

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

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.

Apply changes to current encyclopedia

Apply changes to all future encyclopedias

Data Modeling

Entity Relation and Physical

IDEF1X and Physical

Business Modeling

Enterprise Architecture

BPMN

Process Chart and Map

Business Motivation Model (BMM)

IDEF0 and IDEF3

Simulation

Structured A/D

Gane/Sarson

Ward/Mellor

Yourdon/DeMarco

SSADM

IE

Object Modeling

UML

Frameworks

(none)

DoDAF

DoDAF_ABM

DoDAF2

MoDAF

NAF

NAF3

TOGAF 9

Other Features

Flow Chart

Decomposition

iRMA

XML Schema

Rational Asset Manager

SAP

FEAF2

Target Databases

(none)

AS400

DB2

INFORMIX

Ingres

Microsoft Access

ORACLE

Progress

SQL Anywhere

SQL Server

SYBASE

Teradata

Target Language(s)

(none)

C++

CORBA

Java

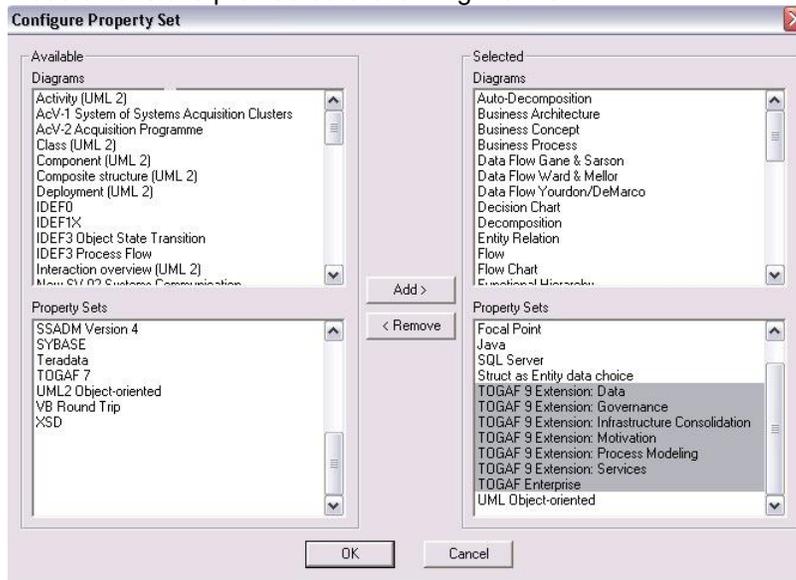
VB Round Trip

XSD

Stylesheet

Encyclopedia Stylesheet (AUTOEXEC.STY)

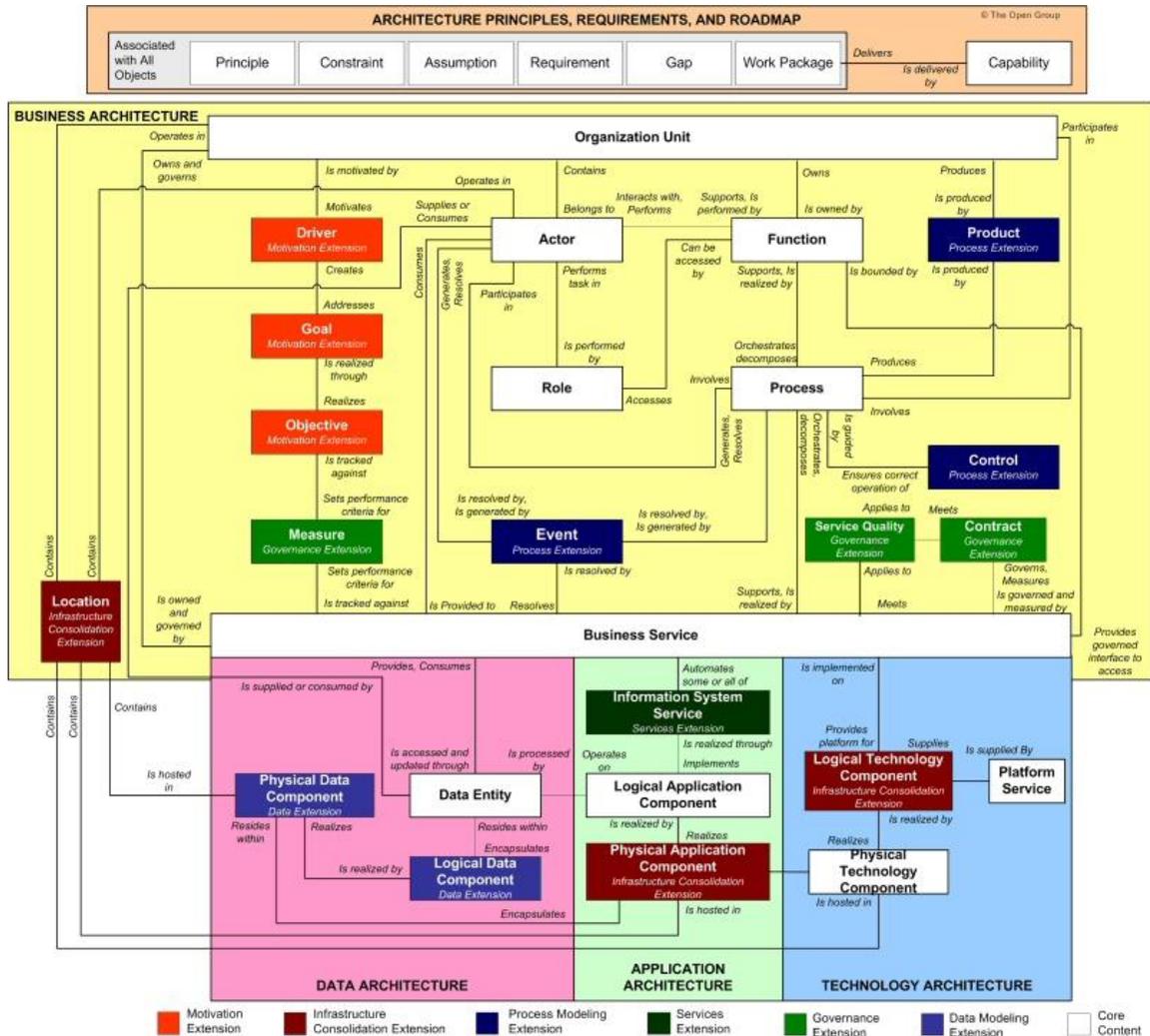
There is also an “Advanced” button. If you click on the “Advanced” button, you can add additional TOGAF 9 extensions. These are not turned on by default as they are for advanced TOGAF 9 users. It is recommended that users become proficient in the use of the default TOGAF 9 Metamodel in SA. Then, use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

