



# EA in SA

*the Skinny*

*Version 1.4*

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# Using System Architect

The first UNICOM version of System Architect is 11.4.4.

- You can get it by sending an email to [Architect.Support@unicomsi.com](mailto:Architect.Support@unicomsi.com)

Last IBM version is 11.4.3.6 -- you can get it on Fix Central

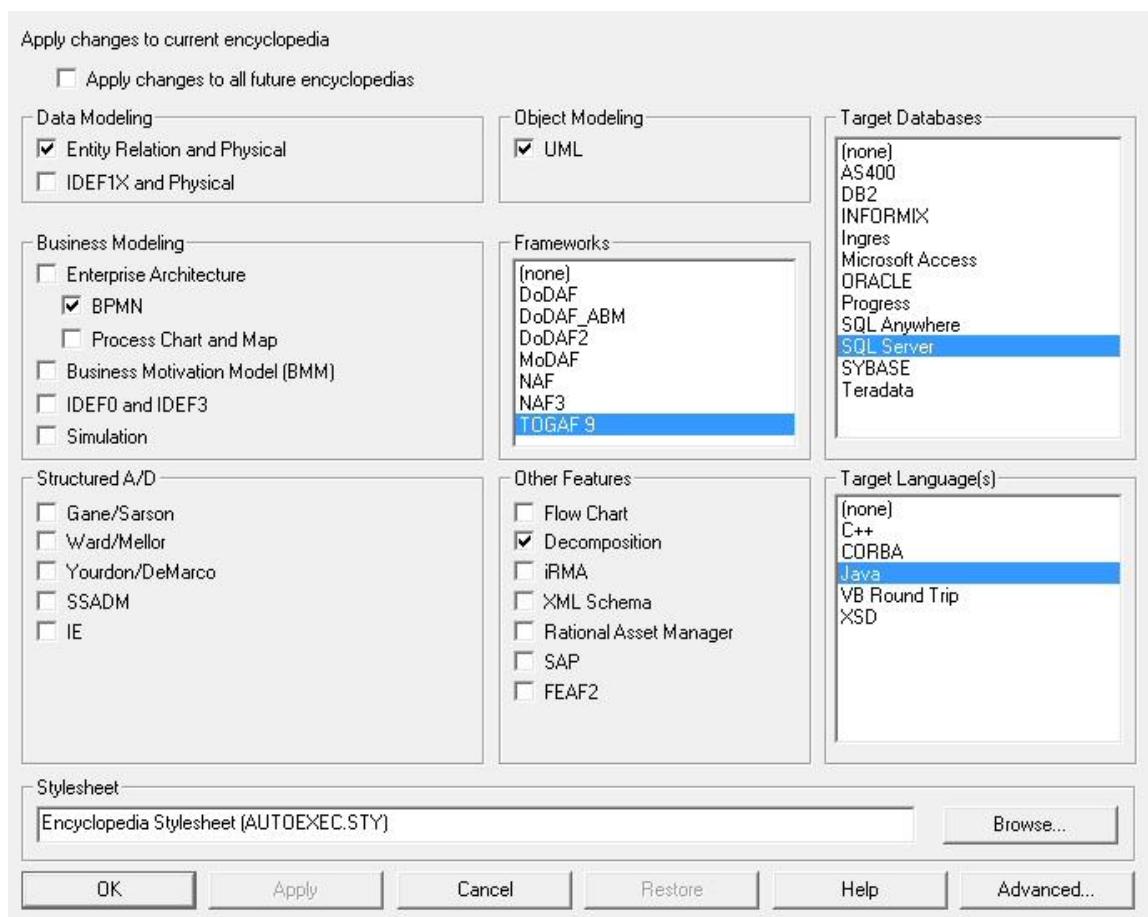
- You can get it on Fix Central, here: <http://www-933.ibm.com/support/fixcentral/>. Select 'Rational' product group, and 'IBM Rational System Architect', and then 11.4.2.6. This is a full install so you'd need to uninstall previous version first.

## Where You Are Storing Your Data

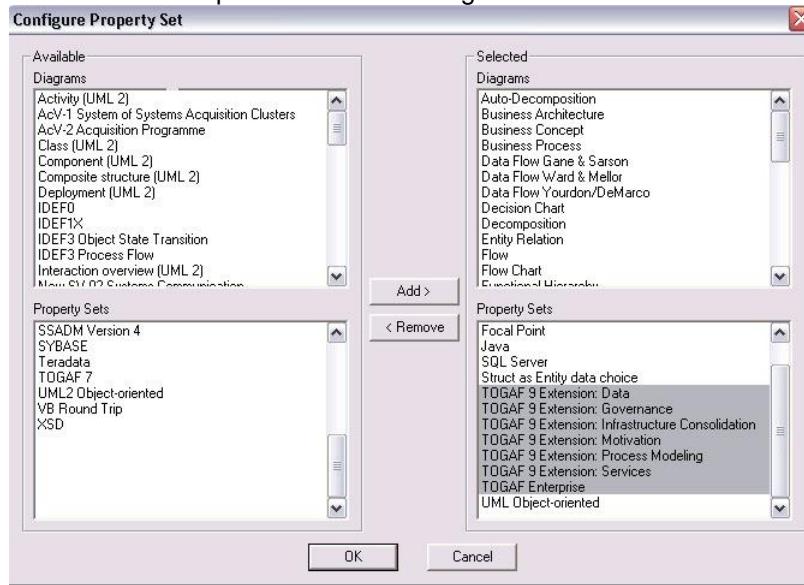
When you work in System Architect, SA, you work in something called an Encyclopedia. This is the EA repository. It is a database on SQL Server (either full-blown SQL Server 2008 or 2012 or 2014 on the network, or SQL Server Express installed locally -- you have the option to install it locally during installation, or after installation by selecting Help, Startup Wizard).

## What Frameworks & Methods & Properties You Have to Choose From

For the work that you've described that you'd like to do, you'd be interested in using the TOGAF framework. So you would create a new encyclopedia, and then in the Encyclopedia Property Configuration dialog (accessible anytime by selecting Tools, Customize Method Support), you'd toggle on the TOGAF framework.



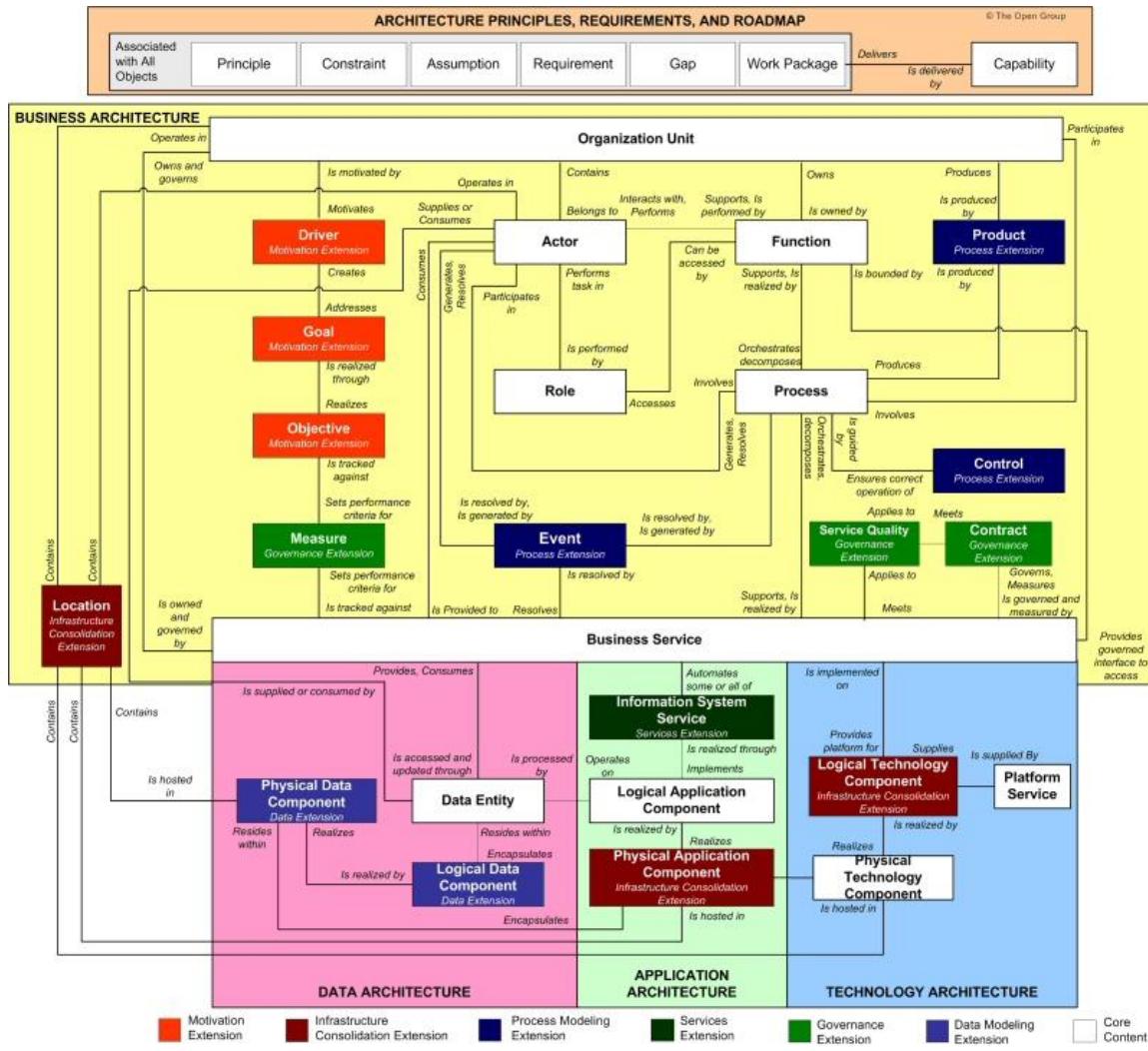
There is also an “Advanced” button. If you click on the “Advanced” button, you can add additional TOGAF 9 extensions. These are not turned on by default as they are for advanced TOGAF 9 users. It is recommended that users become proficient in the use of the default TOGAF 9 Metamodel in SA. Then, use the “Help” to understand the additional functionality these extensions provide before turning them on.



If you make changes to the choices in this dialog (main or Advanced), you need to reopen the encyclopedia for the changes to take affect.

## The TOGAF Metamodel vs Your Metamodel

As you have selected TOGAF as a framework, your encyclopedia is using a metamodel underneath for the TOGAF 9 framework. That metamodel specifies all the definition types available, how they are all related, all of their properties and all of the diagram types available. You can use this metamodel out of the box and proceed. Many customers customize this metamodel so that they can add constructs unique and specific to their organization or EA method. You can add, modify and remove definition types, property types, relationships and diagram types.



The degree to which you can customize SA's metamodel is unmatched in the field and is (and has always been) the tool's biggest selling point. The ability to customize the SA metamodel, and its' behavior with VBA macro's, reports, is the number 1 reason why most of our customers have bought the product. Customizing a product is extremely important for an EA effort; much more so than canned reports, for example. Customizations are made to a file called usprops.txt, which is located in each encyclopedia's Files table. You can make these customizations via coding in this file, or use a GUI for this. The metamodel that we ship out of the box is specified in a series of saprops.cfg files also located in the Files table. But again, you don't have to customize it at all; you can go forward with what we have provided out of the box.

## DoDAF 2.0, MODAF 1.2, NAF 3.0 Add-Ins

Paid add-ins for DoDAF 2.0, DoDAF 1.5 (standard and Activity Based Method (ABM)), MODAF 1.2, and NAF 3.0 are available. The add-ins provide a pre-constructed configuration of metamodel, diagram set, matrices, and reports utilizing native System Architect technology. All you need is a license to turn these features on.

# Adding Information to the EA

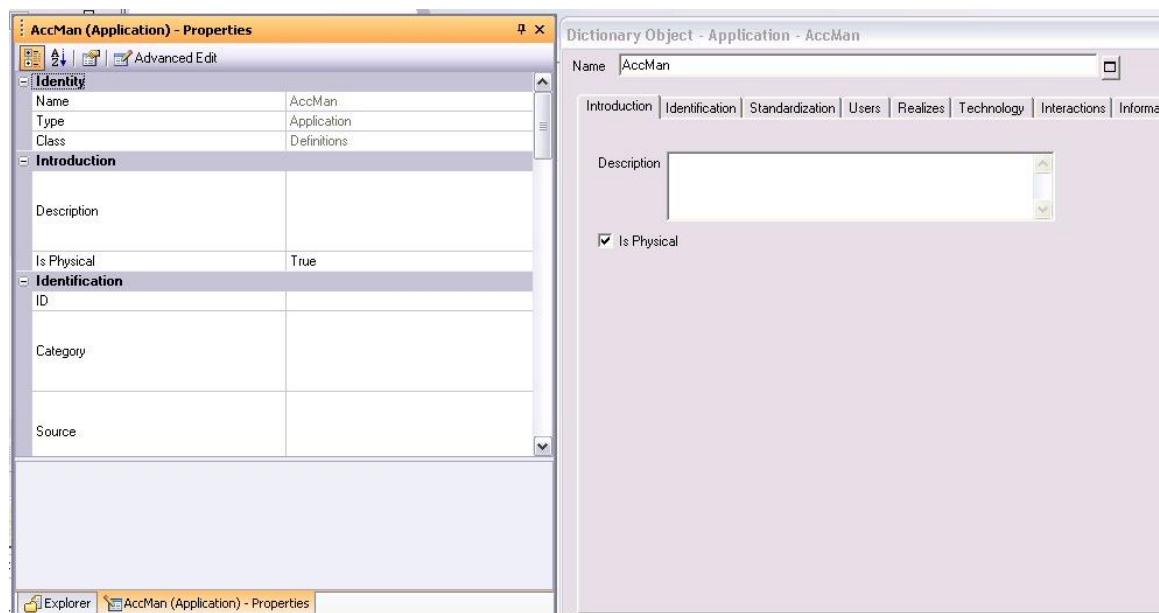
You have a multitude of options for creating information in the EA. You can

- Create definitions,
- Create diagrams,
- Relate definitions to one another within the definition dialogs, or by relating definition symbols on diagrams, or by relating definitions via matrices,
- Harvest information from external sources -- we'll examine this in detail in a later section.

## Create and Edit Definitions, Diagrams, and Symbols

Create definitions of object types (Applications, Servers, Locations, Processes, Functions, Organizations, etc) and use properties of those definitions to relate any object to any other object type.

1. Select **View, Properties** to get a more modern dialog for entering information into definitions. Click the Edit button to add information via the more modern Properties editor, or click Advanced Edit to open the older properties editor.



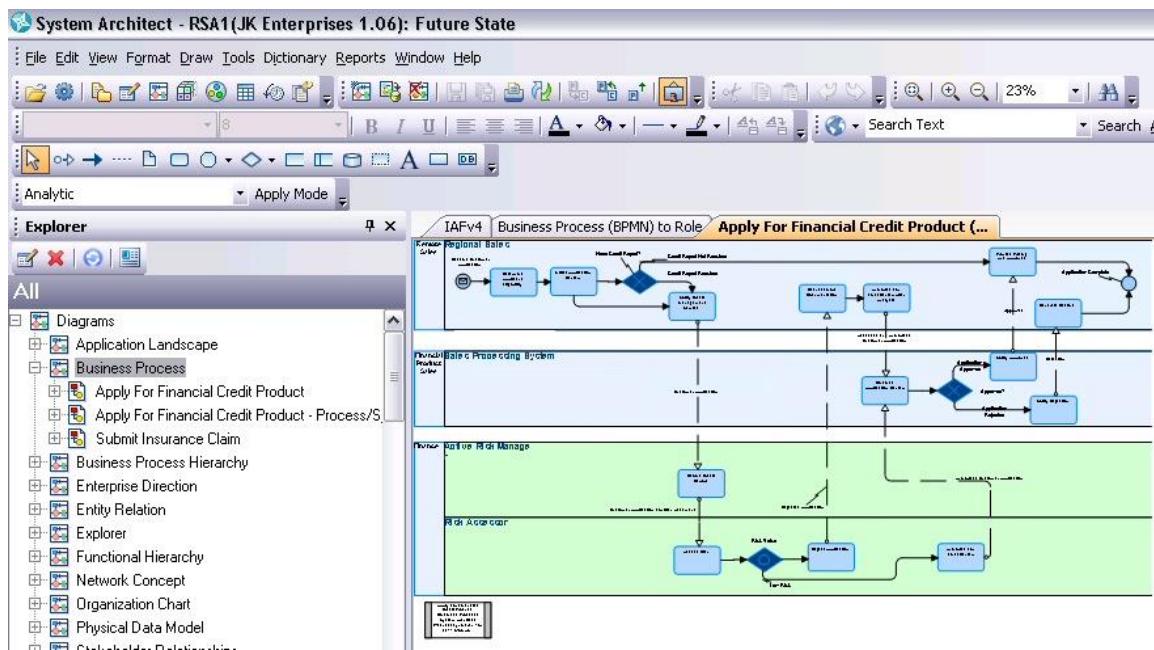
Alternative properties editors -- select View, Properties to get the grid-like editor (on the left)

## Drawing Diagrams

Draw diagrams to design how things relate to other things.

There are several diagram styles in System Architect:

- Standard diagram type with node symbols and relationship lines
- Data-centric diagram type with node symbols and relationship lines
- Hierarchical diagram type
- Data-centric hierarchical diagram type
- Explorer diagram type
- For example, here is a prototypical diagram – a BPMN process flow diagram



## Relating Information

To relate the objects in SA to each other, you may do one or many of the following:

- a. Draw diagrams that relate the information
  - b. Go into the definitions and relate definitions to other definitions via the property set. For example, a Server definition may have a property to list Applications that run on it. These types of properties use a dialog; you click on the “Choices” button for a particular property to see a list of instance of an object type are available in the repository (or ‘encyclopedia’). You then select or remove instances to create and modify specific relationships. In the example below, we are directly specifying an Application is hosted at one or many Locations.



- c. You can also use matrices to relate instances of objects to each other. Select View, Matrix Browser.

System Architect - RSA1(JK Enterprises 1.06): Future State

File Edit View Format Matrix Draw Tools Dictionary Reports Window Help

Search Text Search Advanced...

