to all users. Set by a Supervisor.

 *Access rights are limited to Check in, Check out and Unlock locked item, unless supervisory access has been granted.*

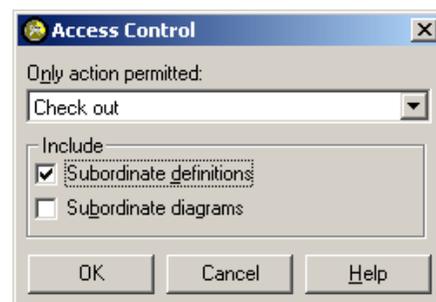
## Checking Out a Diagram

When one or more items have been selected within the Browser, the **Access Control...** option becomes active.

Subordinate diagrams (Child Diagrams) and Subordinate definitions can be automatically checked out with the selected diagram(s).

 **Check out** Diagram 2 along with any subordinate definitions.

 *The available actions will depend upon the current status of the item.*



**Figure 35** Access Control dialog

A report will be displayed, giving detail of any changes made to the Data Dictionary.

Any items that are checked out will now appear in the Browser, prefixed with a ✓.



Access the **Audit Id...** option in the **File** menu; log on using a different Audit Id and then attempt to open both diagrams.

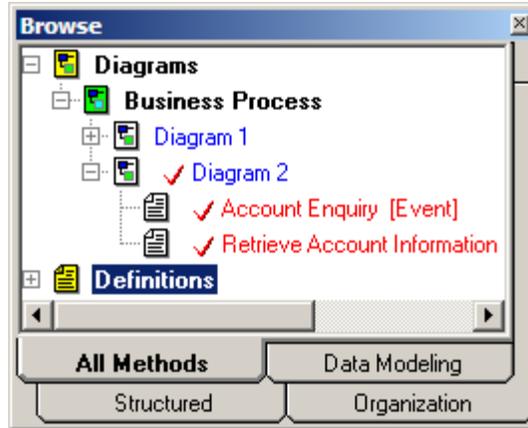


Figure 36 Checked Out Diagram

## Filtering the Browser

The Browser may now be filtered to display only items that meet certain Checked Out and Frozen criteria. Select the **Filters...** option from Browser's floating menu and disable the **Checked out by others** checkbox.

## Referenced By

To find out where a model object has been used throughout an encyclopedia, highlight the name of the diagram or definition in the browser, right click, and select **Referenced By...** You will be presented with a hierarchical view of all diagrams and definitions that *reference* the selected object.

## Data Import and Export

System Architect supports a mechanism for text transfer between the definitions held in the encyclopedia and other software packages. Two formats are supported, text and comma separated value (CSV). The text format produces a text file containing the Name and Description properties of the definition. The CSV format supports all properties of the definition.

### Dictionary Export

When the **Export Definitions...** option from the **Dictionary** menu is selected, the following dialog is displayed;

The **File Name** box determines where the output file will be placed. The **CSV format** drop down list box allows for toggling between CSV and Text output. The scrolling list allows for the selection of a Dictionary Type.

The **Select Name** option filters the output to definitions that start with the characters entered.

The **Name Prefix / Suffix** and **Comment Prefix / Suffix** are only used with Text Format Exports.