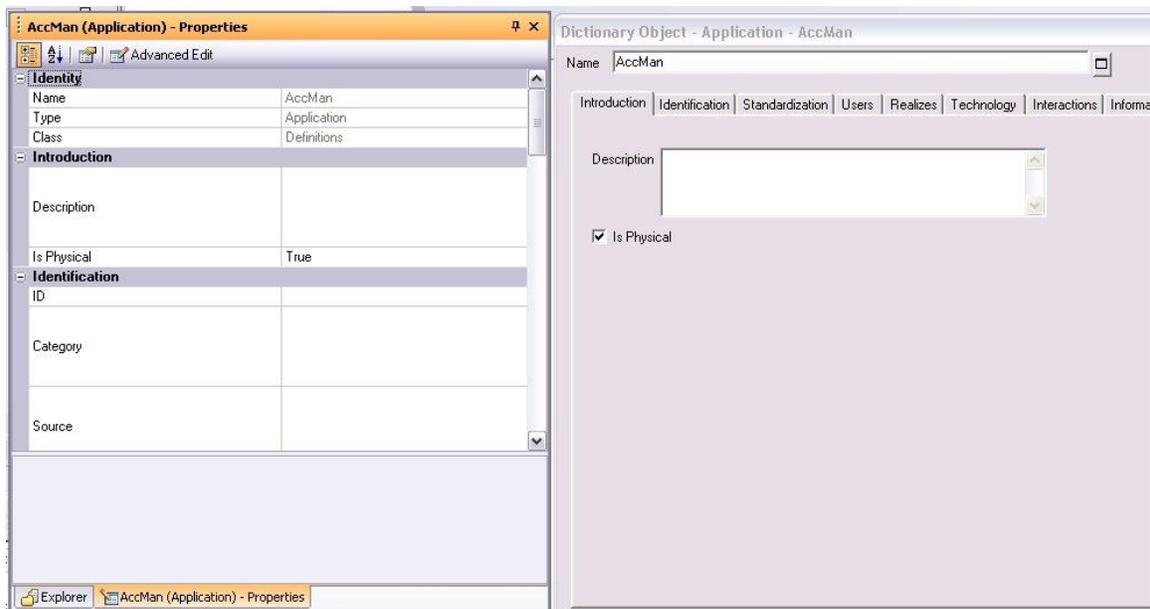
You have a multitude of options for creating information in the EA. You can

- 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

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 Applica...

Explorer

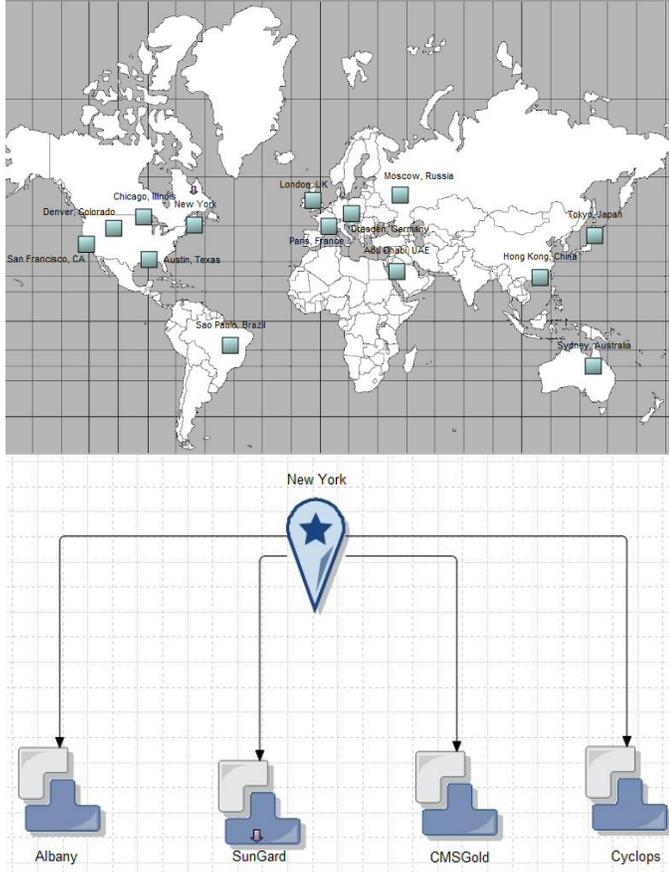
- All
- Diagrams
- Definitions

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															X
AccMan															
Account Management			X						X			X			
Account System															
Accounts Receivables					X										
Active Risk Manager															
Albany															
Business Applications							X								
CMMSGold															
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

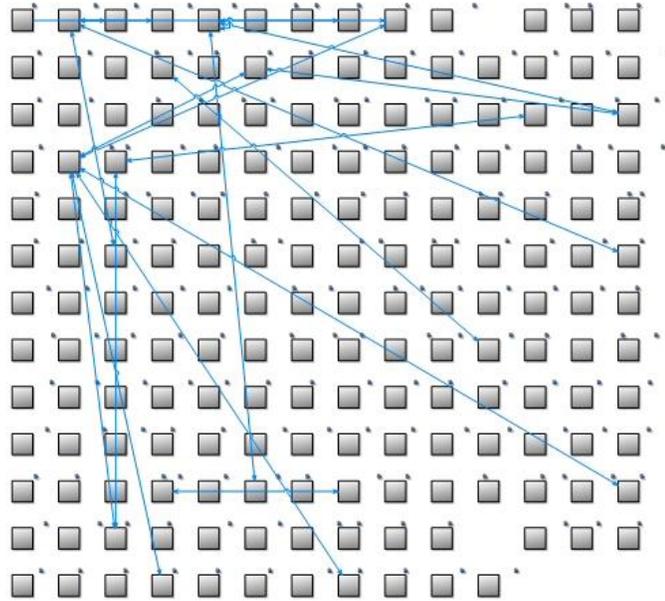
TOGAF 9 comes with a standard set of diagram types based on TOGAF 9 recommendations (the Viewpoints section of the spec), as follows:

<u>Diagram Type</u>	<u>Example of Diagram</u>
<p>Application and User Location diagram</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>What Can Be Drawn/Visualized on Diagram</p> <ul style="list-style-type: none"> o Actor o Application Component o Business Service o Location o Physical Application Component <p><u>Relationships:</u></p> <ul style="list-style-type: none"> o Application to Business Service o Actor to Logical Application Component o Business Processes to Org Unit