IAFv4 Business Process (BPMN) to Application

Explorer All Diagrams Definitions

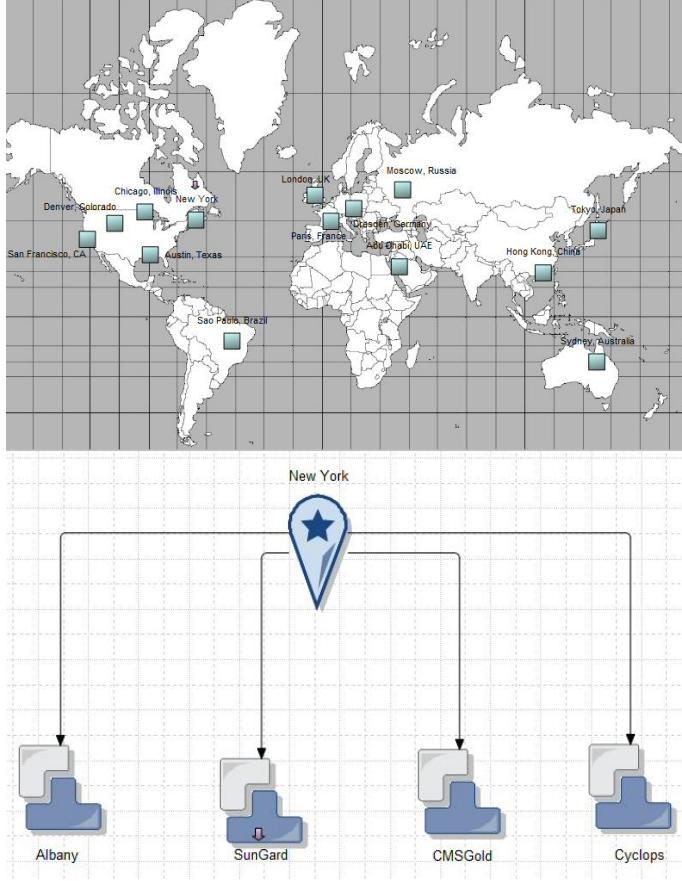
**Business Process (BPMN) to Application**

Application	BPMN Process	Account Coordination	Account Management	Account Planning	Adjust Loss	Assess Risk	Authorize For Final Review	Authorize For Final Review After Analysis	Branch/Store Operations	Business Administration	Business Management and Development	Business Planning	Business Unit Tracking	Collect Claim Details	Collections
AMDOCS															
AccMan															
Account Management		X							X			X			
Account System															
Accounts Receivables				X											
Active Risk Manager															
Albany															
Business Applications						X									
CMSGold															
Call Center			X												
Claims Management															
Clearing List										X					
Collections															
Content Management															
Customer Maintenance							X								
Customer ODS															
Customer Relationship Management															
Cyclops															
Data Warehouse															

# Diagram, Definition, and Property Sets

## TOGAF 9 Diagram Set

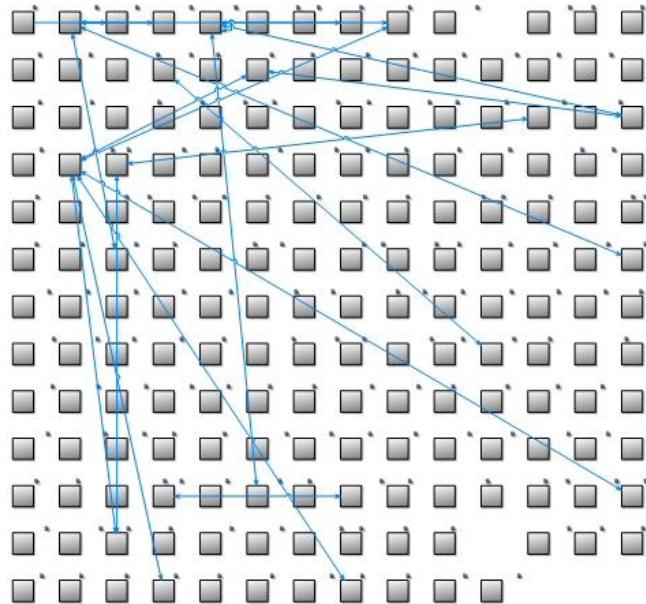
TOGAF 9 comes with a standard set of diagram types based on TOGAF 9 recommendations (the Viewpoints section of the spec), as follows:

Diagram Type	Example of Diagram
<p><b>Application and User Location diagram</b></p> <p><u>The Skinny on this Diagram:</u> Understand what applications are hosted at what locations, and what Business Services rely on what Apps at what Locations.</p>	 <p>The top part of the image shows a world map with various locations marked by small blue squares, representing the locations of different applications. Labels include Chicago, Illinois; New York; Denver, Colorado; San Francisco, CA; Austin, Texas; London, UK; Moscow, Russia; Paris, France; Dubai, UAE; Hong Kong, China; Tokyo, Japan; and Sydney, Australia. The bottom part is a detailed view of the New York area, showing four application components: Albany, SunGard, CMSGold, and Cyclops, each represented by a blue and grey icon. Arrows point from a central location labeled 'New York' to each of these four components.</p> <p><u>What Can Be Drawn/Visualized on Diagram</u></p> <ul style="list-style-type: none"><li>o Actor</li><li>o Application Component</li><li>o Business Service</li><li>o Location</li><li>o Physical Application Component</li></ul> <p><u>Relationships:</u></p> <ul style="list-style-type: none"><li>o Application to Business Service</li><li>o Actor to Logical Application Component</li><li>o Business Processes to Org Unit</li></ul>

## Application Communication diagram

### The Skinny on this Diagram:

Understand what apps are related to what apps. Easily see what apps are ingrained in the org, and what apps are one-off's being used by isolated group.



### What Can Be Drawn on Diagram

- o Application Interface
- o Business Service
- o Entity
- o Logical Application Component

### Relationships:

- o Business Process to Org Unit
- o Business Service to Business Service (Communicates)
- o Business Service to Business Service (Is Dependent)
- o Business Service to Logical Application Component

### Explorer Relationship Reports

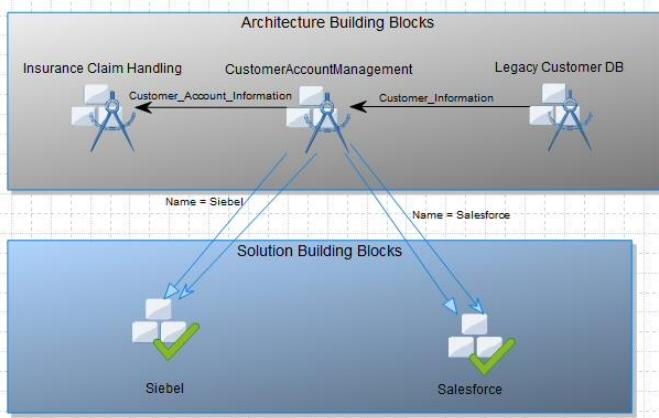
- o Report of App to App based on navigation thru App Interface
- o Logical App to Phys App based on navigation of implicit relationship

## Business Architecture diagram

(TOGAF building block diagram)

### The Skinny on this Diagram:

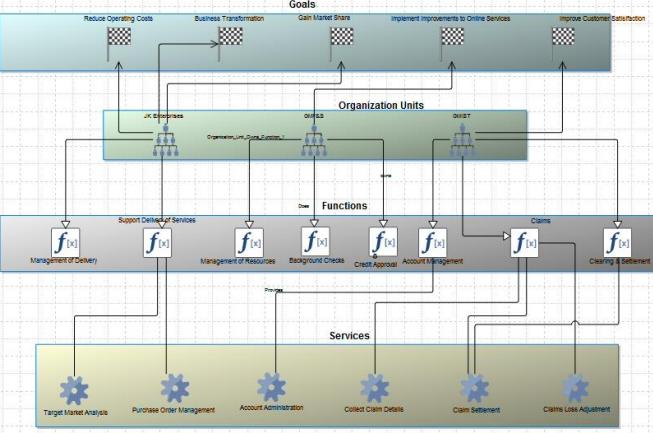
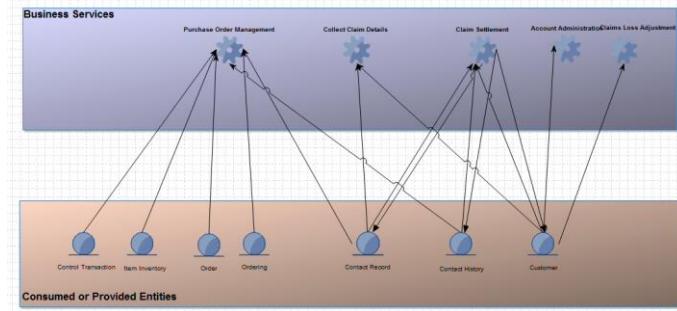
Build Architecture Building Blocks that contain models that constitute building blocks of the EA. Build Solution Building Blocks that specify what applications, technologies and systems can be used by Solution design teams.

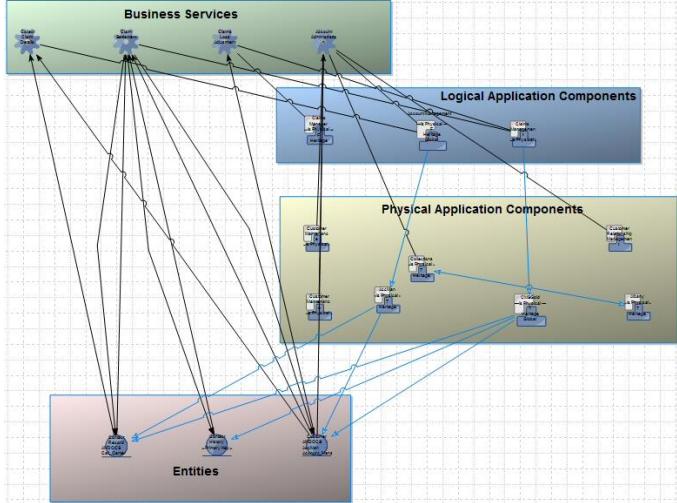
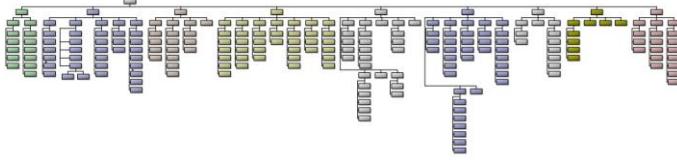


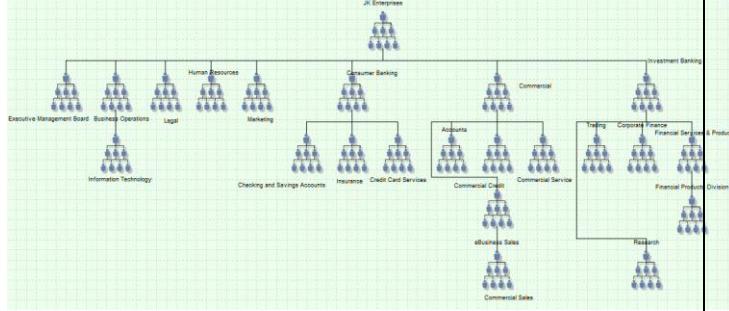
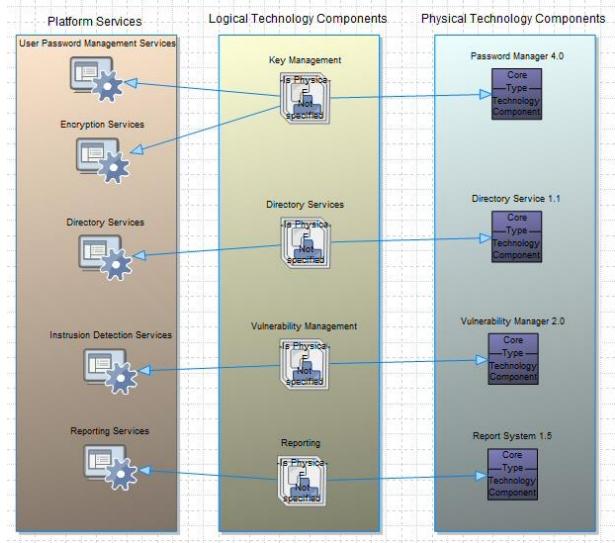
### What Can Be Drawn on Diagram

- o Architecture Building Block
- o Solution Building Block
- o System
- o External

### Relationships:

	<p><b>Business Footprint diagram</b></p> <p><u>The Skinny on this Diagram:</u> Understand (or architect) how organizational goals are provided by organizations that own functions, that are enabled by business services. Further, show what technologies are used to enable those business services.</p>  <p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Business Service</li> <li>o Function</li> <li>o Goal</li> <li>o Logical Technology Component</li> <li>o Organizational Unit</li> <li>o Physical Technology Component</li> <li>o Technology Component</li> </ul> <p><b>Relationships:</b></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> <li>o Business Service to Technology Component</li> <li>o Function to Logical Technology Component</li> <li>o Function to Organization unit</li> <li>o Function to Physical Technology Component</li> <li>o Function to Technology Component</li> <li>o Goal to Logical Technology Component</li> <li>o Goal to Organizational Unit</li> <li>o Goal to Physical Technology Component</li> <li>o Goal to Technology Component</li> </ul>
<p><b>Business Process Hierarchy diagram</b></p> <p><u>The Skinny on this Diagram:</u> Hierarchy of Business Processes -- can show level 1, level 2, level 3, level 4, etc processes.</p>	 <p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Process</li> </ul>
<p><b>Business Service Information diagram</b></p> <p><u>The Skinny on this Diagram:</u> Hierarchy</p>	 <p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Business Service</li> <li>o Entity</li> </ul> <p><b>Relationships:</b></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> </ul>

<p><b>Data Dissemination diagram</b></p> <p><u>The Skinny on this Diagram:</u> Hierarchy</p>	<ul style="list-style-type: none"> <li>o Business Service to Entity</li> </ul>  <p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Application Component</li> <li>o Business Service</li> <li>o Entity</li> <li>o Physical Application Component</li> </ul> <p><u>Relationships:</u></p> <ul style="list-style-type: none"> <li>o Application Component to Entity</li> <li>o Business Process to Org Unit</li> <li>o Business Service to Entity</li> <li>o Physical Application Component to Entity</li> </ul>
<p><b>Data Entity/Data Component diagram</b></p> <p><u>The Skinny on this Diagram:</u> This diagram enables you to visualize or architect how the entities of your logical data model, can be grouped into Logical Data Components of TOGAF 9.</p>	<p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Entity</li> <li>o Logical Data Component</li> <li>o Physical Data Component</li> </ul> <p><u>Relationships:</u></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> <li>o Entity to Logical Data Component</li> <li>o Logical Data Component to Physical Data Component</li> </ul>
<p><b>Event diagram</b></p> <p><u>The Skinny on this Diagram:</u> Hierarchy</p>	<p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Event</li> <li>o Process</li> </ul> <p><u>Relationships:</u></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> <li>o Event to Process</li> </ul>
<p><b>Functional Decomposition</b></p> <p><u>The Skinny on this Diagram:</u> Basic Functional decomposition diagram. Data centric diagram -- import a spreadsheet of Functions and their parent Functions, drag them all onto the diagram and the diagram visualizes itself. And vice versa -- change the connections and change the underlying organizational architecture.</p>	 <p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Function</li> </ul>

<h3>Goal/Objective/Service diagram</h3> <p><u>The Skinny on this Diagram:</u> Gives you a line of sight from Vision, Goals, Objectives, and business Drivers to the Business Services that are employed to enable them.</p>	<p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Business Service</li> <li>o Driver</li> <li>o Goal</li> <li>o Objective</li> <li>o Organization Unit</li> <li>o Vision</li> </ul> <p><u>Relationships:</u></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> <li>o Business Service to Driver</li> <li>o Business Service to Goal</li> <li>o Business Service to Objective</li> <li>o Business Service to Organization Unit</li> <li>o Business Service to Vision</li> </ul>
<h3>Organization Chart</h3> <p><u>The Skinny on this Diagram:</u> Hierarchy of Organizational Units. Data centric -- import a spreadsheet of organizations and their parent organizations, drag them all onto the diagram and the diagram visualizes itself. And vice versa -- change the connections and change the underlying organizational architecture.</p>	 <p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Organizational Unit</li> </ul>
<h3>Technical Architecture diagram</h3> <p>(TOGAF building block diagram)</p> <p><u>The Skinny on this Diagram:</u> Model Architecture Building Blocks and the Systems that implement those standards.</p>	<p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Architecture Building Block</li> <li>o System</li> <li>o External</li> <li>o Data Flow line</li> </ul>
<h3>Platform Decomposition diagram</h3> <p><u>The Skinny on this Diagram:</u> Architect or visualize platform services, and the physical and logical technologies they provide.</p>	 <p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Application Component</li> <li>o Logical Technology Component</li> </ul>

	<ul style="list-style-type: none"> <li>o Physical Application Component</li> <li>o Physical Technology Component</li> <li>o Platform Service</li> <li>o Technology</li> </ul> <p><u>Relationships:</u></p> <ul style="list-style-type: none"> <li>o Application Component to Platform Service</li> <li>o Business Process to Org Unit</li> <li>o Logical Technology Component to Platform Service</li> <li>o Physical Application Component to Physical Technology Component</li> <li>o Platform Service to Physical Application Component</li> <li>o Platform Service to Physical Technology Component</li> <li>o Technology to Platform Service</li> </ul>
<p><b>Software Distribution diagram</b></p> <p><u>The Skinny on this Diagram:</u> Architect or visualize the location of your physical applications and the technologies that they use.</p>	<p>The diagram illustrates the Software Distribution diagram. It consists of three main vertical columns: 'Physical Application Component' (green), 'Physical Technology Components' (grey), and 'Location' (blue).</p> <ul style="list-style-type: none"> <li><b>Physical Application Component Column:</b> Contains icons for AccMan, Cash Equite, Pivotal, Albany, and Quicken.</li> <li><b>Physical Technology Components Column:</b> Contains icons for Cisco Access Points, Lotus Mobile Connect, Windows 2000, Windows Vista, Windows XP, VBA, Eclipse, Jazz Roy, and JBoss Seam.</li> <li><b>Location Column:</b> Contains icons for Call Centre, Detroit, Dallas, and JK Enterprise Operations.</li> </ul> <p>Relationships are represented by lines connecting components across columns. For example, AccMan is connected to Cisco Access Points, Albany, and Dallas. Cisco Access Points is connected to Lotus Mobile Connect, Windows 2000, Windows Vista, Windows XP, VBA, Eclipse, Jazz Roy, and JBoss Seam. Albany is connected to Windows 2000, Windows Vista, Windows XP, VBA, Eclipse, Jazz Roy, and JBoss Seam. Dallas is connected to Windows 2000, Windows Vista, Windows XP, VBA, Eclipse, Jazz Roy, and JBoss Seam. JK Enterprise Operations is connected to Windows 2000, Windows Vista, Windows XP, VBA, Eclipse, Jazz Roy, and JBoss Seam.</p>