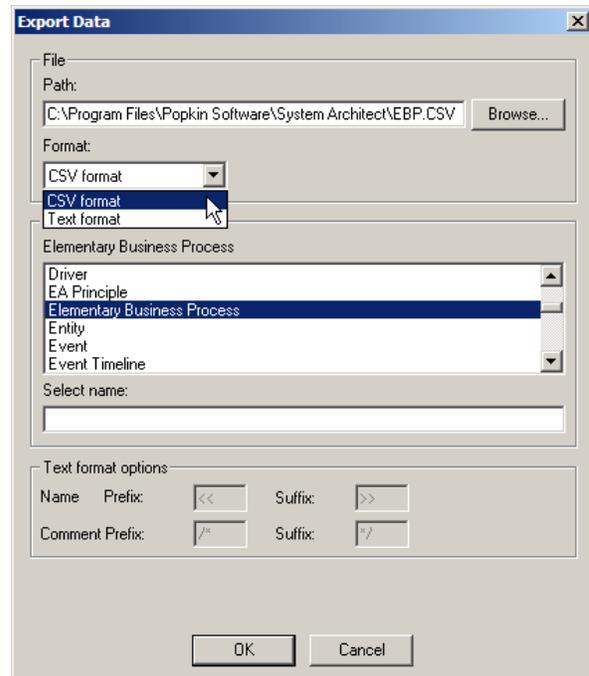


Figure 37 Export Data dialog

After the extraction has finished, a Draft Report is displayed showing the definitions that have been exported, with a count of the number exported.

## Dictionary Import

When the **Import Definitions...** option is selected, the following dialog is displayed.

For the **CSV Format** import, four collision options are provided:

- **Never replace existing definition.**
- **Delete all fields then add new data.** This erases the record before replacing it and is used to recover space when definition properties have been deleted.
- **Update single fields when data supplied.** This only replaces the fields that have data supplied in the import file.
- **Update single fields - clear field if no data.** This replaces the fields that have data and erases fields if they are not supplied as part of the import. Therefore, when the import file has two adjacent comma characters where the data would be (e.g., aaa, bbb, ddd has no data for field ccc.)

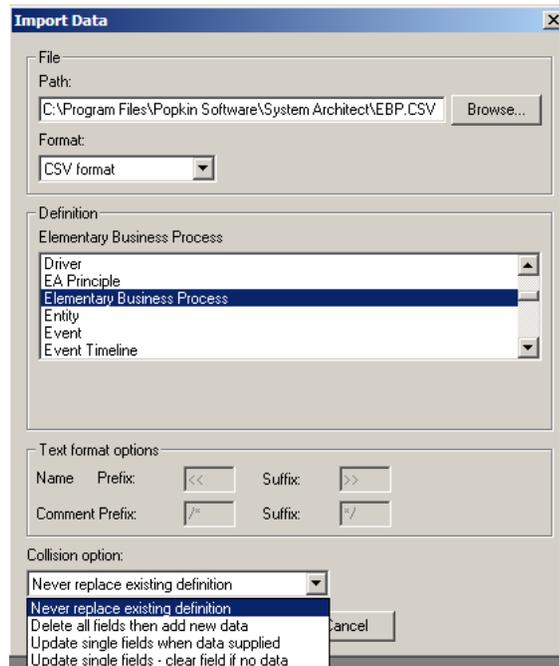


Figure 38 Import Data dialog

For the **Text Format** import, three options are provided:-

- **Never replace existing definition.**
- **Replace description when data supplied.** This only replaces the Description when data is supplied in the import file.
- **Replace description - clear if no data.** This will erase any Descriptions that have no data. In the example below, the description for name2 would be deleted.

```
<<name1>>
Description for name1
<<name2>>
<<name3>>
Description for name3
```

Following a Data Import the **Tools** menu **Dictionary Update** option should be run to ensure that all relationships between the data are correctly held within the encyclopedia:

On live encyclopedias be sure to take a backup of the encyclopedia prior to running the Import command.

## Encyclopedia Backup and Archiving

Each network encyclopedia contains:

- a relational database, consisting of two tables and some indexes;
- one data file for each graphical diagram;
- one windows metafile (WMF) for each graphical diagram;
- four files that store the configuration of the encyclopedia;
- a lock-file that stops two or more users having write access to the same diagram at the same time, to prevent update anomalies; and, optionally
- one or more 'style-sheets';
- one or more internal report (RPT) files; and
- An Images folder for storing custom symbols.

 *Every encyclopedia contains, by name, the same files; only the data in the files is different. For this reason you must **never** use Windows Explorer to move diagrams or definitions between encyclopedias, System Architect has a Merge/Extract utility for moving diagrams and definitions between encyclopedias.*

For backup purposes you may use Windows Explorer to copy an entire encyclopedia to a 'clean' directory by selecting the encyclopedia folder icon. Your internal System Architect Administrator should manage this.