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

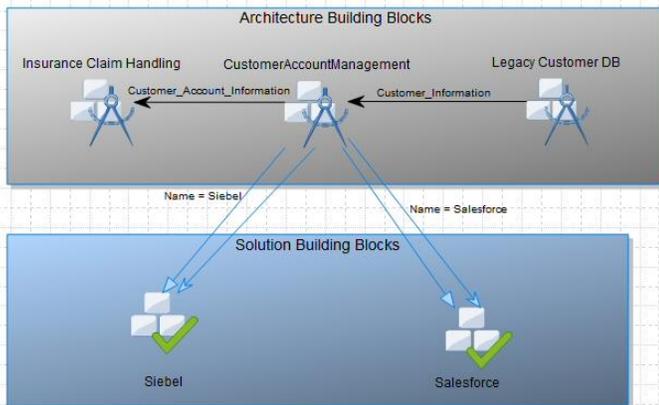
- o Report of App to App based on navigation thru App Interface
- o Logical App to Phys App based on navigation of implicit relationship

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

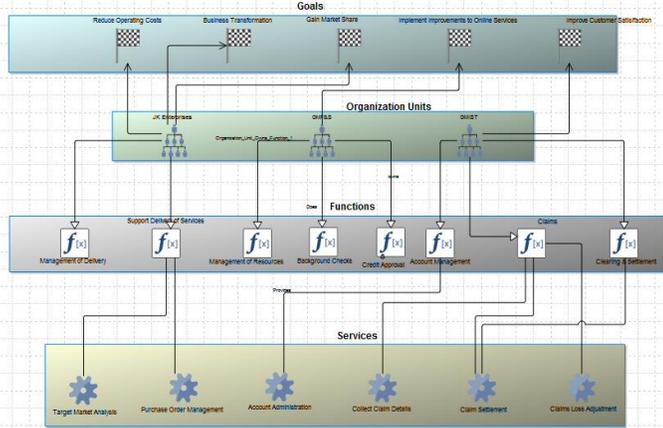
- o Architecture Building Block
- o Solution Building Block
- o System
- o External

Relationships:

Business Footprint diagram

The Skinny on this Diagram:
 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.

o Data Flow Line



What Can Be Drawn on Diagram

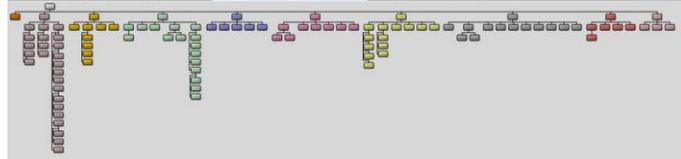
- o Business Service
- o Function
- o Goal
- o Logical Technology Component
- o Organizational Unit
- o Physical Technology Component
- o Technology Component

Relationships:

- o Business Process to Org Unit
- o Business Service to Technology Component
- o Function to Logical Technology Component
- o Function to Organization unit
- o Function to Physical Technology Component
- o Function to Technology Component
- o Goal to Logical Technology Component
- o Goal to Organizational Unit
- o Goal to Physical Technology Component
- o Goal to Technology Component

Business Process Hierarchy diagram

The Skinny on this Diagram:
 Hierarchy of Business Processes -- can show level 1, level 2, level 3, level 4, etc processes.

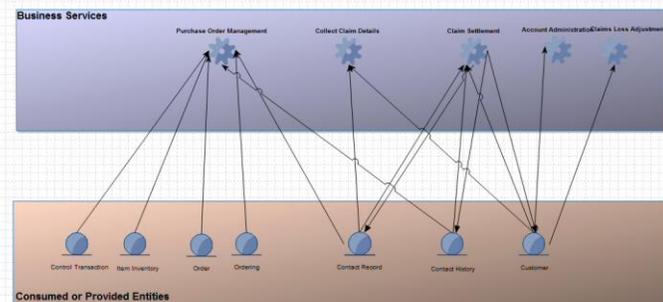


What Can Be Drawn on Diagram

- o Process

Business Service Information diagram

The Skinny on this Diagram:
 Hierarchy

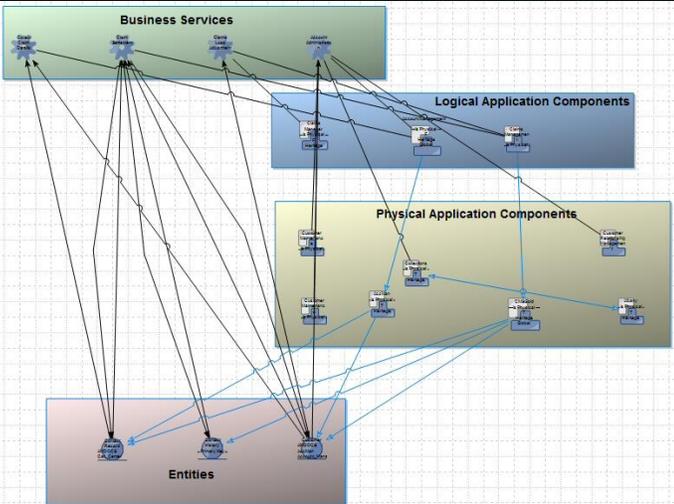
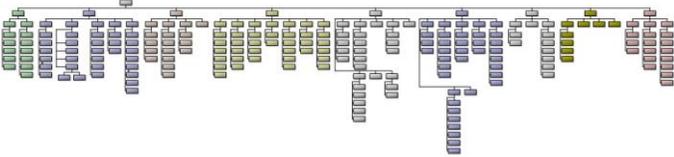