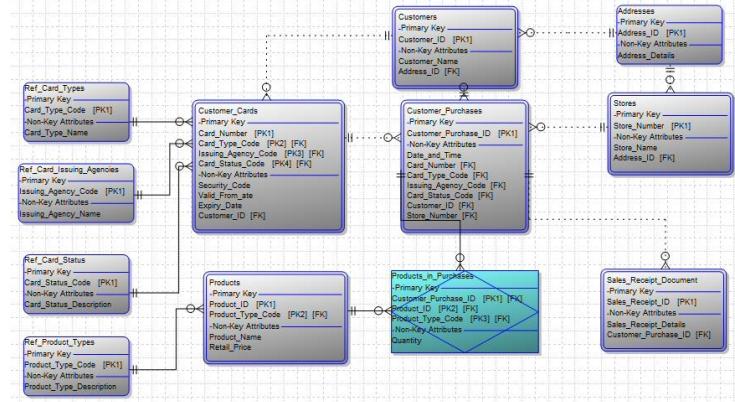
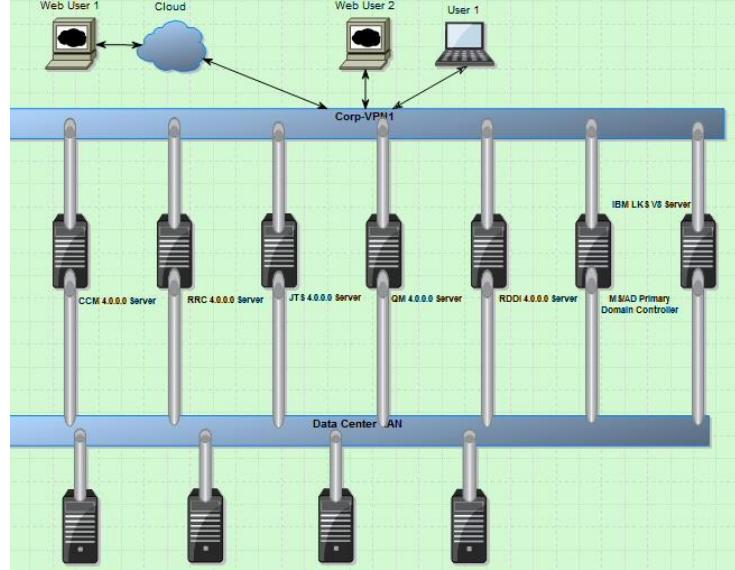
#### What Can Be Drawn on Diagram

- o Location
  - o Physical Application Component
  - o Physical Technology Component
- Relationships:
- o Business Process to Org Unit
  - o Location to Physical Application Component (Hosts)
  - o Location to Physical Technology Component (Hosts)
  - o Physical Technology Component to Application Component

## Additional Diagram Types that Can Be Used with TOGAF 9

- Once you create a TOGAF encyclopedia a litany of TOGAF definition and diagram types become available for you to create. These are from the TOGAF 9 Specification as released by the Open Group. Here are pertinent diagram types and what can be drawn on them:

Additional Diagrams for Use with TOGAF	What Can Be Drawn on Diagram
<p><b>Business Process diagram (aka BPMN)</b></p> <p><u>The Skinny on this Diagram:</u> BPMN 2.0 process flow.</p> <ul style="list-style-type: none"> <li>Supports .bpmn 2.0 interchange format. Can import/export models from/to IBM BlueWorksLive, IBM Business Process Manager, RSA, etc.</li> <li>Supports discrete event simulation and optimization via SA Simulator add-in</li> </ul>	<p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>Process</li> <li>Event</li> <li>Gateway</li> <li>Data Object</li> <li>Group</li> <li>Data Store</li> <li>Pool</li> <li>Lane</li> <li>Message Flow Line</li> <li>Sequence Flow Line</li> </ul>
<p><b>Decision Chart</b></p> <p><u>The Skinny on this Diagram:</u> Hierarchy</p>	<p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>Team</li> <li>Branch line</li> </ul>
<p><b>Enterprise Direction diagram (BMM)</b></p> <p><u>The Skinny on this Diagram:</u> Hierarchy</p>	<p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>Mission</li> <li>Vision</li> <li>Goal</li> <li>Objective</li> </ul>

	<ul style="list-style-type: none"> <li>o Strategy</li> <li>o Tactic</li> <li>o Business Rule</li> <li>o Business Policy</li> <li>o Organizational Unit</li> </ul>
<b>Entity Relation diagram</b> <u>The Skinny on this Diagram:</u> Logical Entity Relation diagram.	 <p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Entity</li> <li>o Identifying, Non-Identifying, Non-Specific, and Super/Sub relationship lines</li> </ul>
<b>Network diagram</b> <u>The Skinny on this Diagram:</u> Basic network diagram; would need a new metamodel, with computers, processors, etc being subtypes of system, etc	 <p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Computer</li> <li>o Processor</li> <li>o Switch</li> <li>o Server</li> <li>o Storage Device</li> <li>o Communication Medium</li> <li>o Router</li> <li>o Communication Node</li> <li>o Firewall</li> <li>o Printer</li> <li>o Phone</li> <li>o Multiplexer</li> <li>o Peripheral</li> </ul>

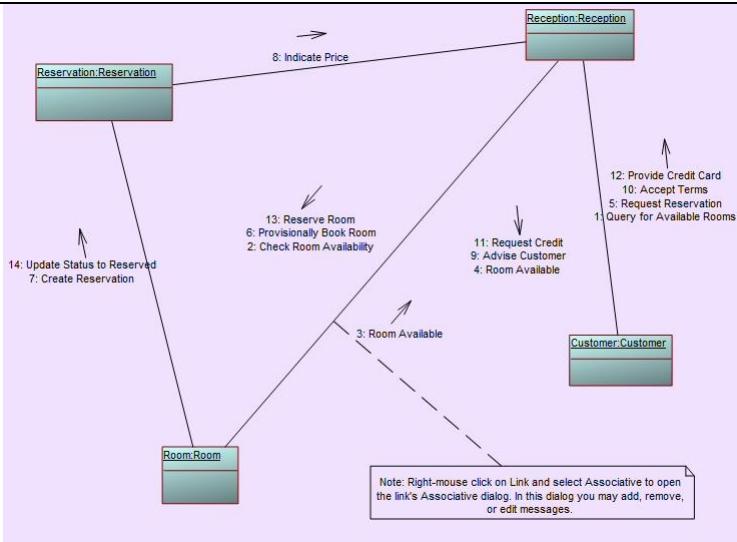
	<ul style="list-style-type: none"> <li>o Location</li> <li>o Link</li> <li>o Serial Connection</li> <li>o Circuit Switched Line</li> <li>o Wireless Connectivity</li> </ul>
<b>Physical Data Model</b> <u>The Skinny on this Diagram:</u> Physical data model of tables, their columns, and constraints (relationships) between tables.	<pre> classDiagram     class Room {         number: CHARACTER(10) [PK1]         status: CHARACTER(10)         type: CHARACTER(10)         employeeID: CHARACTER(10) [PK2] [FK]         Customer_ID: CHARACTER(5) [PK3] [FK]     }     class Guest {         Guest_Number: CHARACTER(10) [PK1]         Name: CHARACTER(15)         Title: CHARACTER(2)         Company: CHARACTER(20)         Address: CHARACTER(10)         City: CHARACTER(15)         Post_Code: CHARACTER(10)         Guest_Phone_No: CHARACTER(20)         Last_Stay: DATE         Rate: CHARACTER(10)         Number_of_Nights: INTEGER         Number_of_Stays: INTEGER     }     class Reservationist {         employeeID: CHARACTER(10) [PK1]         Customer_ID: CHARACTER(5) [PK2]     }     class Reservation {         code: CHARACTER(10) [PK1]         status: CHARACTER(10)         date: CHARACTER(10)         duration: CHARACTER(10)         roomType: CHARACTER(5)         Employee_ID: CHARACTER(10) [PK2] [FK]         Customer_ID: CHARACTER(5) [PK3] [FK]         Property_Code: CHARACTER(10) [PK4] [FK]         Shift_Num: INTEGER         Sales_Clerk: CHARACTER(3)         Agency_ID: INTEGER         Guest_Number: CHARACTER(10) [FK]         Unit_Number: CHARACTER(6) [PK5] [FK]     }     class Vehicle {         Year: CHARACTER(4)         Make: CHARACTER(10)         Model: CHARACTER(10)         Registration_Num: CHARACTER(12)         Guest_Number: CHARACTER(10) [PK1] [FK]     }     class Property {         Property_Code: CHARACTER(10) [PK1]         Unit_Type: CHARACTER(10)         Unit_Number: CHARACTER(5) [PK2]         OwnerId: INTEGER [FK]     }     class Owner {         OwnerId: INTEGER [PK1]         Owner_Name: CHARACTER(32)         Owner_Dob: DATE         Owner_Balance: INTEGER         Owner_Tel_No: CHARACTER(20)     }      Room "books" --&gt; Reservationist     Guest "*" --&gt; Reservation     Guest "*" --&gt; Vehicle     Guest "*" --&gt; Property     Reservationist "*" --&gt; Reservation     Vehicle "*" --&gt; Property     Owner "*" --&gt; Property   </pre>
	<b>What Can Be Drawn on Diagram</b> <ul style="list-style-type: none"> <li>o Table</li> </ul> Identifying Constraint, Non-Identifying Constraint relationship lines
<b>Stakeholder Relationships diagram</b> <u>The Skinny on this Diagram:</u> For balanced scorecard support	<b>What Can Be Drawn on Diagram</b> <ul style="list-style-type: none"> <li>o Stakeholder Category</li> <li>o Organizational Unit</li> <li>o Stakeholder Relationship line</li> </ul>
<b>Strategy Map</b> <u>The Skinny on this Diagram:</u> For balanced scorecard support	<b>What Can Be Drawn on Diagram</b> <ul style="list-style-type: none"> <li>o BSC Objective</li> <li>o BSC Scorecard</li> <li>o BSC Linkage line</li> </ul>
<b>System Architecture diagram</b> <u>The Skinny on this Diagram:</u> Diagram on which you can draw Applications (aka Application Components) and data that passes between them	<b>What Can Be Drawn on Diagram</b> <ul style="list-style-type: none"> <li>o Application</li> <li>o Data Store</li> <li>o Multi Data Store (note same definition as Data Store, different symbol; no stereotype set)</li> <li>o External</li> <li>o Multi External (note same definition as External, different symbol; no stereotype set)</li> <li>o Data Flow line</li> <li>o Material Flow line</li> </ul>
<b>System Area Map</b> <u>The Skinny on this Diagram:</u> A diagram on which you can draw Application Areas (groups of Applications aka Application Components) and data that	<b>What Can Be Drawn on Diagram</b> <ul style="list-style-type: none"> <li>o Application Area</li> <li>o Data Store</li> <li>o Data Flow line</li> </ul>

<p>passes between them</p> <p><b>System Context diagram</b></p> <p><u>The Skinny on this Diagram:</u> A diagram on which you can draw Systems and data that passes between them</p>	<p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o System</li> <li>o Data Store</li> <li>o Multi Data Store (note same definition as Data Store, different symbol; no stereotype set)</li> <li>o External</li> <li>o Multi External (note same definition as External, different symbol; no stereotype set)</li> <li>o Data Flow line</li> <li>o Material Flow line</li> </ul>
<p><b>UML Use Case</b></p> <p><u>The Skinny on this Diagram:</u> Actors, Use Cases, relationships</p>	<p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Actor</li> <li>o Use Case</li> <li>o Includes</li> <li>o Association</li> <li>o etc</li> </ul>
<p><b>UML Activity diagram</b></p> <p><u>The Skinny on this Diagram:</u> UML diagram to model Activities and control flow.</p>	<p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Activity</li> </ul>

	<ul style="list-style-type: none"> <li>o Decision</li> <li>o Flow of Control</li> <li>o etc</li> </ul>
<b>UML Class diagram</b> <u>The Skinny on this Diagram:</u> Model software classes and relationships. Note: an integration exists in IBM Rational Software Architect (RSA) to enable you to port Class diagrams between System Architect and RSA.	<p>The diagram illustrates the following classes and their relationships:</p> <ul style="list-style-type: none"> <li><b>Reception</b>: A boundary class with methods like <code>book()</code> and <code>cancel()</code>.</li> <li><b>Diary</b>: A central class maintaining reservations. It has methods for confirming, decreasing, and showing availability.</li> <li><b>Room</b>: A class representing rooms with attributes like room type, number, capacity, and directions.</li> <li><b>Reservation</b>: A class representing bookings with attributes like date, duration, and room type.</li> <li><b>Customer</b>: A class representing customers with attributes like name, address, phone, and percentage discount.</li> <li><b>Reservonist</b>: An object associated with the Reception class.</li> <li><b>ControlManager</b>: An object associated with the Diary class.</li> <li><b>ReservationForm</b>: An object associated with the Reception class.</li> </ul> <p>Relationships include:     <ul style="list-style-type: none"> <li><b>Reception</b> has a directed association to <b>Reservonist</b> labeled <code>books</code>.</li> <li><b>Reception</b> has a directed association to <b>ControlManager</b> labeled <code>manages</code>.</li> <li><b>Reception</b> has a directed association to <b>ReservationForm</b> labeled <code>uses</code>.</li> <li><b>Diary</b> has a directed association to <b>Room</b> labeled <code>books</code>.</li> <li><b>Diary</b> has a directed association to <b>Reservation</b> labeled <code>is maintained by</code>.</li> <li><b>Room</b> has a directed association to <b>Reservation</b> labeled <code>names</code>.</li> <li><b>Customer</b> has a directed association to <b>Reservation</b> labeled <code>names</code>.</li> </ul> </p>
<b>UML Sequence diagram</b> <u>The Skinny on this Diagram:</u> Model Event lifelines and messages passed between them. This basic diagram structure has been profiled in the tool to represent various other architecture artifacts.	<p>The sequence diagram shows the following interactions:</p> <ol style="list-style-type: none"> <li><b>Customer</b> sends a message to <b>Reception</b>: <code>1 Query for Available Rooms</code>.</li> <li><b>Reception</b> sends a message to <b>Room</b>: <code>2 Check Room Availability</code>.</li> <li><b>Room</b> returns a message to <b>Reception</b>: <code>3 Room Available</code>.</li> <li><b>Reception</b> sends a message to <b>Customer</b>: <code>4 Room Available</code>.</li> <li><b>Customer</b> sends a message to <b>Reception</b>: <code>5 Request Reservation</code>.</li> <li><b>Reception</b> sends a message to <b>Room</b>: <code>6 Provisionally Book Room</code>.</li> <li><b>Room</b> returns a message to <b>Reception</b>: <code>7 Create Reservation</code>.</li> <li><b>Reception</b> sends a message to <b>Customer</b>: <code>8 Indicate Price</code>.</li> <li><b>Customer</b> sends a message to <b>Reception</b>: <code>9 Advise Customer</code>.</li> <li><b>Reception</b> sends a message to <b>Customer</b>: <code>10 Accept Terms</code>.</li> <li><b>Customer</b> sends a message to <b>Reception</b>: <code>11 Request Credit</code>.</li> <li><b>Reception</b> sends a message to <b>Customer</b>: <code>12 Provide Credit Card</code>.</li> <li><b>Reception</b> sends a message to <b>Room</b>: <code>13 Reserve Room</code>.</li> <li><b>Room</b> returns a message to <b>Reception</b>: <code>14 Update Status to Reserved</code>.</li> </ol>

## UML Collaboration diagram

The Skinny on this Diagram:  
Objects that instantiate classes and the links between those objects. Links contain groupings of messages passed between objects. This diagram is autogenerated from a Sequence diagram and vice versa.

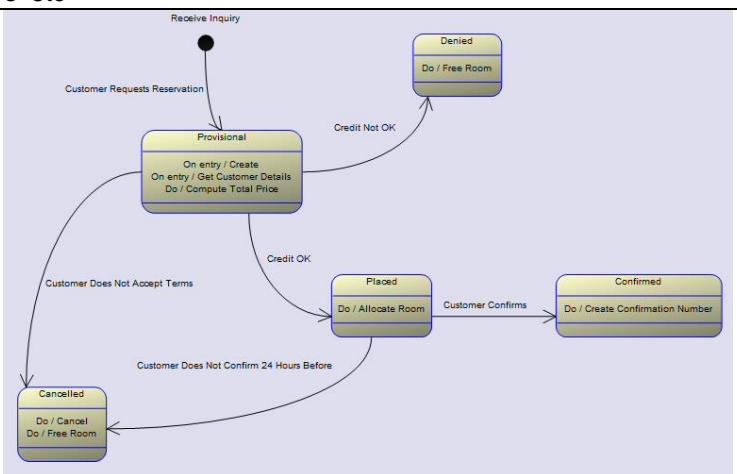


### What Can Be Drawn on Diagram

- o Objects
- o Communication Links
- o etc

## UML State Machine

The Skinny on this Diagram:  
Basic UML State machine diagram, enabling you to model the states of a class and transitions between states.

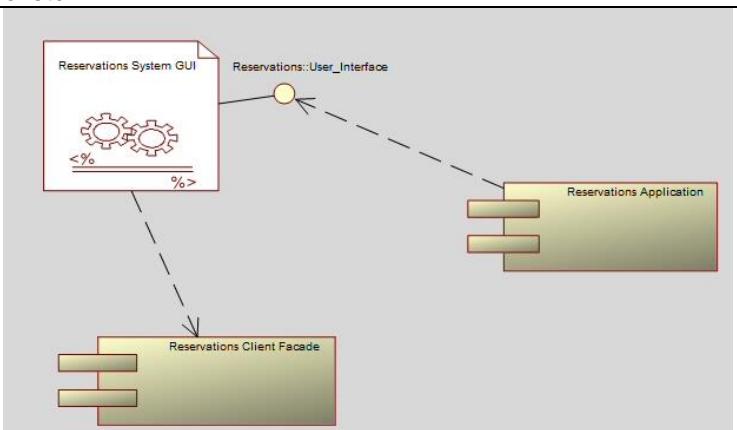


### What Can Be Drawn on Diagram

- o States
- o Transitions
- o etc

## UML Component diagram

The Skinny on this Diagram:  
Basic UML component diagram; data centric and items are name-spaced by package.



### What Can Be Drawn on Diagram

	<ul style="list-style-type: none"> <li>o Components</li> <li>o Classes</li> <li>o Interfaces</li> <li>o Association</li> <li>o Dependency</li> <li>o Realizes</li> <li>o etc</li> </ul>
<b>UML Deployment diagram</b> <u>The Skinny on this Diagram:</u> Basic UML Deployment diagram; data centric and artifacts are name-spaced by package.	<p><b>What Can Be Drawn on Diagram</b></p> <ul style="list-style-type: none"> <li>o Node</li> <li>o Component</li> <li>o Object</li> <li>o Connection</li> <li>o Realizes</li> <li>o Dependency</li> <li>o etc</li> </ul>

## **Harvesting Information**

You can harvest information from already existing data sources in a variety of ways.

### **Import Spreadsheets**

Import Excel spreadsheets via CSV import (select Dictionary, Import Definitions) – to do this, of course, you'd need to customize the metamodel to be able to map to the information you have in the CSV file (of Applications, Servers, etc). So customization is key in this scenario.

### **Import information via XML**

System Architect supports XML import and export of information via its own DTD. The XML import/export is the preferred and recommended way to get information between encyclopedias -- it will bring over definitions and diagram information without loss of data -- including exact positioning of symbols on diagrams, and so forth.

To use XML import or export, simply go to the Explorer (Browser) and right-mouse click on a diagram, diagram type, definition, definition type, or selections thereof.

XML output from System Architect can be mapped (or transformed) to other XML formats for inputting into another tool, or for getting information from another tool into System Architect. Some users have used XSL transforms to map the XML.

### **Import from Visio**

UNICOM provides a System Architect-Visio Mapper macro, at no charge on the System Architect [Customer Portal](#). This macro is installed to System Architect, and when run, 'sees' an open Visio diagram and provides a list of all symbol types that are present. A dialog allows you to map those symbol types to relevant symbol types on a System Architect diagram type that you choose.

You can map the Visio diagram into an existing System Architect diagram type, or customize the metamodel so that an existing SA diagram type contains the same elements as the Visio diagram. Some clients create a brand new diagram type in SA that matches the Visio diagram type, symbol for symbol.