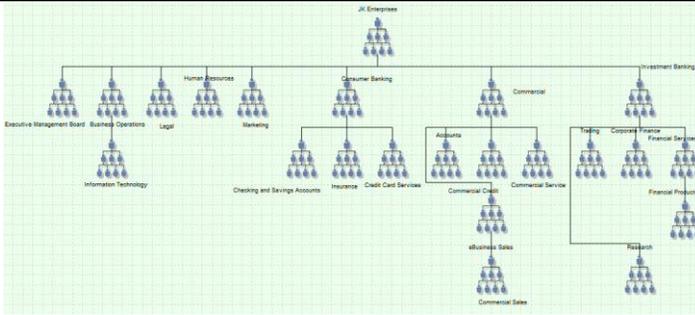
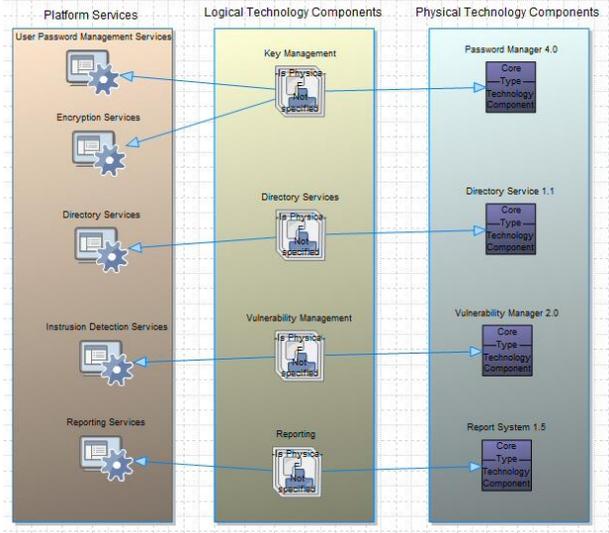
What Can Be Drawn on Diagram

- o Business Service
- o Entity

Relationships:

- o Business Process to Org Unit

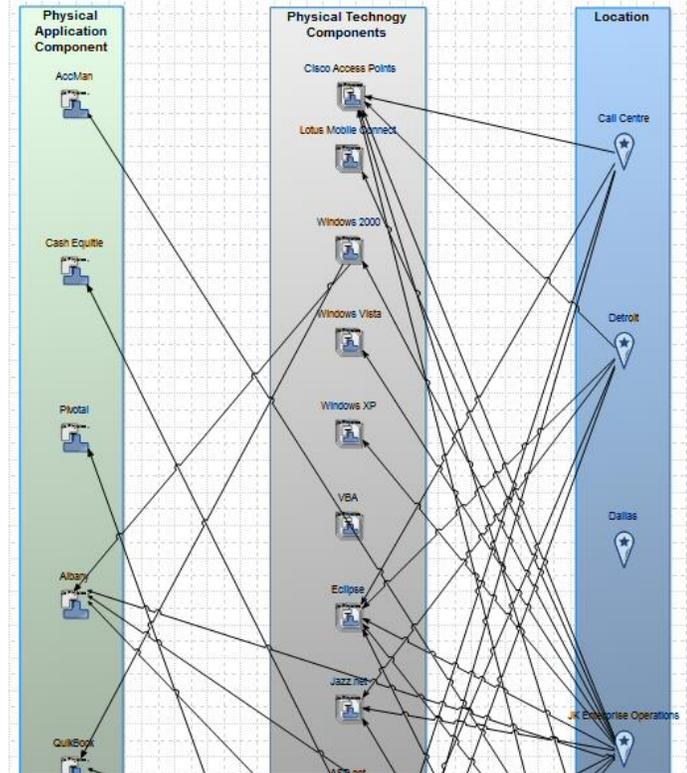
<p>Data Dissemination diagram <u>The Skinny on this Diagram:</u> Hierarchy</p>	<p>o Business Service to Entity</p>  <p>What Can Be Drawn on Diagram</p> <ul style="list-style-type: none"> o Application Component o Business Service o Entity o Physical Application Component <p><u>Relationships:</u></p> <ul style="list-style-type: none"> o Application Component to Entity o Business Process to Org Unit o Business Service to Entity o Physical Application Component to Entity
<p>Data Entity/Data Component diagram <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>What Can Be Drawn on Diagram</p> <ul style="list-style-type: none"> o Entity o Logical Data Component o Physical Data Component <p><u>Relationships:</u></p> <ul style="list-style-type: none"> o Business Process to Org Unit o Entity to Logical Data Component o Logical Data Component to Physical Data Component
<p>Event diagram <u>The Skinny on this Diagram:</u> Hierarchy</p>	<p>What Can Be Drawn on Diagram</p> <ul style="list-style-type: none"> o Event o Process <p><u>Relationships:</u></p> <ul style="list-style-type: none"> o Business Process to Org Unit o Event to Process
<p>Functional Decomposition <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>What Can Be Drawn on Diagram</p> <ul style="list-style-type: none"> o Function

<p>Goal/Objective/Service diagram</p> <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><u>What Can Be Drawn on Diagram</u></p> <ul style="list-style-type: none"> o Business Service o Driver o Goal o Objective o Organization Unit o Vision <p><u>Relationships:</u></p> <ul style="list-style-type: none"> o Business Process to Org Unit o Business Service to Driver o Business Service to Goal o Business Service to Objective o Business Service to Organization Unit o Business Service to Vision
<p>Organization Chart</p> <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><u>What Can Be Drawn on Diagram</u></p> <ul style="list-style-type: none"> o Organizational Unit
<p>Technical Architecture diagram</p> <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><u>What Can Be Drawn on Diagram</u></p> <ul style="list-style-type: none"> o Architecture Building Block o System o External o Data Flow line
<p>Platform Decomposition diagram</p> <p><u>The Skinny on this Diagram:</u> Architect or visualize platform services, and the physical and logical technologies they provide.</p>	 <p><u>What Can Be Drawn on Diagram</u></p> <ul style="list-style-type: none"> o Application Component o Logical Technology Component

- o Physical Application Component
 - o Physical Technology Component
 - o Platform Service
 - o Technology
- Relationships:
- o Application Component to Platform Service
 - o Business Process to Org Unit
 - o Logical Technology Component to Platform Service
 - o Physical Application Component to Physical Technology Component
 - o Platform Service to Physical Application Component
 - o Platform Service to Physical Technology Component
 - o Technology to Platform Service

Software Distribution diagram

The Skinny on this Diagram:
Architect or visualize the location of your physical applications and the technologies that they use.