### **Auto-Discover Network with CMDB Tools Such As Tivoli TADDM**

UNICOM provides an integration between System Architect and IBM Tivoli TADDM. The integration may be retrofitted for other CMDB tools. You may use Tivoli TADDM to sniff the network to auto-discover:

- Computer Systems and their Location
- Operating Systems running on Computer Systems
- Application Servers running on those Operating Systems
- Relations between running Applications

#### The Skinny on the Integration:

The integration for System Architect includes a VBA macro and XML mapping file -- Tivoli TADDM extracts in XML form are run through the XML mapping file by the VBA macro and imported into System Architect. The TOGAF 9 metamodel has been extended in System Architect to allow capture of this deployment information.

Rational System Architect Report

Page last updated 12/28/2013 14

Highlight Children

Location, Computer System, Operating System, & Server Instance				
Location	Computer System	Operating System	Operating System Type	Server
Austin, Texas	CALM-RI-SVR2clone.democentral.ibm.com	CALM-RI-SVR2.democentral.ibm.com	Microsoft(R) Windows(R) Server 2003, Enterprise Edition	192.168.64.2:7277
	EUSL15.democentral.ibm.com	x3950-11esx.demos.ibm.com:3760	Red Hat Enterprise Linux 4 (32-bit)	192.168.64.7:8008
	bd4f6fc13-0308-4af5-bdaa-bea0afe0746d.soabt48.demos.ibm.com	soabt48.demos.ibm.com	Microsoft(R) Windows(R) Server 2003, Enterprise Edition	x350001.democentral.ibm.com:8
Chicago, Illinois	CALM-REQ-SVR.democentral.ibm.com	x3950-11esx.demos.ibm.com:2992	Red Hat Enterprise Linux AS release 4 (Nahant Update 8)	192.168.64.2:1105
	CALM-RPC-SVR.democentral.ibm.com	b7f462dd-d93b-4bf3-b7bc-6ffaff882a75.CALM-RPC-SVR.democentral.ibm.com	Microsoft Windows Server 2003, Enterprise Edition (32-bit)	192.168.64.35:13043
Denver, Colorado	gotPot20-05.democentral.ibm.com	41448e18-6683-4f82-acf1-db142b14cbe0.CALM-RTC-SVR2.democentral.ibm.com	Microsoft Windows Server 2003, Enterprise Edition (32-bit)	192.168.64.15:2809
	gotPot20-08.democentral.ibm.com	501BF036-5832-37EC-DCA5-DDD1FECC5D84	Microsoft Windows Server 2003, Enterprise Edition (32-bit)	192.168.64.16:15200
	gotPot20-10.democentral.ibm.com	RTB14.democentral.ibm.com	Microsoft(R) Windows(R) Server 2003, Standard Edition	192.168.64.28:31531
	gotPot20-12.democentral.ibm.com	SecTiger5.democentral.ibm.com	Microsoft(R) Windows(R) Server 2003, Enterprise Edition	192.168.64.2:10025
	gotPot20-16.democentral.ibm.com	SecTiger7.democentral.ibm.com	Microsoft(R) Windows(R) Server 2003, Standard Edition	192.168.64.2:1034

Report generated from System Architect after import from Tivoli TADDM discovery of network

## Import/Export BPMN 2.0 Models from BPA Tools

System Architect supports import and export of the .BPMN 2.0 interchange format, which means you can interchange BPMN 2.0 models from other tools that support the interchange format. The following IBM tools also support this interchange format:

- IBM BlueWorksLive -- this tool is a thin-client web tool
- IBM Business Process Manager -- this is the business process management design tool formerly named Lombardi

For example, to import a BPMN model from IBM BlueWorksLive, you select Export Process from the Process Blueprint tab, to open the Export Process Data tab. There you choose to export the process to BPMN 2.0. A zip file is generated. In System Architect, you right-mouse click on Definitions in the Explorer (Browser) and choose to Import XML.

**Export Process Data**

Select the format you would like to use for export:

- Microsoft Excel Process Data (.xls)  
Process data displayed in relational tables in Microsoft Excel format.
- XML Process Definition Language (XPDL 2.1)  
An XML-based format for business processes from the WfMC.  
[More Details](#)
- Business Process Model and Notation (BPMN 2.0)  
An XML-based format for business processes from the OMG.  
[More Details](#)
- IBM WebSphere Business Modeler XML (Version 7.0)  
An XML-based format for business processes modeled in IBM WebSphere Business Modeler.

**Export**

**Export to BPMN 2.0 in IBM BlueWorksLive**

All

New

Copy

Create Instance

Delete

---

Read Only

---

Refresh

---

Workspace Compare

---

Access Control...

---

Access Control Filters...

---

Merge/Extract Filters...

---

Reset Filters...

---

Prepare to Check Out to Project

Prepare to Check In From Project...

---

Copy Onto Diagram

---

Export XML...

---

Export BPMN File...

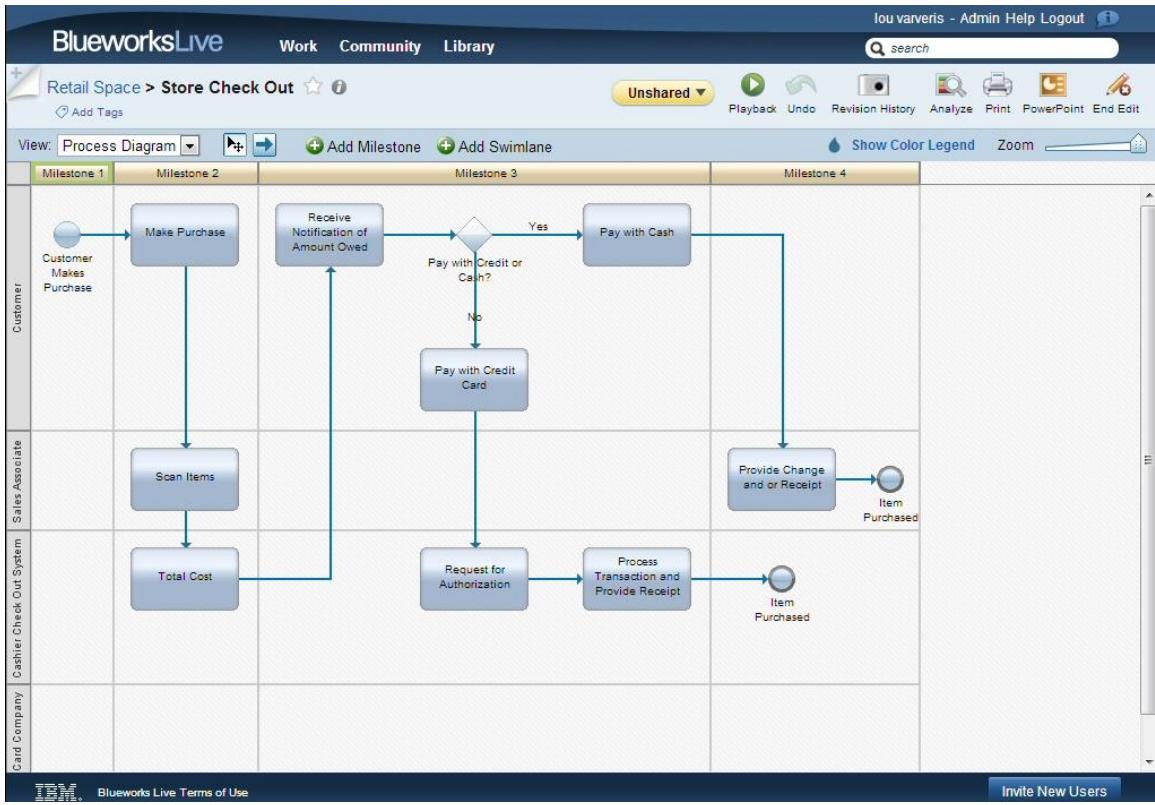
---

Import XML...

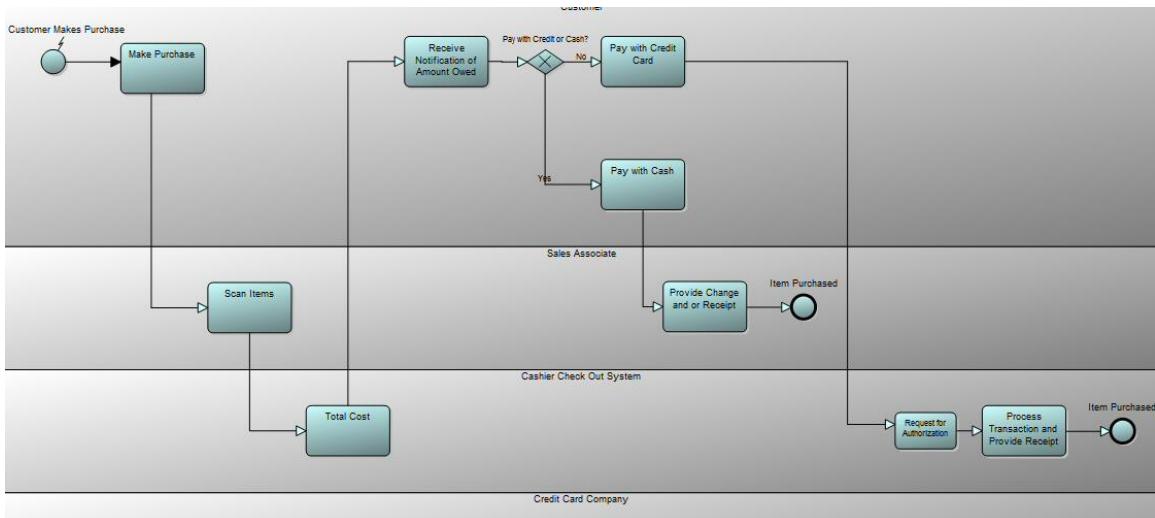
---

Import BPMN File...

**Import BPMN 2.0 in System Architect**



BPMN 2.0 diagram in IBM BlueWorksLive



BPMN 2.0 diagram in System Architect, imported from IBM BlueWorksLive

### SA Process Integrator Add-in for Modeling BPMN in Visio & Integrating with SA

System Architect also comes with a copy of SA Process Integrator, which is an add-in to Visio -- it allows you to model BPMN diagrams in Visio, with System Architect's automatic rules checking running in the background (upholding BPMN rules such as Message Flow Lines must be drawn between processes in different pools, etc), and store the information in System Architect's repository.

### BPMN Modeling in SA/XT Thin Web Client

SA/XT also provides BPMN drawing in a thin web client. You store the BPMN models directly into the SA repository -- the same one you are using with rich-client System Architect.

## **Reverse Engineer/Synchronize Database Models**

Both IBM's Infosphere Data Architect (IDA) and CA's ERWin come equipped with an integration to System Architect furnished by MetalIntegration.com. Selections are provided in both tools to move data models to and from System Architect. A video of the SA-IDA integration is provided [here](#).

## **Harvest SAP Processes, Data, and Application Components**

You can harvest information from other tools into System Architect. For example, SA has an add-on integration to Tivoli which can be used to sniff the network and bring information into a Network diagram, or a paid add-on to bring in SAP processes or data architecture, etc.

## **Use VBA to Build Importer**

Import information by building an interface to another tool (SA comes with built in VBA (Tools, Macros, VBA Editor) so that you can use its open API to build a direct interface to other tools),

## **Using Reference Models to Guide/Jump Start EA**

System Architect provides support for several popular reference models to help guide or jump start the enterprise architecture effort.

### **FEA Reference Models**

Federal Enterprise Architecture Framework 2.0 and 1.0 are supported via the paid add-on, FEA Reference Model Add-on. The most popular of the reference models for commercial-industry clients are the Technical Reference Model (TRM) and the Services Reference Model (SRM).

The add-in is designed to allow users to import the latest reference models from whitehouse.gov, align their architecture with the reference models (through the property set), and then auto-generate pertinent parts of OMB 300 reports that can be submitted to the US Office of Management and Budget to obtain funding on a system or proposal. The reference models are used also by commercial clients

### **TMForum Reference Models**

An add-in to System Architect provides an encyclopedia with prebuilt reference models of the Telecommunications Forum (TMForum) -- TAM logical applications, eTOM processes (hierarchy and example BPMN flows), and SID.

### **APQC Reference Models**

You may import the APQC reference models for various industries, providing 5-layer processes. The reference models are available from APQC.org.

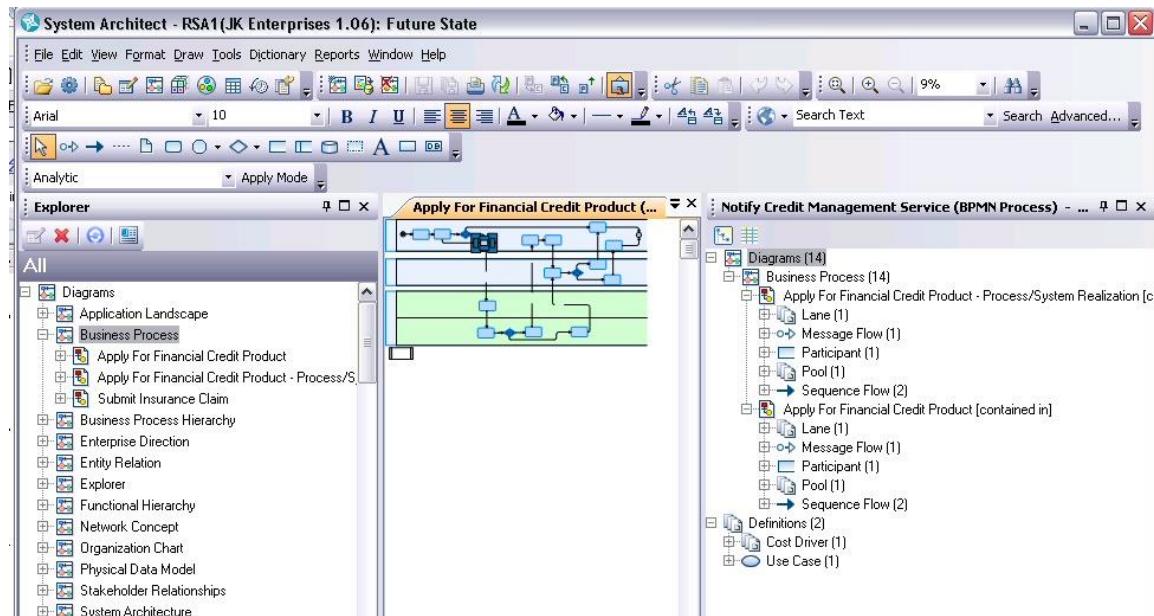
### **SCOR Reference Models**

A paidn add-in to System Architect provides reference process models for SCOR.

# Explore the Architecture

## View References -- See What's Related to What

1. Select View, References at any time to open the References pane. Anything you touch from that point forward (a symbol on a diagram, a definition in the browser, etc) will have all its references shown in the dockable References pane. Right-mouse click on an item in the References pane and select Referenced By to see its references.



## Examine the History of an Object & Revert Back to Previous Version

Click on View, Object History to find and see the history of changes to any definition (you may revert back to a previous definition). If you are using Workspaces (see below) you can do a quick compare of an item across two workspaces (or versions of the architecture).

## Search for Stuff

Use the **Search** toolbar to search for specific definitions; use the Advanced Search to use the reporting system to filter your search.

## Categorize the Architecture

You can create your own tabs in the Explorer (Browser) and create folders to categorize elements of the architecture. For example, you might create folders for all of the information pertaining to the Human Resource dept, the Product Development dept, the Training dept, etc. The names of the folders you create are up to you, capturing whatever categorization of the architecture you desire. You may also create as many tabs as you like.

You have two choices of folders to create -- a static folder that you drag-and-drop information into, and a dynamic folder that is populated automatically by the running of reports. For example, you might automatically populate the Human Resource dept folder with all the BPMN Process diagrams for human resources, by running a report that gets all processes with "Human Resources" in the name.

These are categorizations -- providing no namespace -- so you can have, for example, the same process model appearing in several folders -- in our example, in the Product Development organization folder, and in the Testing folder.

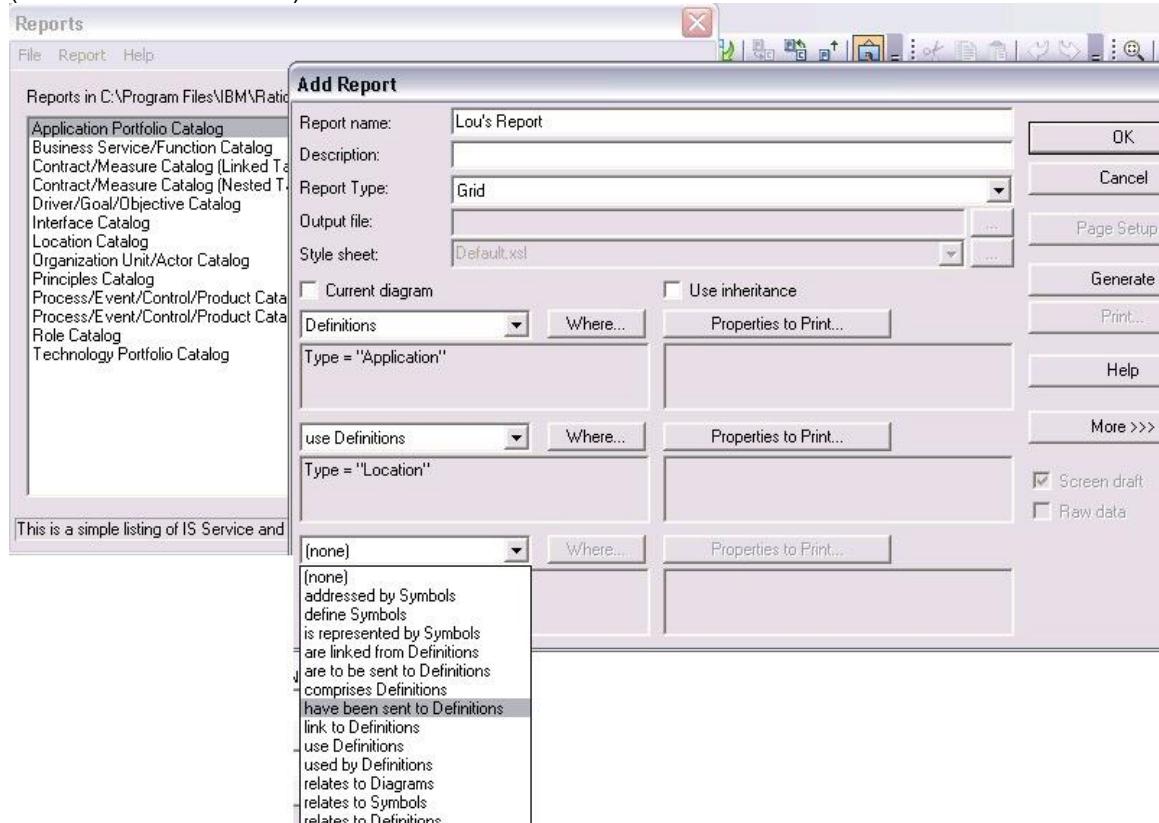
# Analyze the Architecture

## Reporting on Your EA – Native Report Generator

System Architect has a built in, native report generator which you can use to build any and all kinds of reports on your architecture, and generate it out to text, Grid, or HTML (with stylesheets applied). This reporting engine also serves as the basis for all of the analytics (described above) that you can run against the repository information.

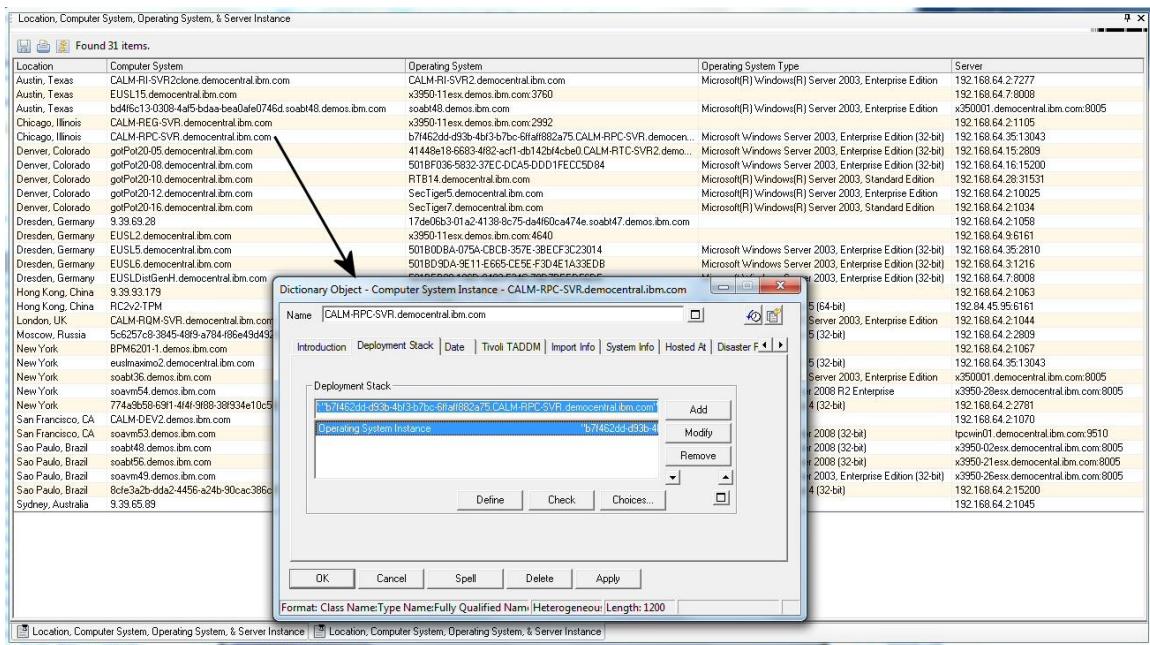
To use the Report Generator, select Reports, Report Generator. You'll see there are many report files that come with the product. In the Report Generator dialog, select File, Open Report File. Each Report File TOGAF9Catalog.rpt, for example comes with lots of out-of-box SQL Query based reports. You can also build your own reports and put them in your own report files. See the online help for instructions on how to build a report.

(See screenshots below)



*Example of Report GUI used to navigate and build SQL-like queries*

You can output reports to Grid, or to HTML, or you can print them to PDF (if you have Adobe Acrobat Distiller installed). Printing to Grid produces the report in a System Architect grid dialog, which you can save to Excel. Just as importantly, you can double click on any item in the grid to access its definition and edit it.



*Example of Report output to Grid -- so that you can double-click on any of the cells in the report to access and edit the information*

Function Name	Logical App	Physical App	App Version	App Instance
Create IT services and solutions	Software Design	Rational Software Architect	Rational Software Architect 8.5	Rational Software Architect Ld567
Develop and manage IT service levels	IT Asset Management	Tivoli TADDM	Tivoli TADDM 7.2	Tivoli TADDM Lo9903x
Establish information security, privacy, and data protection strategies and leve	Application Security	AppScan Reporting Console AppScan Source Edition AppScan OnDemand Production Site Monitoring AppScan OnDemand AppScan Enterprise Edition AppScan Build Edition AppScan Tester Edition	AppScan Reporting Console 8.0 AppScan Source Edition 8.5 AppScan OnDemand Production Site Monitoring 8.0 AppScan OnDemand 8.0 IBM AppScan 8.5 AppScan Enterprise Edition 8.0 AppScan Build 8.5 AppScan Build Edition 8.0	AppScan Reporting Console L56e7 AppScan Source Edition L2ee7 AppScan OnDemand Production Site Monitoring L34 AppScan OnDemand L294545 IBM AppScan L29sww AppScan Enterprise Edition L22267 AppScan Build L1245 AppScan Build Edition L2967 AppScan Tester Edition L3367
Maintain Enterprise Architecture	Enterprise Architecture	System Architect	IBM System Architect 11.4.2.5 IBM System Architect 11.4.2.4 IBM System Architect 11.4.1.0	System Architect L2 System Architect L1 IBM System Architect L296h7 IBM System Architect L296d7 IBM System Architect Lfss47
Maintain IT services and solutions	Cloud Platform and Application Virtualization DevOps Release and Deploy	WebSphere MQ Hypervisor for AIX WebSphere MQ Hypervisor for RedHat Linux Rational Automation Framework (RAF)	WebSphere MQ Hypervisor for AIX 7.5 WebSphere MQ Hypervisor for RedHat Linux 7.5 Rational Automation Framework (RAF) 3.0	WebSphere MQ Hypervisor for AIX Ldfp67 WebSphere MQ Hypervisor for RedHat Linux L2w47 Rational Automation Framework (RAF) Lo990
Maintain customer master data	Data Protection	Security Key Lifecycle Manager for z/OS 2.5 InfoSphere Guardium Database Activity Monitor	Security Key Lifecycle Manager for z/OS 2.5 InfoSphere Guardium Database Activity Monitor 9.2	Security Key Lifecycle Manager for z/OS LoSEx InfoSphere Guardium Database Activity Monitor 9.2

*Example of Report output to HTML using a CSS stylesheet*

Computer Systems w Op Systems w Apps

Computer System Name	Operating System Name	Server or Application Instance Name
192.84.45.76	192.84.46.76	IBM Cognos L296ss4 IBM Focal Point L2dfd IBM System Architect Lfs47
5c6257c8-3845-48f9-a784-f86e49d492b8 ldapb.democentral.ibm.com	ldapb.democentral.ibm.com	192.168.64.2:2809
774a9b58-69f1-44f9-9f88-38f934e10c56.rce05.democentral.ibm.com_NeedsNAT	564D1F5E-FED6-7583-6238-048D5001647A	192.168.64.2:2781
8cfe3a2b-dda2-4456-a24b-90cac386c31e.rcc-wat-lpm-bak	501B03C6-2C14-045B-CF9E-D10A98792366	192.168.64.2:15200
9.39.65.89	10:00:00:05:1E:34:4E:AC	192.168.64.2:1045
9.39.69.28	17de06b3-01a2-4138-8c75-da4f60ca474e.soabt47.demos.ibm.com	192.168.64.2:1058
9.39.93.179	20:00:00:0D:EC:8E:80:C0	192.168.64.2:1063
BPM6201-1.demos.ibm.com	x3950-04esx.democentral.ibm.com:8816	192.168.64.2:1067
CALM-DEV2.demos.ibm.com	x3950-11esx.demos.ibm.com:2960	192.168.64.2:1070
CALM-REQ-SVR.democentral.ibm.com	x3950-11esx.demos.ibm.com:2992	192.168.64.2:1105
CALM-RI-SVR2clone.democentral.ibm.com	CALM-RI-SVR2.democentral.ibm.com	192.168.64.2:7277
CALM-RPC-SVR.democentral.ibm.com	b7f462dd-d93b-4bf3-b7bc-6ffaff882a75.CALM-RPC-SVR.democentral.ibm.com	192.168.64.35:13043
CALM-RQM-SVR.democentral.ibm.com	CALM-RQM-SV2.democentral.ibm.com	192.168.64.2:1044
EUSL15.democentral.ibm.com	x3950-11esx.demos.ibm.com:3760	192.168.64.7:8008
EUSL2.democentral.ibm.com	x3950-11esx.demos.ibm.com:4640	192.168.64.9:6181
EUSL5.democentral.ibm.com	501B0DBA-075A-CBCB-357E-3BECF3C23014	192.168.64.35:2810
EUSL6.democentral.ibm.com	501BD9DA-9E11-E065-CE5E-F3D4E1A33EDB	192.168.64.3:1216
EUSLDistGenH.democentral.ibm.com	501BEB09-196D-0493-F24C-79D7BEED56DE	192.168.64.7:8008
RC2v2-TPM	soavm125.democentral.ibm.com	192.84.45.95:6161

Example of Report output to HTML using a CSS stylesheet

You can publish a report that only shows items fully related to the last item (column) in the report, or you can toggle on Partial to publish a report to show *all* items -- whether they are related to other items in the report or not. This can tell you how much work you have to do to align things -- and publish to Grid so you can open up artifacts directly to add information to them.

Functions & their Logical Apps & Phys Apps & Instances -> Grid

Function Name	Logical App	Physical App	App Version	App Instance
Establish information security, privacy, and data protection strategies and...	Application Security	AppScan Source Edition	AppScan Source Edition 8.5	AppScan Source Edition L2ee7
Establish information security, privacy, and data protection strategies and...	Application Security	AppScan OnDemand Produc...	AppScan OnDemand Production Site Monitoring L3k4	
Establish information security, privacy, and data protection strategies and...	Application Security	AppScan OnDemand	AppScan OnDemand 8.0	AppScan OnDemand L294545
Establish information security, privacy, and data protection strategies and...	Application Security	AppScan Enterprise Edition	IBM AppScan 8.5	IBM AppScan L29sww
Establish information security, privacy, and data protection strategies and...	Application Security	AppScan Enterprise Edition	AppScan Enterprise Edition 8.0	AppScan Enterprise Edition L22267
Establish information security, privacy, and data protection strategies and...	Application Security	AppScan Build Edition	AppScan Build 8.5	AppScan Build L1245
Establish information security, privacy, and data protection strategies and...	Application Security	AppScan Build Edition	AppScan Build Edition 8.0	AppScan Build Edition L2967
Establish information security, privacy, and data protection strategies and...	Application Security	AppScan Tester Edition	AppScan Tester Edition 8.0	AppScan Tester Edition L3367
Establish information security, privacy, and data protection strategies and...	IBM Rational Policy Tester			
Establish the enterprise risk framework and policies				
Evaluate and communicate IT business value and performance				
Evaluate and manage financial performance				
Evaluate and prioritize market opportunities				
Execute floor merchandising and promotions				
Invoice customer				
Loss Prevention				
Maintain Enterprise Architecture	Enterprise Architecture	System Architect	IBM System Architect 11.4.2.5	System Architect L2
Maintain Enterprise Architecture	Enterprise Architecture	System Architect	IBM System Architect 11.4.2.5	System Architect L1
Maintain Enterprise Architecture	Enterprise Architecture	System Architect	IBM System Architect 11.4.2.5	IBM System Architect L296h7
Maintain Enterprise Architecture	Enterprise Architecture	System Architect	IBM System Architect 11.4.2.4	IBM System Architect L296d7
Maintain Enterprise Architecture	Enterprise Architecture	System Architect	IBM System Architect 11.4.1.0	IBM System Architect L1s47
Maintain IT services and solutions	Cloud Platform and Application Virt...	WebSphere MQ Hypervi...	WebSphere MQ Hypervisor for AIX Ldp67	
Maintain IT services and solutions	Cloud Platform and Application Virt...	WebSphere MQ Hypervi...	WebSphere MQ Hypervisor for Linux L2w47	
Maintain IT services and solutions	Cloud Platform and Application Virt...	WebSphere MQ Hypervi...	WebSphere MQ Hypervisor for RedHat Linux L2w47	
Maintain IT services and solutions	DevOps Release and Deploy	IBM Workload Developer		
Maintain IT services and solutions	DevOps Release and Deploy	IBM UrbanCode Deploy		
Maintain IT services and solutions	DevOps Release and Deploy	IBM UrbanCode Release		
Maintain customer master data	Rational Automation Fra...	Rational Automation Framework (RAF) Lo990		
Maintain customer master data	Data Protection	Security Key Lifecycle Mana...	Security Key Lifecycle Manager for z/OS Lo9ex	
Maintain customer master data	Data Protection	InfoSphere Guardium Da...	InfoSphere Guardium Database Activity Monitor Ldfdd67	
Maintain customer master data	Data Protection	InfoSphere OptIn Data Priva...	InfoSphere OptIn Data Privacy Workgroup Edition L2d67	
Maintain customer master data	Data Protection	Tivoli Key Lifecycle Mana...	Tivoli Key Lifecycle Manager L097	
Maintain customer master data	Data Modeling	InfoSphere Data Architect	InfoSphere Data Architect 9.1	InfoSphere Data Architect L277g7
Manage Business Compliance				
Manage Corporate Cash				

Example of Report Grid with "Partial" turned on -- shows you gaps in the architecture

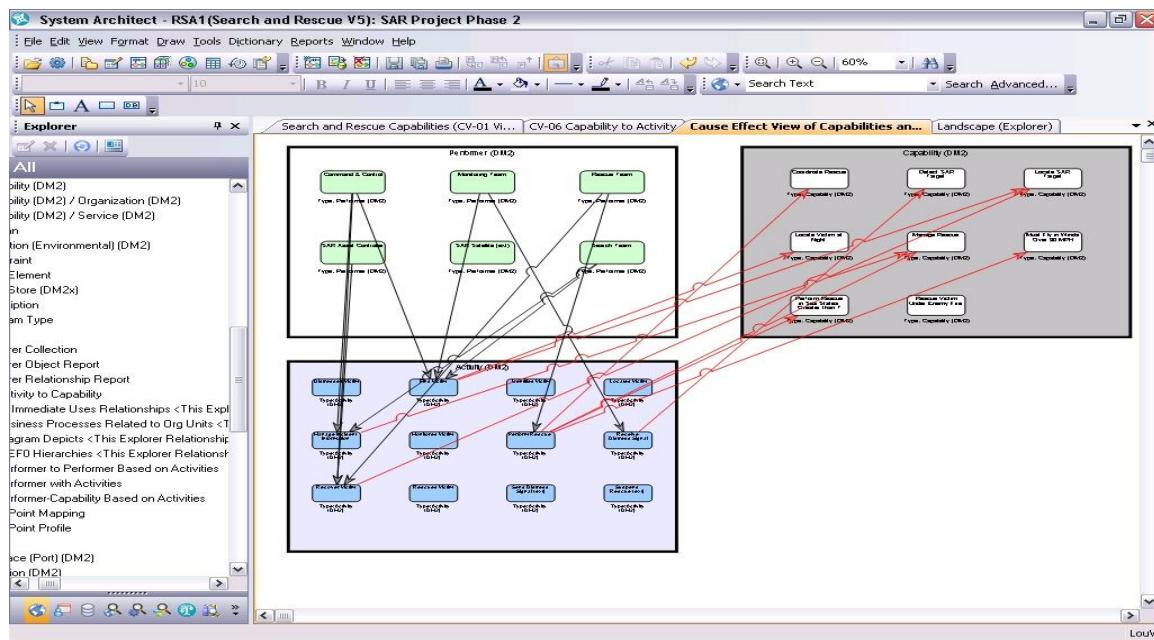
## Explorer Diagrams for Cause-Effect & Gap Analysis

- One of the unique, powerful, and most widely used diagram types in System Architect is the **Explorer** diagram. It provides a visual output of SQL report queries run against the repository. These enable you to get spider diagrams of cause-effect analysis, and Landscape diagrams upon which you can run analytic reports to build Heat Maps.

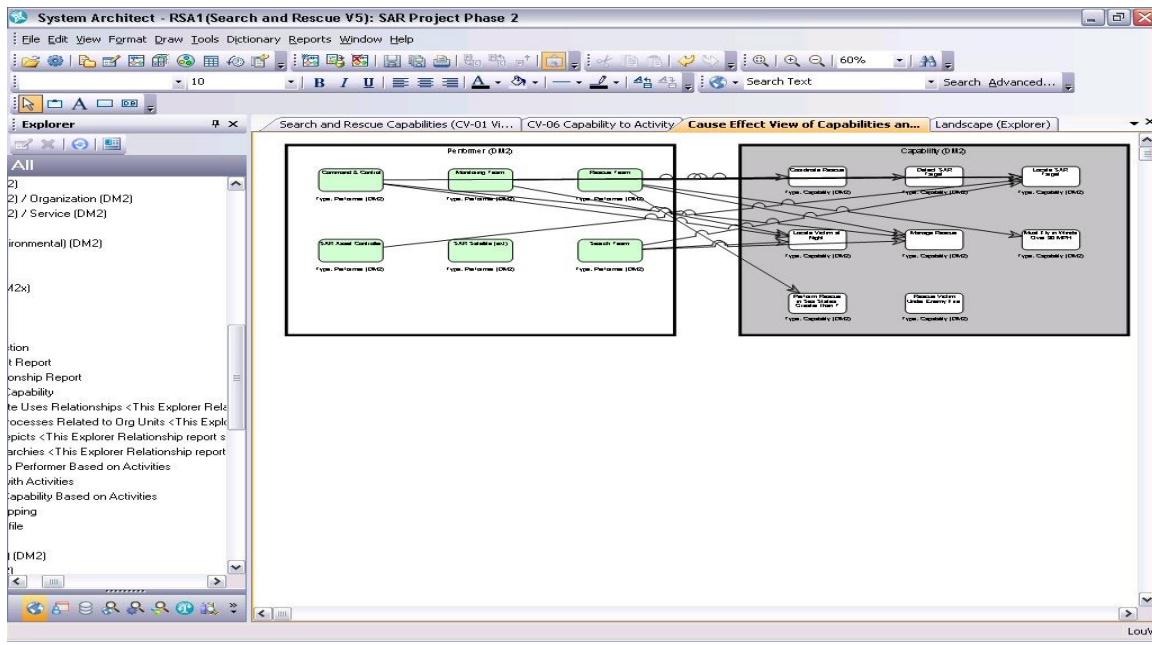
### Standard Network-Style Explorer Diagrams

The standard **Explorer diagram** enables you to:

- Run a report to filter out certain definitions (just show me the Applications used by a certain group, or that don't have a Disaster Recovery Plan in place, etc)
- See a view of the relationships between 'collections' of any objects, and their type, to all other objects, and type, they are related to.
- See what inferred relationships exist – if X is related to Y is related to Z, then show me X related to Z (and don't show Y on the diagram). For example, if *Capabilities* are enabled by *Processes* that are performed by *Applications* that are installed on *Servers* that are deployed at *Locations*, then just show me *Capabilities* enabled by *Locations*.
- This is an example of an *Explorer Cause-Effect Diagram*. This diagram is Auto generated by the tool based filters you build into on reports you run on the diagram. This example uses a diagram to report on Capabilities that are enabled by Activities that are performed by any kind of 'Performer' (System, Organization, Person, etc). Simple rectangles are used here, but you can replace these with any pictorial icons, depictions, you like. Further, the node symbols shown here may be result of a report run that has a filter applied – just show me the Capabilities that are priority ranked higher than 5, etc .