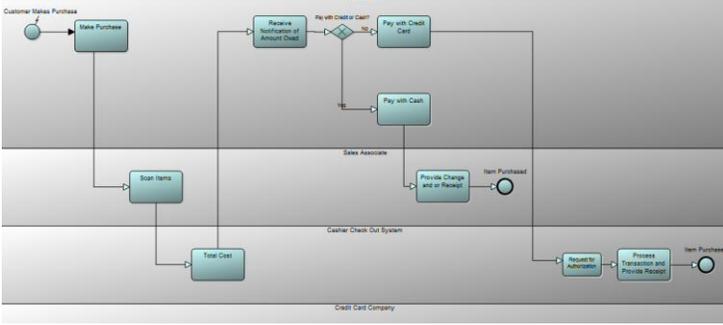
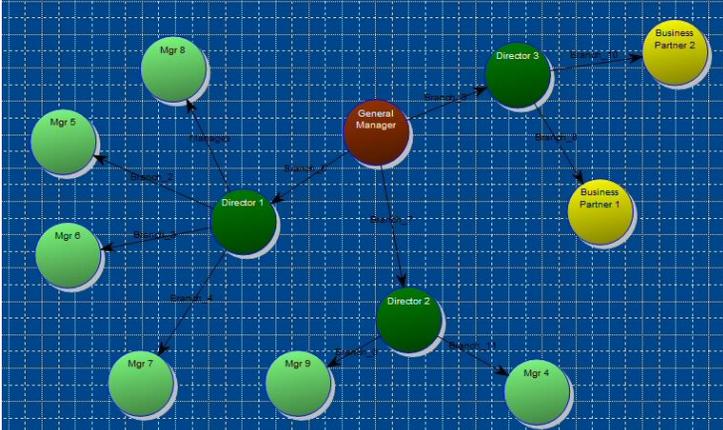


What Can Be Drawn on Diagram

- 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

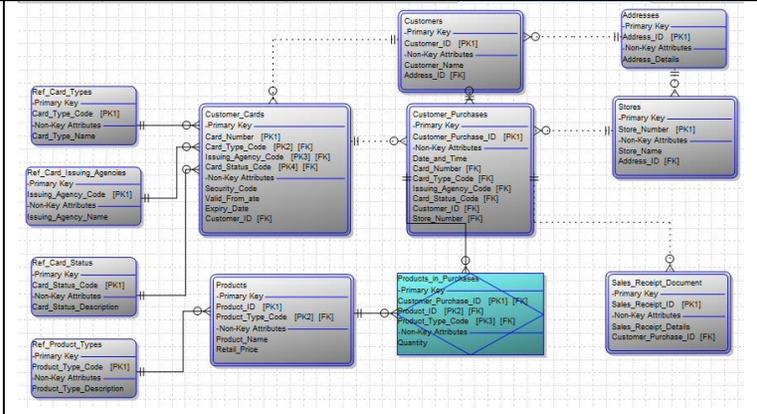
- Once you create a TOGAF encyclopedia a litany of TOGAF definition and diagram types become available for you to create. These are from the TOGAF 9 Specification as released by the Open Group. Here are pertinent diagram types and what can be drawn on them:

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

	<ul style="list-style-type: none"> o Strategy o Tactic o Business Rule o Business Policy o Organizational Unit
--	---

Entity Relation diagram
The Skinny on this Diagram:
 Logical Entity Relation diagram.

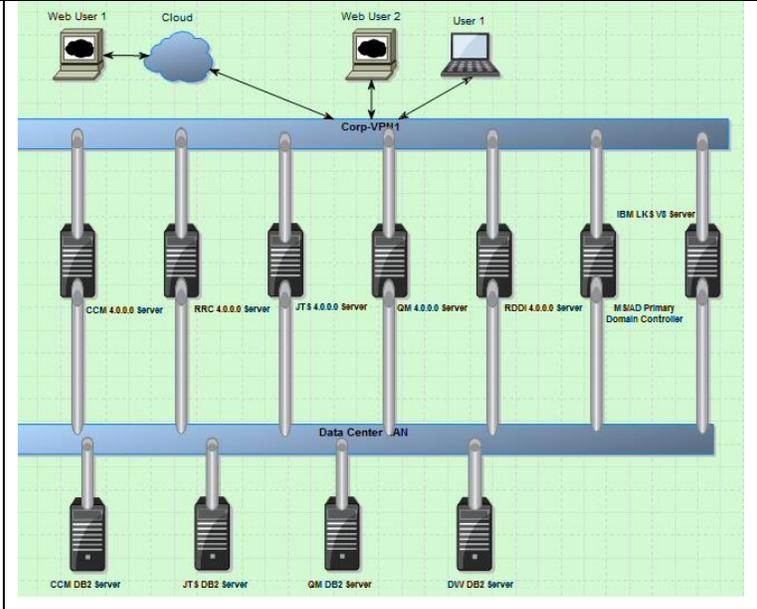
- Can be automatically created by mapping a physical diagram to it (which itself has been reverse engineered from DDL or live database connection)
- Can automatically map to a physical data model
- Has underlying data dictionary of data elements, data structures, and data domains



What Can Be Drawn on Diagram

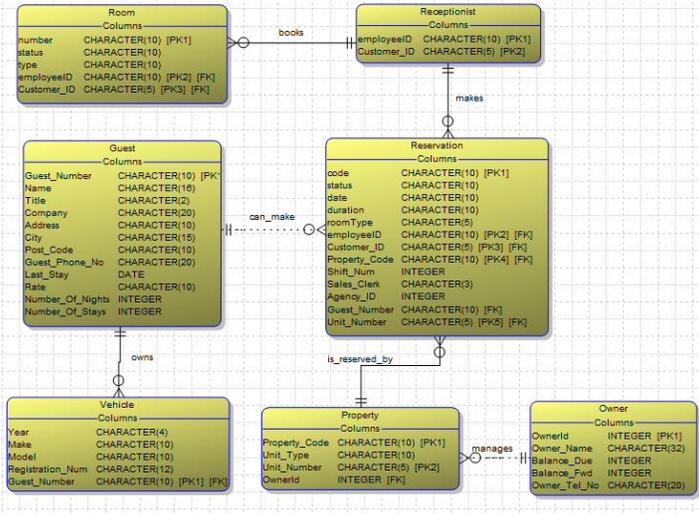
- o Entity
- o Identifying, Non-Identifying, Non-Specific, and Super/Sub relationship lines

Network diagram
The Skinny on this Diagram:
 Basic network diagram; would need a new metamodel, with computers, processors, etc being subtypes of system, etc



What Can Be Drawn on Diagram

- o Computer
- o Processor
- o Switch
- o Server
- o Storage Device
- o Communication Medium
- o Router
- o Communication Node
- o Firewall
- o Printer
- o Phone
- o Multiplexer
- o Peripheral