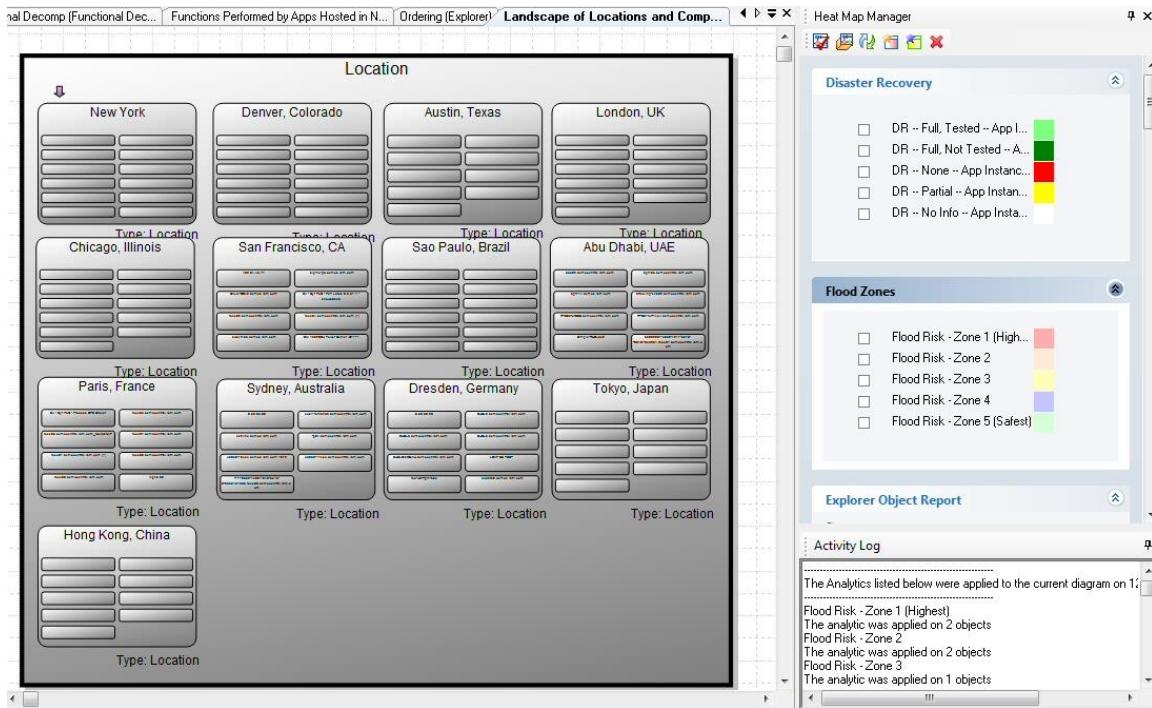
- This is another Explorer Cause-Effect Diagram, this time showing direct relationships between Capability and Performer.



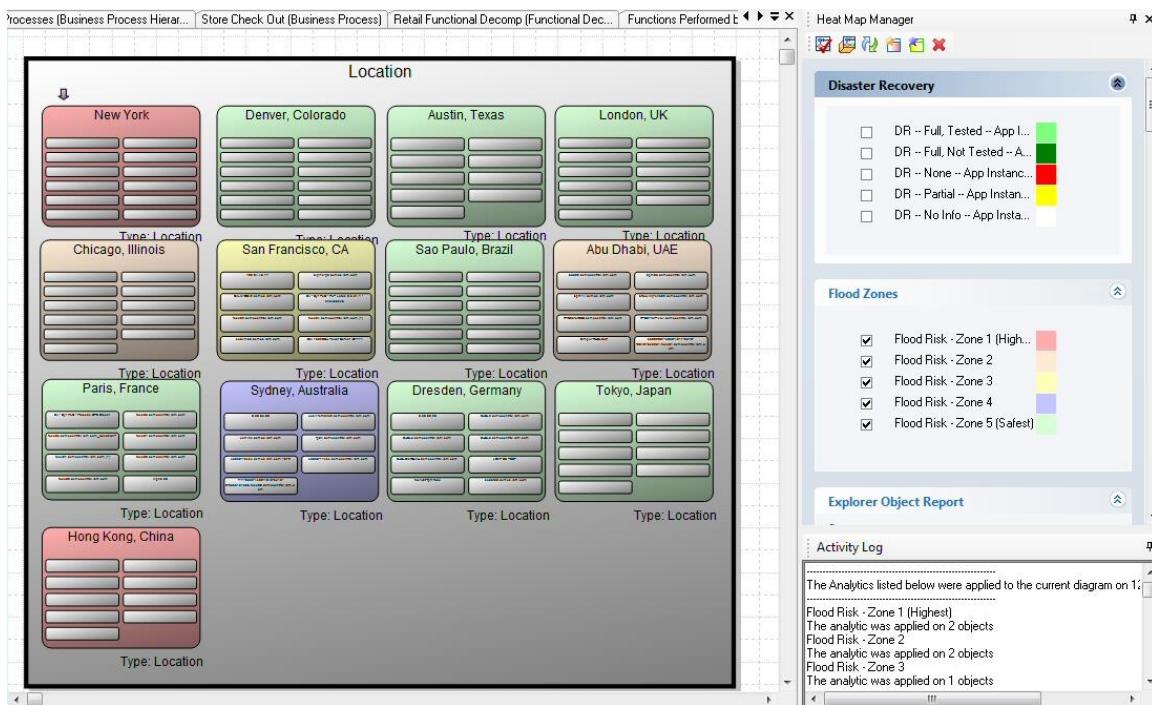
## Explorer Diagrams for Landscape & Heatmap Analysis

The Landscape-Style **Explorer diagram** enables you to:

- Run the same SQL queries to auto create diagrams, but this time as box-in-box Landscape diagrams.
- This is a Landscape-style Explorer diagram – same kind of information as a network-style Explorer diagram – in this example, Locations of data centers as the outside box, and then a report run to relate those locations to the Computer Systems located at each location, the Operating System on each Computer System, the Servers hosted on those Operating Systems, the Applications running on those Servers, and the Application Versions of those Apps -- the report simply shows App Versions at Locations -- all the "join" information is hidden.

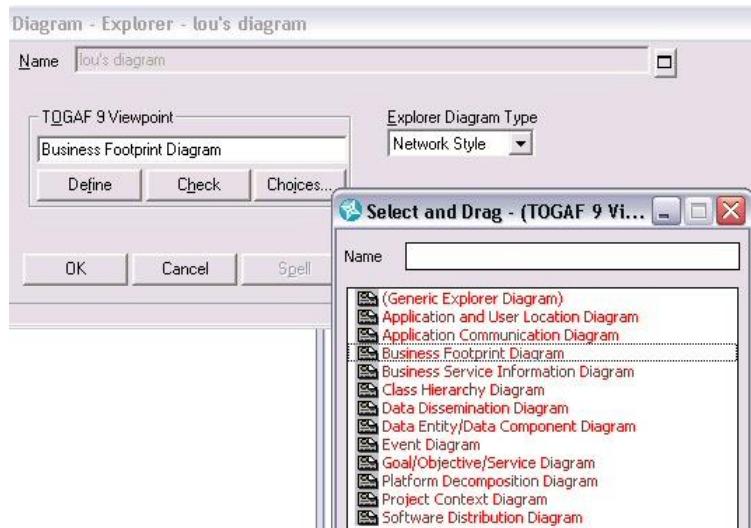


- c. This is a Landscape-style Explorer diagram with analytics applied – a report is run to color the new Locations based on their Flood Zone information– in this case, Locations in Flood Zone 1 are colored red, Flood Zone 2 is orange, etc. You can build and run a report to turn something a color based on any value of any property, and you may use icons as well as color to denote analytical information..

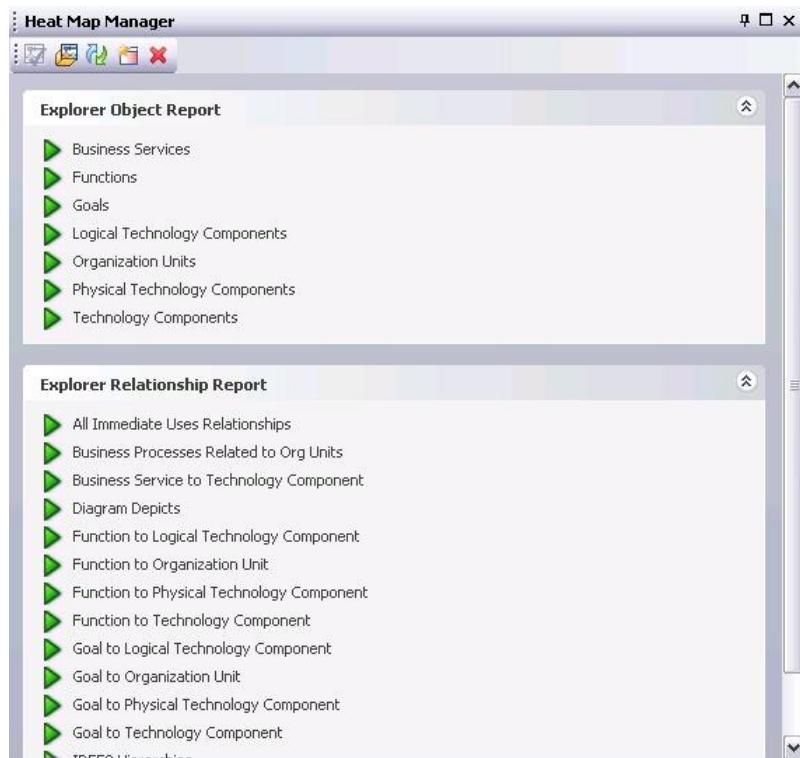


## TOGAF 9 Comes with Pre-Configured Set of Explorer Diagrams

2. TOGAF 9 comes with a standard set of Explorer diagrams based on TOGAF 9 recommendations (the Viewpoints section of the spec), preconfigured with reports that can be run to auto-create the diagram. To create such diagrams you:
  - f. Create an Explorer diagram, and select the stereotype of the diagram you wish to build.

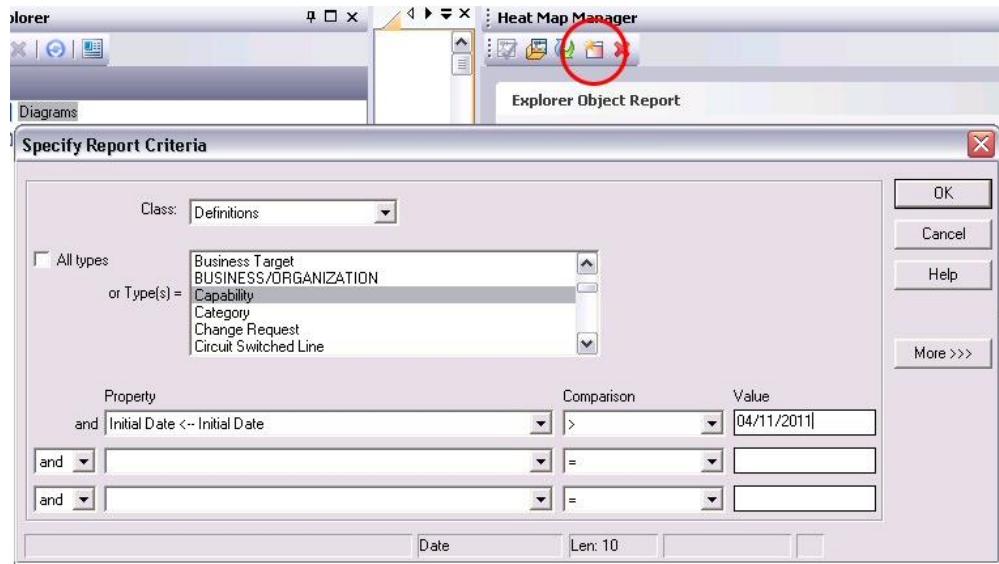


- g. Select View, Heatmap Manager to open a dialog that presents you with the pre-built reports to run to build the diagram.



- h. You can also easily create your own Analytics – after selecting View, Heatmap Manager to open the Heatmap Manager window, click on the little Create Analytic button (circled in red below) in the Heatmap manager, and then navigate

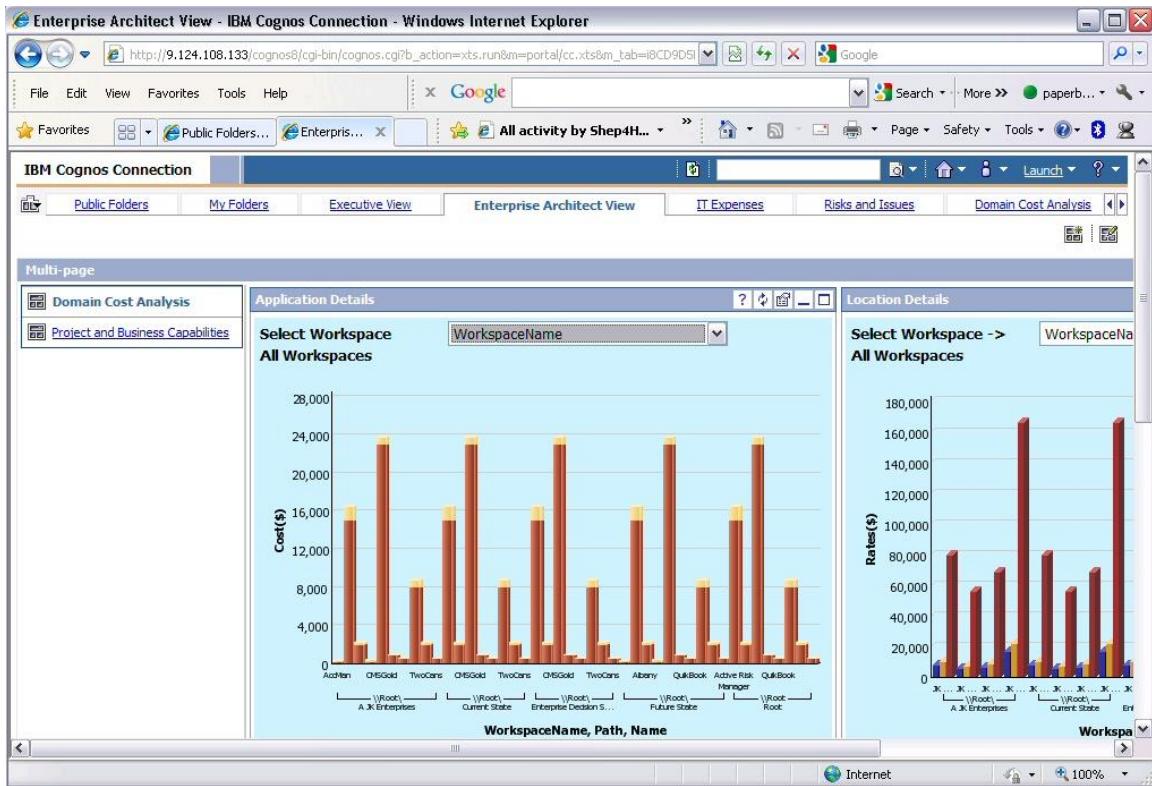
the Wizard to get at the GUI to SA's SQL-query reporting system (shown below), and specify your report-based analytic (you also have the option of building very complex VBA-based analytic algorithms).



- i. The Pre-Built Explorer diagrams for TOGAF 9 are described in Appendix A. The list is as follows:
  - i. Explorer Diagram of stereotype <**Application and User Location diagram**>
  - ii. Explorer Diagram of stereotype <**Application Communication diagram**>
  - iii. Explorer Diagram of stereotype <**Business Footprint diagram**>
  - iv. Explorer Diagram of stereotype <**Business Service Information diagram**>
  - v. Explorer Diagram of stereotype <**Data Dissemination diagram**>
  - vi. Explorer Diagram of stereotype <**Data Entity/Data Component diagram**>
  - vii. Explorer Diagram of stereotype <**Event diagram**>
  - viii. Explorer Diagram of stereotype <**Goal/Objective/Service diagram**>
  - ix. Explorer Diagram of stereotype <**Platform Decomposition diagram**>
  - x. Explorer Diagram of stereotype <**Project Context diagram**>
  - xi. Explorer Diagram of stereotype <**Software Distribution diagram**>

## **Business Intelligence Reporting on the EA – Cognos Bundled with SA**

System Architect V11.3.1.1 (released in March of 2010) and later, offers Cognos BI 8.4 bundled at no extra charge with the software. It is available from Passport Advantage. SA has an integration with Cognos that enables you to generate your repository (aka encyclopedia) out to an Offline Data Store, ODS, data source that is used by Cognos. This allows users to build BI reports against the data, using Cognos' native capabilities to generate dashboard reports.



Please see this page for the Cognos installation and configuration instructions, and for an example encyclopedia with some sample reports built.

<http://tinyurl.com/y9reaka>

## Summary So Far

You don't have to draw any diagrams; you can simply import information into the repository, or manually create definitions and relate them via their properties, or the matrices, and then auto build Explorer diagrams. Or you can manually draw diagrams. There are many ways to begin building your models that represent your EA.

# Managing the EA

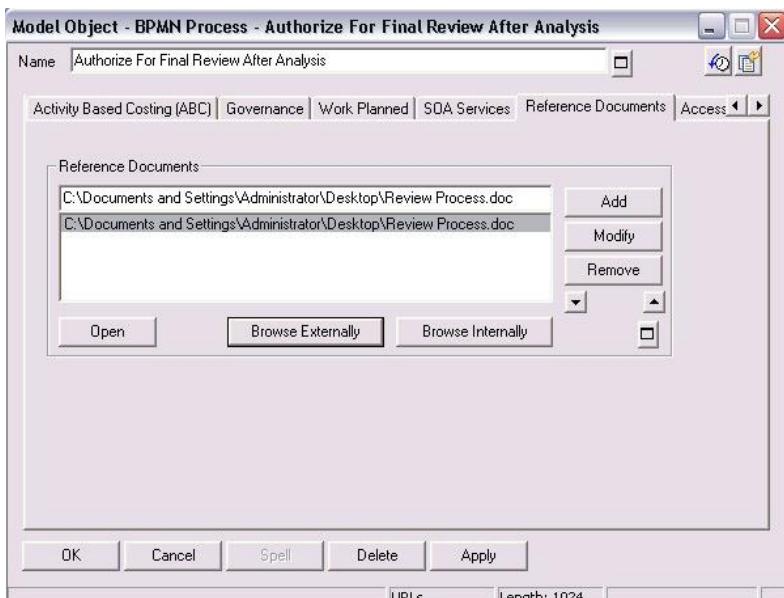
## Access Control

There are lots of ways to govern access to the content in the encyclopedia. System Architect is natively a multi-user tool, unlike many file-based UML tools, for example. Its' behavior is quite different. When you are working in System Architect on the network, many other people may be working in the same encyclopedia at the same time. If you open a definition or a diagram, and then another person tries to open that same definition or diagram, while you have it open, they will get a message that says you have it open, and they will get a read only version of it. That's the essence of the multi-user capabilities. Beyond that, you can right-mouse click on any item in the Explorer/tree Browser and select to check it out. This allows you to lock it to your user until you complete your work. Then you check it back in. Administrators can also freeze items so they are set in stone, i.e., no one can change them.