	<ul style="list-style-type: none"> o Location o Link o Serial Connection o Circuit Switched Line o Wireless Connectivity
<p>Physical Data Model <u>The Skinny on this Diagram:</u> Physical data model of tables, their columns, and constraints (relationships) between tables.</p> <ul style="list-style-type: none"> • Can automatically map to a Logical ER data model • Can be automatically created by reverse engineering DDL or live database connection -- for Oracle, SQL Server, or DB2. Reverse engineering is by doing side-by-side compare of physical model to database, and then do selective merge • Can generate schema to Oracle, SQL Server, DB2, or Teradata 	 <p>What Can Be Drawn on Diagram</p> <ul style="list-style-type: none"> o Table Identifying Constraint, Non-Identifying Constraint relationship lines
<p>Stakeholder Relationships diagram <u>The Skinny on this Diagram:</u> For balanced scorecard support</p>	<p>What Can Be Drawn on Diagram</p> <ul style="list-style-type: none"> o Stakeholder Category o Organizational Unit o Stakeholder Relationship line
<p>Strategy Map <u>The Skinny on this Diagram:</u> For balanced scorecard support</p>	<p>What Can Be Drawn on Diagram</p> <ul style="list-style-type: none"> o BSC Objective o BSC Scorecard o BSC Linkage line
<p>System Architecture diagram <u>The Skinny on this Diagram:</u> Diagram on which you can draw Applications (aka Application Components) and data that passes between them)</p>	<p>What Can Be Drawn on Diagram</p> <ul style="list-style-type: none"> o Application o Data Store o Multi Data Store (note same definition as Data Store, different symbol; no stereotype set) o External o Multi External (note same definition as External, different symbol; no stereotype set) o Data Flow line o Material Flow line
<p>System Area Map <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</p>	<p>What Can Be Drawn on Diagram</p> <ul style="list-style-type: none"> o Application Area o Data Store o Data Flow line

passes between them

System Context diagram

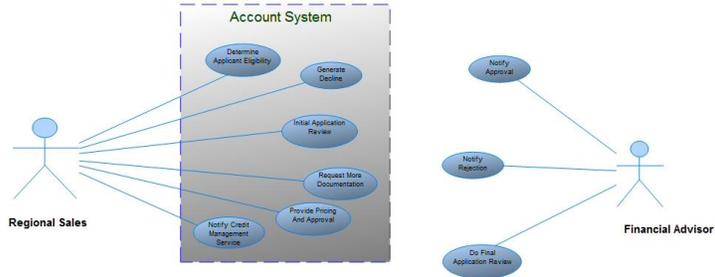
The Skinny on this Diagram:
A diagram on which you can draw Systems and data that passes between them

What Can Be Drawn on Diagram

- o System
- o Data Store
- o Multi Data Store (note same definition as Data Store, different symbol; no stereotype set)
- o External
- o Multi External (note same definition as External, different symbol; no stereotype set)
- o Data Flow line
- o Material Flow line

UML Use Case

The Skinny on this Diagram:
Actors, Use Cases, relationships

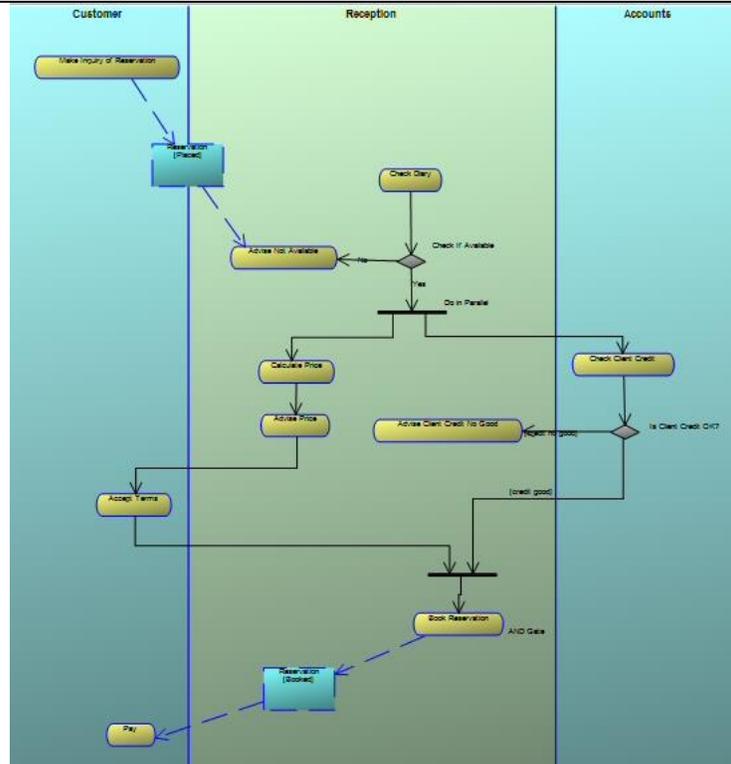


What Can Be Drawn on Diagram

- o Actor
- o Use Case
- o Includes
- o Association
- o etc

UML Activity diagram

The Skinny on this Diagram:
UML diagram to model Activities and control flow.



What Can Be Drawn on Diagram

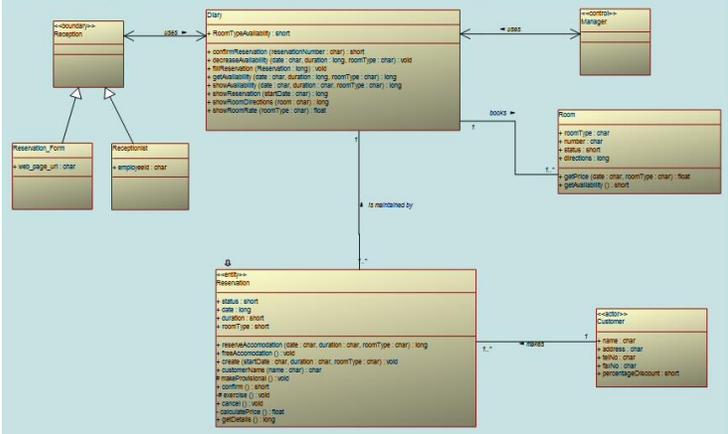
- o Activity

- o Decision
- o Flow of Control
- o etc

UML Class diagram

The Skinny on this Diagram:

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.



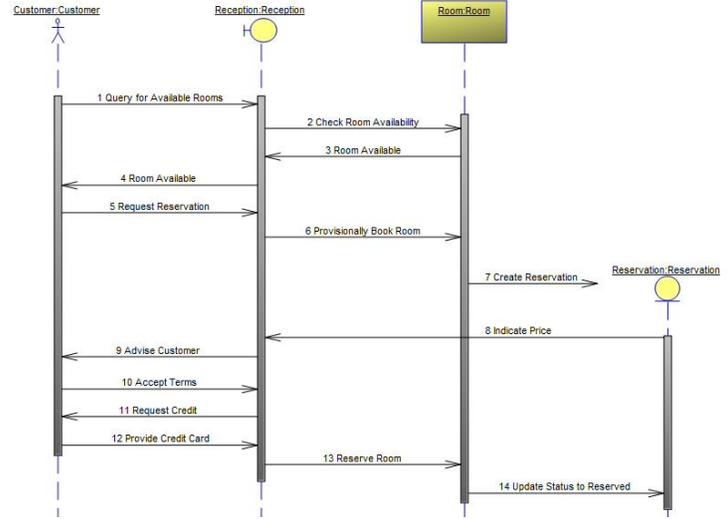
What Can Be Drawn on Diagram

- o Class
- o Port
- o Object
- o Package
- o Association
- o Inherits From
- o Dependency
- o Realizes
- o etc

UML Sequence diagram

The Skinny on this Diagram:

Model Event lifelines and messages passed between them. This basic diagram structure has been profiled in the tool to represent various other architecture artifacts.

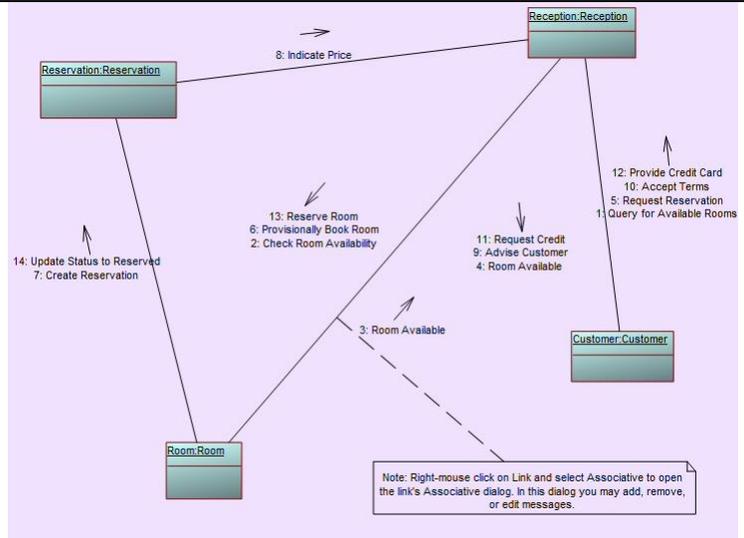


What Can Be Drawn on Diagram

- o Object Lifeline
- o Messages and Events
- o etc

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 autocreated from a Sequence diagram and vice versa.

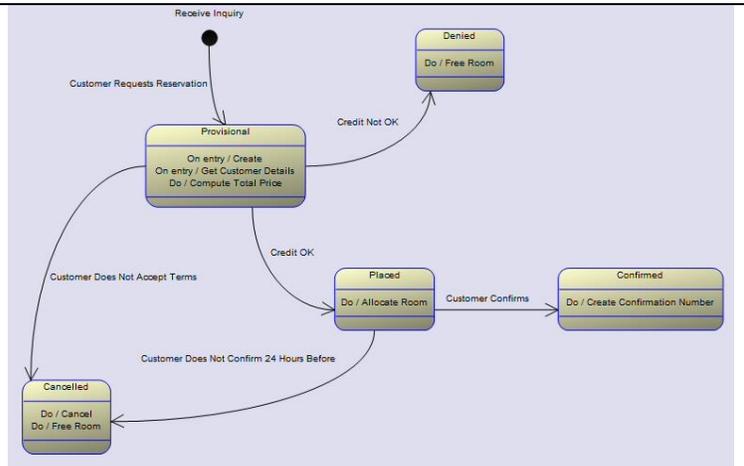


What Can Be Drawn on Diagram

- 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.

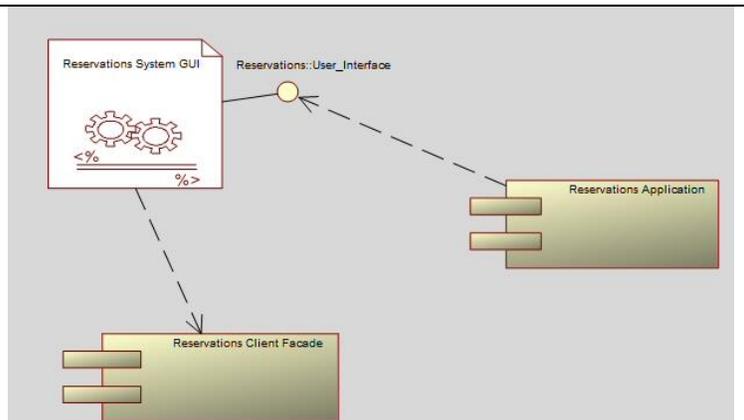


What Can Be Drawn on Diagram

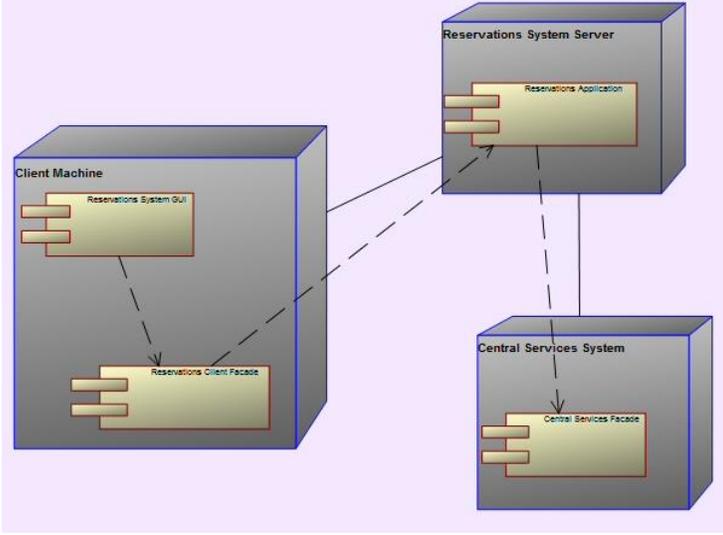
- o States
- o Transitions
- o etc

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"> o Components o Classes o Interfaces o Association o Dependency o Realizes o etc
<p>UML Deployment diagram</p> <p><u>The Skinny on this Diagram:</u> Basic UML Deployment diagram; data centric and artifacts are name-spaced by package.</p>	 <p>The diagram shows three nodes: Client Machine, Reservations System Server, and Central Services System. The Client Machine contains two components: Reservations System GUI and Reservations Client Facade. The Reservations System Server contains one component: Reservations Application. The Central Services System contains one component: Central Services Facade. Solid lines with open arrowheads represent dependencies: Reservations System GUI depends on Reservations Client Facade, Reservations Application depends on Reservations Client Facade, and Reservations Application depends on Central Services Facade. Dashed lines with open arrowheads represent realizations: Reservations Client Facade realizes Reservations System GUI, and Central Services Facade realizes Reservations Application.</p> <p><u>What Can Be Drawn on Diagram</u></p> <ul style="list-style-type: none"> o Node o Component o Object o Connection o Realizes o Dependency o etc

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.