Further, encyclopedias in SA can be "Professional", i.e., only use by the creator, or they can be "Enterprise", shared by many users. SA comes with a utility called The SA/Catalog Manager, which enables you to specify that a Professional encyclopedia is to be changed to an Enterprise encyclopedia. Users of Enterprise encyclopedias must be granted access rights to use them. The SA Administrator will use the Catalog Manager to set up role based access control – each user can be assigned one or more Roles (ie, Enterprise Architect, Data Architect, Business Architect, Admin, etc), and each Role is assigned permissions that specify what diagram and definition types they are allowed to edit, or even see; what menus they can see, etc. A triplet of info – role-permissions-encyclopedia can be arranged for each user and/or user group. This allows users different levels of access to different encyclopedias. You may also perform instance-level access control – assigning access of a certain diagram or definition instance to a Group, i.e., only execs can see a business process diagram instance.

## Governing the EA Assets

In every definition within System Architect, on the second to last tab of the definition, the References Chapter, there is a Reference Document field. You can use this field to relate any definition to the knowledge base for the diagram or object; a standards document, a requirement document, etc. The document can be a file on a drive, a url, or you can import it into the Files table of the database (aka 'encyclopedia' aka 'repository'). You can report on this information, and if you generate the architecture to a website, the references are brought along. Customers have used this feature to great avail – linking it to sources of record (so that an external viewer, viewing the architecture on an internet, can click the link and navigate to the live document or database), or you can use this feature to link the architecture to other architectures.



### **Governing EA Assets**

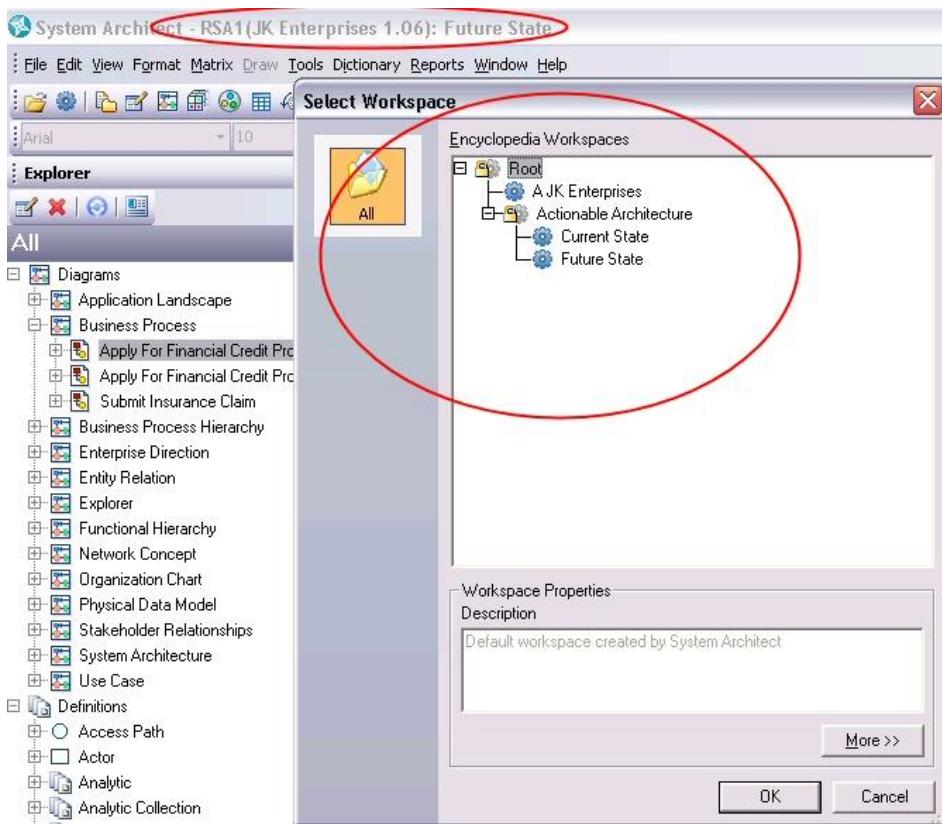
What this approach does not cover, however, is ‘governing’ those related documents. What if the URL changes? What if someone replaces the document with a new version, with a new suffix to the named, such as StandardV2.doc. IBM provides a tool to enable governance of files and documents – it is called Rational Asset Manager (RAM). You can use it to auto discover files and documents and ‘assets’ in the organization, and place governance around them so that if someone wishes to change the document, an approval process can be invoked forcing sign off by three people, for example, before it is placed into an authorized state. This authorization then can trigger the update to the EA and the republishing of the EA. System Architect has an integration with RAM, so that such documents that are linked into the EA can be ‘governed’. RAM is an additional investment for a user. There is no charge for the integration.

### **As-Is and To-Be Architecture Modeling (Workspaces)**

System Architect comes with a feature called Workspaces, introduced with 11.3.1, which enables you to baseline a version of your architecture, but continue working on the information on that baseline in new to-be layers – adding, deleting, or modifying information in the baseline to create the future architecture. You may create alternative, side-by-side to-be architectures, and then do comparisons across workspaces – comparing alternative architectures, or comparing as-is and to-be architectures.

An encyclopedia must be ‘workspace enabled’ via the SAEM tool (which comes with the product). Instructions are in the help – you basically add to the schema of the underlying repository to enable workspaces. Once enabled, you may use SAEM or System Architect itself to create workspaces.

When you open a workspace-enabled encyclopedia, you are asked what workspace you want to work in. After that, you work as usual – the fact that you are working in a layer is only noticeable to you in the title bar of the tool.



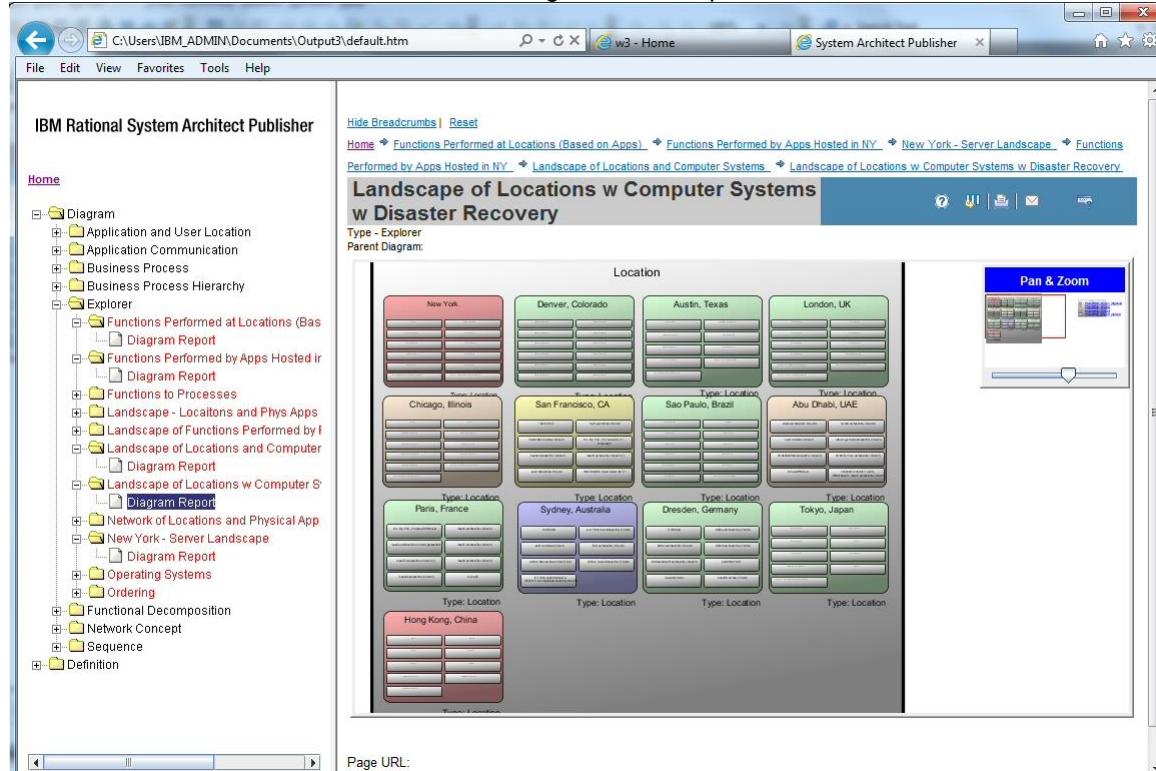
# Communicating the EA

## Publishing the EA

### SA/Publisher Paid Add-On

SA/Publisher is an add-on product that enables you to generate websites of your architecture that are the result of SQL queries (native reporting system reports). The website itself is a directory of html pages, xml files, css stylesheets, and svg files, with a default.htm portal page. The directory can be hosted on the internet or intranet. Use of the reporting engine enables you to build fairly sophisticated websites with tailored output, and navigation. SA Publisher is for the read-only consumers of the EA. These consumers will look to the EA team to communicate to them via websites that are controlled and managed by the EA Team, that are generated from the one-statement-of-truth repository, and all of this is provided to them without their need for SA on their desktop and without them coming to you for EA content in Excel, Visio and PowerPoint. SA Publisher readers can save any report page to Word or Excel if they wish.

SA Publisher websites provide the read-only consumer with all of the read-only capability SA has itself; parent to child navigation, drill into definitions, viewing reports, using references to open knowledge based documentation for diagrams and objects, navigation from a framework, and more. These websites are completely tailor-able and customizable, by the creator, and there is no limit to the number of websites a user can generate and publish.



*Example output of the SA/Publisher tool. The diagram is SVG format, which can be zoomed.*

The screenshot shows the IBM Rational System Architect Publisher interface. On the left, there is a navigation tree under 'Home' with categories like Diagram, Application and User Location, Application Communication, Business Process, Entity Relation, Definition, and Object. The main area displays a report titled 'Operate customer checkout' with the following sections:

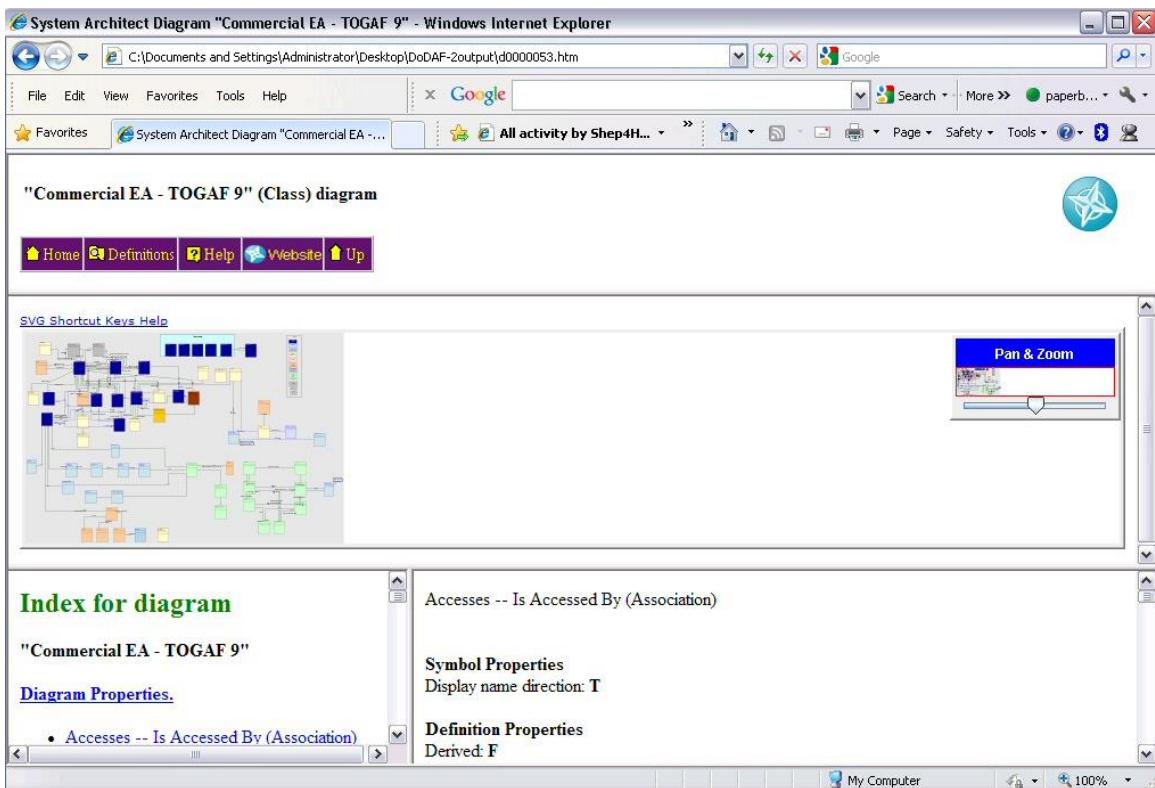
- Type - Process:** Customer Facing: F
- Description:**
- Reference Documents:**
- Applications That Support This Process:**
- Roles That Carry Out This Process:** Count:2 (Customer, Sales Associate)
- Data Used By This Process:** Count:12 (Customer Cards, Customer Purchases, Customers, Products, Products in Purchases, Ref Card Issuing Agencies, Ref Card Status, Ref Product Types, Sales Receipt Document, Addresses, Stores)
- Items Of Technology That Are Used By This Process:**
- Functions That Are Supported By This Process:**
- Definitions Addressed By This Process:**
- Page URL:** file:///C:/Users/IBM\_ADMIN/Documents/Output4/businessprocessreports\_bpebreport\_1071.htm

*Example output of the SA/Publisher -- several different reports output to same page for an entity.  
Notice unique Page URL generated (bottom right) that can be referenced in Sharepoint, etc.*

More SA/Pub output – notice how this report is something generated by a report created in the Native Report Generator, with a stylesheet applied, and notice that in upper right-hand corner you can push a button to output to Word or Excel.

### **What You Get for 'Free'**

Bear in mind that System Architect comes with an “HTML Generator” out of the box, which generates html views of the EA. It does not however, use SQL queries so the output is more of a dump out of the architecture. Still, many customers use this tool, who do not wish to buy the SA/Publisher add-on.



## Gaining Web Access to the EA – SA/XT Paid Add-On

SA/XT is a sister tool to System Architect – a thin browser, zero install product that enables you to access the repository and read/write to it. Much (but not all) of the functionality available in thick-client SA is available in SA/XT. You can

- Browse the repository and add, edit, or delete definitions.
- Run reports and view their output live in real time,
- View matrix editors.
- Draw two diagram types (BPMN and Org Chart).

SA/XT gives a large audience live access to the repository. Federal Aviation Administration (FAA) for example, has hundreds of users adding stuff to the repository thru this means, and thousands viewing the static website produced by SA/Publisher (above). This is a typical usage scenario. In other words, SA/XT does everything the Publisher does but it is dynamic rather than static. Users can be in a hotel lobby in Peoria, Illinois, and use a computer in the office center to log into a url, and with proper access credentials, view the EA and work against the EA -- viewing dashboards created live by reports run against the repository, viewing diagrams and definitions, and editing the information (if they have a write license). SA/XT provides writer licenses and cheaper, reader licenses for those just needing to view and navigate the live architecture.

SA/XT provides an easy-to-use collaboration capability that your extended architecture team can use to maintain the parts of the EA they have the expertise in.

System Architect XT - Home - Windows Internet Explorer

http://telelogic.demos.ibm.com/saxt/pagegen.aspx

File Edit View Favorites Tools Help

Google

Favorites System Architect XT - Home

IBM Rational System Architect XT

Logged in as: SAXT1 Users logged in: 1 Refresh | Bookmark | View all sessions | About | Help | Log Out

**INTRODUCTION**

Welcome to the home page for your Enterprise Architecture. This site allows you to navigate through and update your enterprise architecture components.

**QUESTION ORIENTED ARCHITECTURE**

The full System Architect [web site](#) contains details about Question Oriented Architecture (QOA). QOA allows you to make best use and follow the practice of ensuring that the architecture information you capture can be used in a meaningful way.

→ DEFENCE QUESTIONS

→ HEALTH OF ARCHITECTURE

→ CREATE MY OWN QUESTION/QUERY

→ SYSTEM ARCHITECT XT BROWSER

→ SYSTEM ARCHITECT XT BROWSER

→ SA-COGNOS REPORTS

SITE MANAGEMENT

Encyclopedia Profile

SEARCH FOR SA ITEMS

SEARCH

Advanced Search

MY BOOKMARKS

Manage my bookmarks

MY LINKS

Manage my links

LATEST ADDITIONS

	Initial Date	Initial Time	Initial Audit	Name
	11/1/2010	12:08 PM	SAXT1	Acquire enemy targets in fi

System Architect XT - Home - Windows Internet Explorer

Detailed description: The screenshot shows the homepage of the IBM Rational System Architect XT web application. The top navigation bar includes links for File, Edit, View, Favorites, Tools, and Help. A search bar is present, along with a 'Google' button. The main content area features sections for 'DEFENCE QUESTIONS', 'HEALTH OF ARCHITECTURE', 'CREATE MY OWN QUESTION/QUERY', 'SYSTEM ARCHITECT XT BROWSER', 'SA-COGNOS REPORTS', and 'LATEST ADDITIONS'. The 'LATEST ADDITIONS' section displays a table with columns for date, time, audit, and name, showing one entry: '11/1/2010 12:08 PM SAXT1 Acquire enemy targets in fi'. To the right, there are three boxes for 'SEARCH FOR SA ITEMS', 'MY BOOKMARKS', and 'MY LINKS', each with a 'Manage my [item]' link. The bottom of the screen shows the standard Windows Internet Explorer window frame.

**HEALTH OF ARCHITECTURE QUESTIONS**

Health of Architecture questions allow for the user to drill into the architectural information for consistency, audit trails, counts and statistics. The health of the enterprise architecture can be summarised here.

**BY AUDIT**

- Which Audit ID has modified the most definitions?
- Which Audit ID has created the most definitions?
- Which Audit ID has modified the most diagrams?
- Which Audit ID has created the most diagrams?
- A count of all definitions where there is no description grouped by Audit ID
- A count of all definitions checked out grouped by Audit

**BY DATE**

- A count of all definitions modified after 31 Dec 2004
- A count of all definitions created after 31 Dec 2004
- A count by date of the number of definitions created
- Timeline of DoDAF Diagrams from initial date to last updated date

**STATISTICS**

- A count of all definitions where there is no description
- A count of DoDAF definitions where Description is Blank
- A count of how many words a user has entered for definitions
- A count of DoDAF definitions that do not Reference anything
- A count of All definitions that do not Reference

**BY TYPE**

- A count of DoDAF Definitions
- A count of all definitions grouped by type of definition
- A count of all diagrams grouped by diagram type
- A count of all definitions checked out grouped by Definition Type
- A count of all diagrams checked out grouped by Diagram Type

SEARCH FOR SA ITEMS  
SEARCH  
Advanced Search

MY BOOKMARKS  
Manage my bookmarks

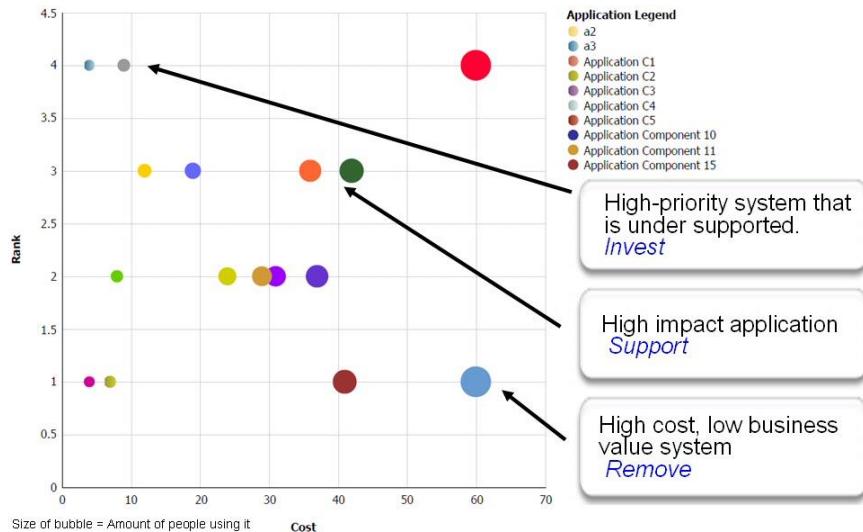
MY LINKS  
Manage my links

© Copyright IBM Corporation 1986, 2009. All Rights Reserved. 11.3.128.0

NOTE: If you want to play with SA/XT let us know; we can give you a url to go up and play in an encyclopedia on our website.

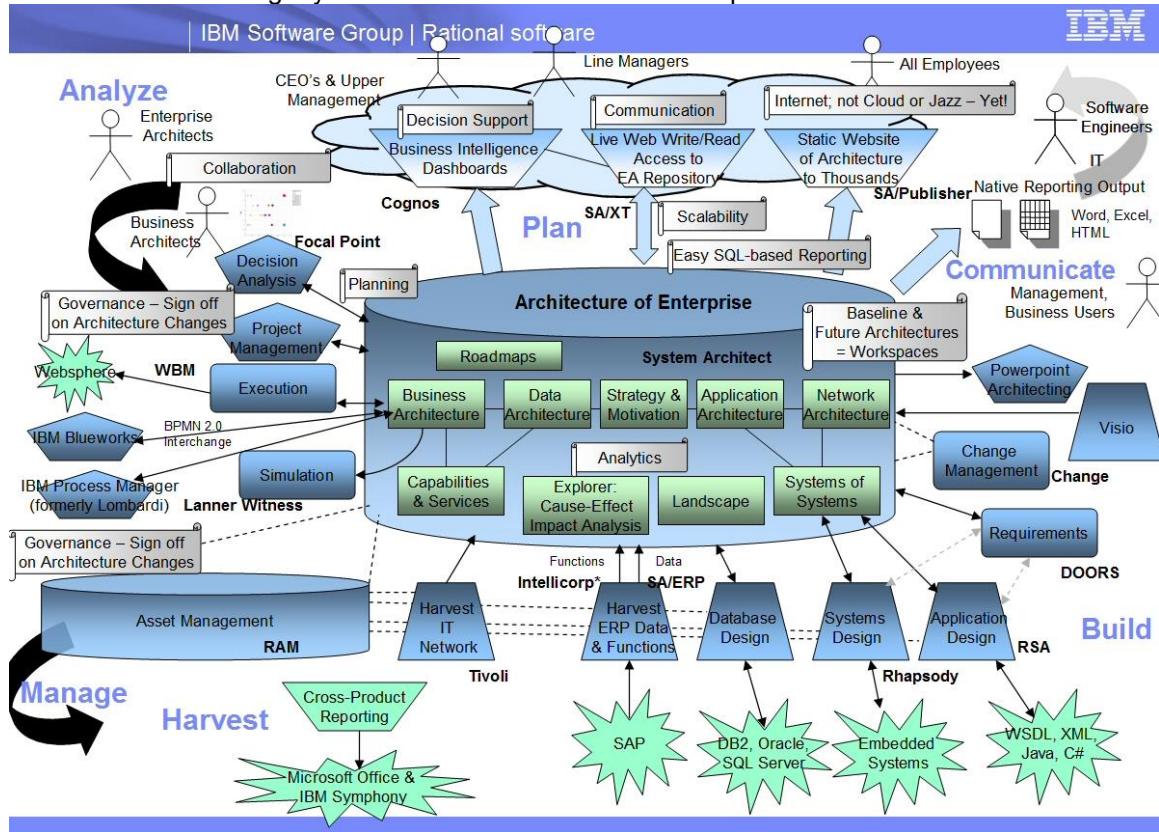
## Decision Based Analysis – SA with Focal Point

UNICOM Focal Point™ is a decision-based analysis tool with many features. System Architect has a bidirectional integration with FP, that enables you to further analyze the EA. Bring all or selected EA info into Focal Point, and then add non-architectural information to it – development manpower needed to perform a project, cost, priorities, what users' Favorite applications are, etc. Then do trade off analysis. Focal Point offers all kinds of analysis dashboards, roadmap diagrams, bubble charts, etc. You can use Focal Point (a web tool) to get a pulse on your users – let them fill out surveys for what their favorite application is, what their most important app is, how happy they are with an app, what feature is more important to them, etc. Use that information to prioritize future solutions, or select which projects to fund, and produce a project roadmap as well.



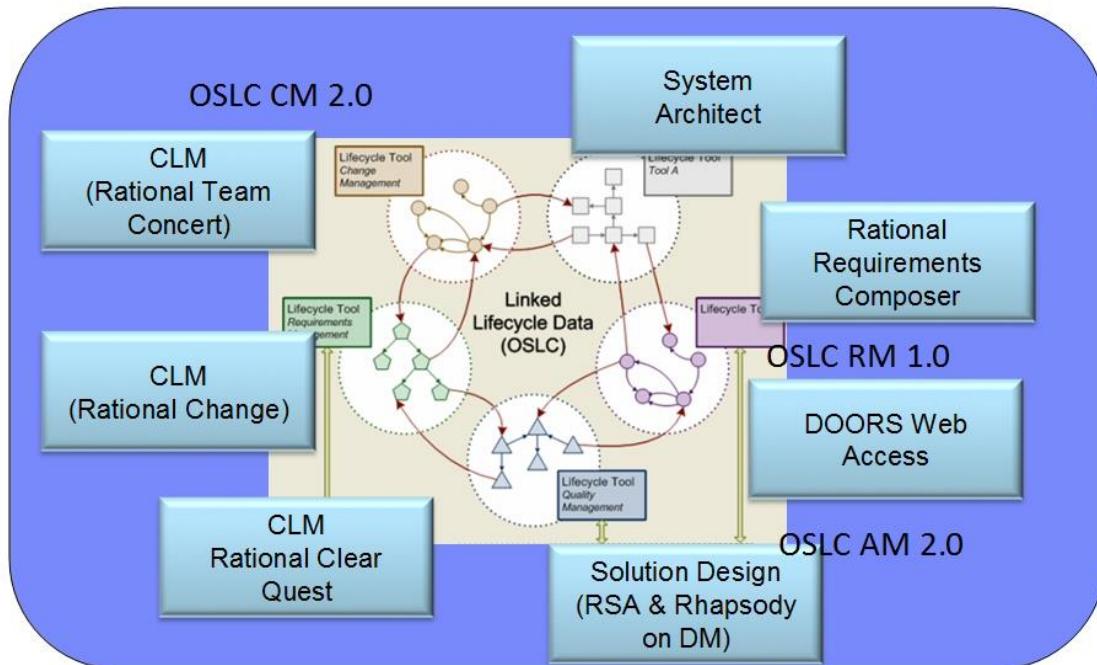
## Starting to Get the Full Scope

Now you're starting to get the full scope of the tools we offer for Enterprise Architecture. System Architect at the heart, and an ecosystem of sister products, add-ins, and integrations to other best-of-breed tools to get your work done. Here's the landscape view:



## Jazz -- OSLC Integrations

Most of the above concerns point-to-point integrations. There is an open source effort to develop open-source lifecycle collaboration (OSLC) integrations. System Architect supports the following OSLC integrations:

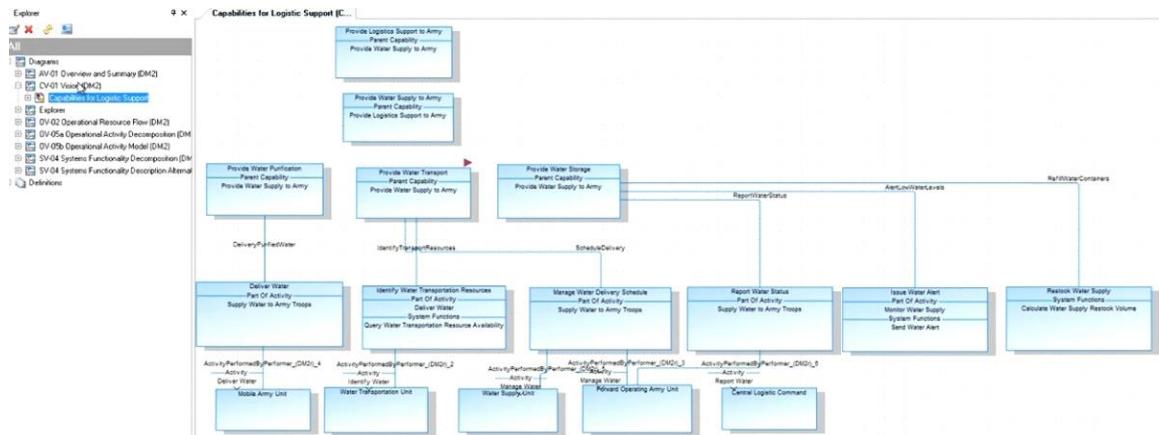


- System Architect can consume artifacts from the following products:
  - ▶ Rational Team Concert (RTC) 4.0 (OSLC CM 2.0)
  - ▶ Rational Doors Web Access (DWA) 1.5 (OSLC RM 1.0)
  - ▶ Rational Change 5.3 (OSLC CM 2.0)
  - ▶ Rational Clear Quest 8.0.0.3
  - ▶ Rational Requirements Composer 4.0
  - ▶ Rational Design Manager (DM) 3.0 (OSLC AM 2.0)
- System Architect can provide data so that the following products can consume it:
  - ▶ Rational Team Concert (RTC) 4.0 (OSLC CM 2.0)
  - ▶ Rational Doors Web Access (DWA) 1.5 (OSLC RM 1.0)
  - ▶ Rational Requirements Composer 4.0
  - ▶ Rational Design Manager (DM) 3.0 (OSLC AM 2.0)

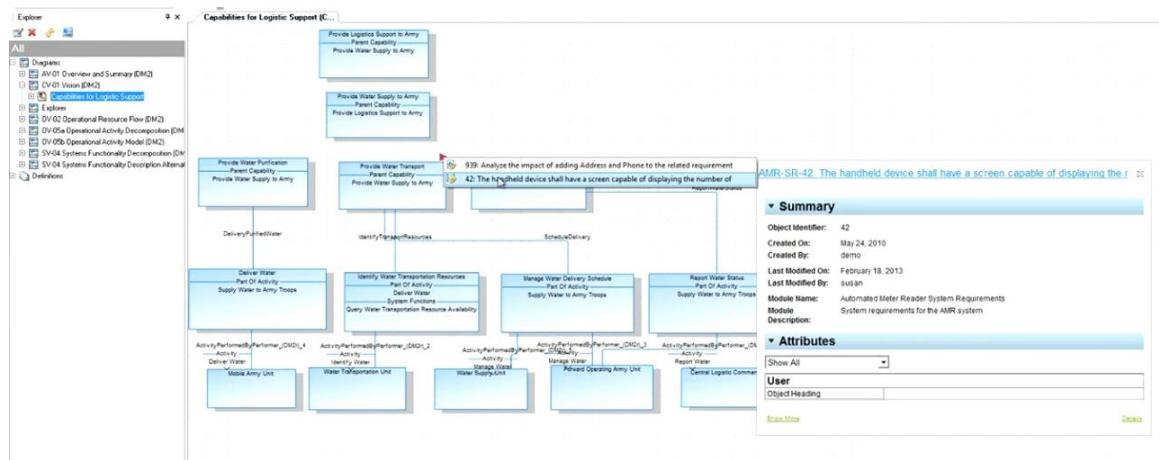
## How Does It Work

You simply specify that a System Architect encyclopedia is OSLC-enabled, and specify what servers it should be looking for on the network -- within the Service Provider Configuration choice on the Tools menu in SA.

You may then select any artifact in SA and view and then link it to one or more artifacts in a partner OSLC tool -- such as an artifact in Rational Software Architect, RTC, Requirements Composer, Change, etc. Once linked, the artifact in SA is notated with a forward or back facing purple arrow to show it is linked to an external tool. You may hover over that artifact and get a popup of a summary of information of the linked artifact -- it is read live from the linked tool. You may open the artifact directly in the other tool.



*Example of an artifact linked in SA via OSLC to another tool or tools -- see the artifact with the purple arrow in its upper right corner.*



*Hovering over the artifact shows there are two items in two other tools connected to this artifact via OSLC. Hovering over one of the links produces a pop up summary of info.*

## More Information

For more information on Enterprise Architecture and System Architect, please visit the following resources:

 <b>UNICOM</b> Systems, Inc. A Division of UNICOM Global	System Architect product pages on Unicomsi.com	<a href="http://unicomsi.com/products/system-architect/">http://unicomsi.com/products/system-architect/</a>
	System Architect Train on Youtube	<a href="https://www.youtube.com/user/SystemArchitectTrain">https://www.youtube.com/user/SystemArchitectTrain</a>
	System Architect on Twitter	<a href="https://twitter.com/unicorn_sa">https://twitter.com/unicorn_sa</a>
	System Architect on Facebook	<a href="https://www.facebook.com/SystemArchitect/">https://www.facebook.com/SystemArchitect/</a>
	System Architect on Pinterest	<a href="https://www.pinterest.com/systemarchitect/">https://www.pinterest.com/systemarchitect/</a>

## Appendix A -- List of TOGAF 9 Explorer Diagrams

<u>Analysis Diagram Set</u>	<u>What Can Be Drawn on Diagram</u>
Explorer Diagram of stereotype < <b>Application and User Location diagram</b> >	<ul style="list-style-type: none"> <li>o Actor</li> <li>o Application Component</li> <li>o Business Service</li> <li>o Location</li> <li>o Physical Application Component</li> </ul> <p><u>Explorer Relationship Reports:</u></p> <ul style="list-style-type: none"> <li>o Application to Business Service</li> <li>o Actor to Logical Application Component</li> <li>o Business Processes to Org Unit</li> </ul>
Explorer Diagram of stereotype < <b>Application Communication diagram</b> >	<ul style="list-style-type: none"> <li>o Application Interface</li> <li>o Business Service</li> <li>o Entity</li> <li>o Logical Application Component</li> </ul> <p><u>Explorer Relationship Reports:</u></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> <li>o Business Service to Business Service (Communicates)</li> <li>o Business Service to Business Service (Is Dependent)</li> <li>o Business Service to Logical Application Component</li> </ul>
Explorer Diagram of stereotype < <b>Business Footprint diagram</b> >	<ul style="list-style-type: none"> <li>o Business Service</li> <li>o Function</li> <li>o Goal</li> <li>o Logical Technology Component</li> <li>o Organizational Unit</li> <li>o Physical Technology Component</li> <li>o Technology Component</li> </ul> <p><u>Explorer Relationship Reports:</u></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> <li>o Business Service to Technology Component</li> <li>o Function to Logical Technology Component</li> <li>o Function to Organization unit</li> <li>o Function to Physical Technology Component</li> <li>o Function to Technology Component</li> <li>o Goal to Logical Technology Component</li> <li>o Goal to Organizational Unit</li> <li>o Goal to Physical Technology Component</li> <li>o Goal to Technology Component</li> </ul>
Explorer Diagram of stereotype < <b>Business Service Information diagram</b> >	<ul style="list-style-type: none"> <li>o Business Service</li> <li>o Entity</li> </ul> <p><u>Explorer Relationship Reports:</u></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> <li>o Business Service to Entity</li> </ul>
Explorer Diagram of stereotype < <b>Data Dissemination diagram</b> >	<ul style="list-style-type: none"> <li>o Application Component</li> <li>o Business Service</li> <li>o Entity</li> <li>o Physical Application Component</li> </ul> <p><u>Explorer Relationship Reports:</u></p>

	<ul style="list-style-type: none"> <li>o Application Component to Entity</li> <li>o Business Process to Org Unit</li> <li>o Business Service to Entity</li> <li>o Physical Application Component to Entity</li> </ul>
Explorer Diagram of stereotype < <b>Data Entity/Data Component diagram</b> >	<ul style="list-style-type: none"> <li>o Entity</li> <li>o Logical Data Component</li> <li>o Physical Data Component</li> </ul> <p><u>Explorer Relationship Reports:</u></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> <li>o Entity to Logical Data Component</li> <li>o Logical Data Component to Physical Data Component</li> </ul>
Explorer Diagram of stereotype < <b>Event diagram</b> >	<ul style="list-style-type: none"> <li>o Event</li> <li>o Process</li> </ul> <p><u>Explorer Relationship Reports:</u></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> <li>o Event to Process</li> </ul>
Explorer Diagram of stereotype < <b>Goal/Objective/Service diagram</b> >	<ul style="list-style-type: none"> <li>o Business Service</li> <li>o Driver</li> <li>o Goal</li> <li>o Objective</li> <li>o Organization Unit</li> <li>o Vision</li> </ul> <p><u>Explorer Relationship Reports:</u></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> <li>o Business Service to Driver</li> <li>o Business Service to Goal</li> <li>o Business Service to Objective</li> <li>o Business Service to Organization Unit</li> <li>o Business Service to Vision</li> </ul>
Explorer Diagram of stereotype < <b>Platform Decomposition diagram</b> >	<ul style="list-style-type: none"> <li>o Application Component</li> <li>o Logical Technology Component</li> <li>o Physical Application Component</li> <li>o Physical Technology Component</li> <li>o Platform Service</li> <li>o Technology</li> </ul> <p><u>Explorer Relationship Reports:</u></p> <ul style="list-style-type: none"> <li>o Application Component to Platform Service</li> <li>o Business Process to Org Unit</li> <li>o Logical Technology Component to Platform Service</li> <li>o Physical Application Component to Physical Technology Component</li> <li>o Platform Service to Physical Application Component</li> <li>o Platform Service to Physical Technology Component</li> <li>o Technology to Platform Service</li> </ul>
Explorer Diagram of stereotype < <b>Project Context diagram</b> >	<ul style="list-style-type: none"> <li>o Work Package</li> </ul> <p><u>Explorer Relationship Reports:</u></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> </ul>
Explorer Diagram of stereotype < <b>Software Distribution diagram</b> >	<ul style="list-style-type: none"> <li>o Location</li> <li>o Physical Application Component</li> <li>o Physical Technology Component</li> </ul> <p><u>Explorer Relationship Reports:</u></p> <ul style="list-style-type: none"> <li>o Business Process to Org Unit</li> <li>o Location to Physical Application</li> </ul>

	<ul style="list-style-type: none"><li>Component (Hosts)</li><li>o Location to Physical Technology Component (Hosts)</li><li>o Physical Technology Component to Application Component</li></ul>
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