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
Chicago, Illinois	bd4f6c13-0308-4af5-bdaa-bea0afe0746d.soabt48.demos.ibm.com	soabt48.demos.ibm.com	Microsoft(R) Windows(R) Server 2003, Enterprise Edition	x350001.democentral.ibm.com:8
	CALM-REG-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
Denver, Colorado	CALM-RPC-SVR.democentral.ibm.com	b7f462dd-d93b-4bf3-b7bc-6ffa1f682a75.CALM-RPC-SVR.democentral.ibm.com	Microsoft Windows Server 2003, Enterprise Edition (32-bit)	192.168.64.35:13043
	gotPot20-05.democentral.ibm.com	41448e18-f683-4f62-acf1-db142bf4cbe0.CALM-RPC-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:

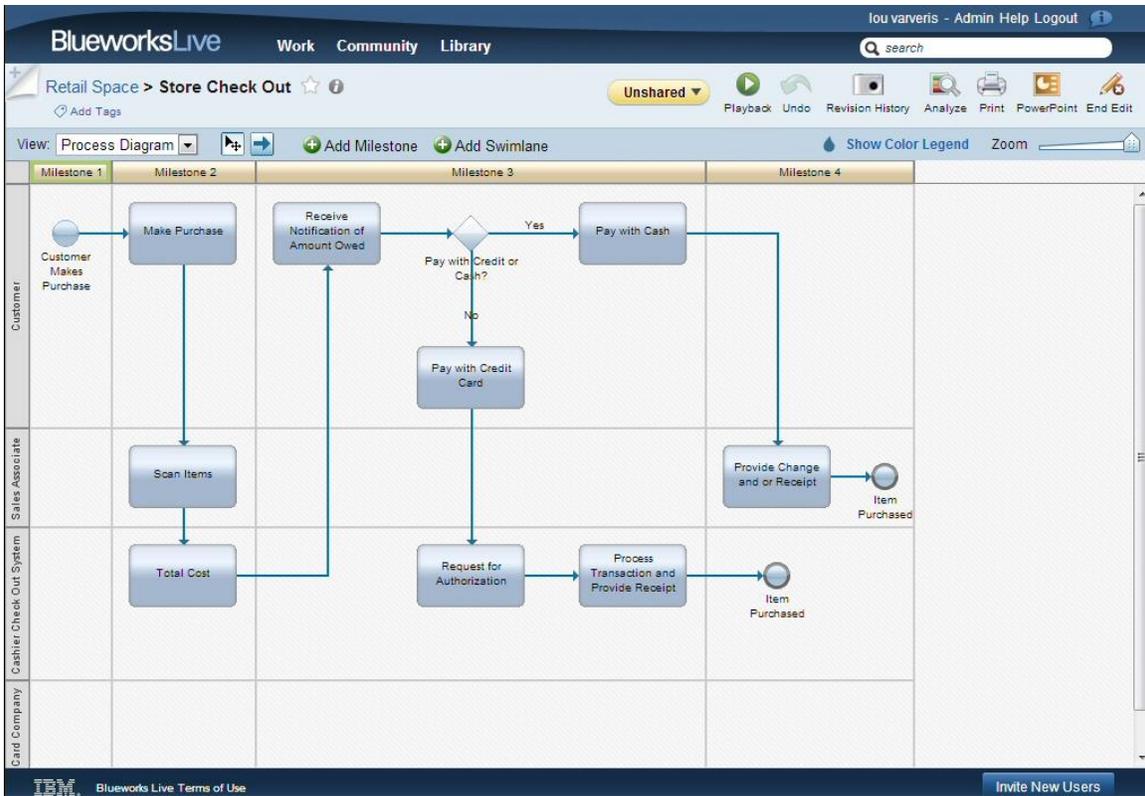
- Microsoft Excel Process Data (.xls)
Process data displayed in relational tables in Microsoft Excel format.
- XML Process Definition Language (XPDL 2.1)
An XML-based format for business processes from the WfMC.
[More Details](#)
- Business Process Model and Notation (BPMN 2.0)
An XML-based format for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

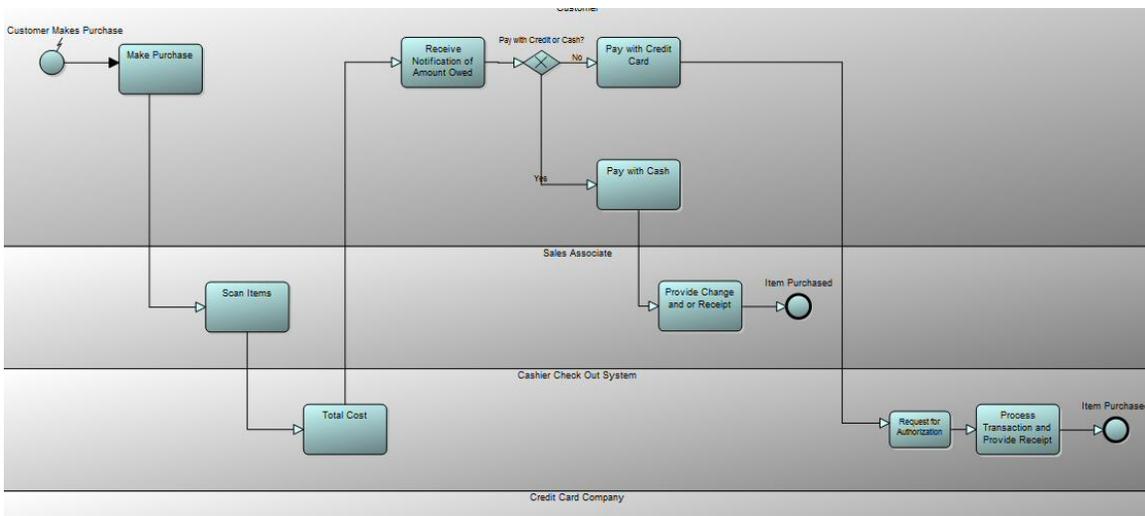
Export to BPMN 2.0 in IBM BlueWorksLive

- 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.

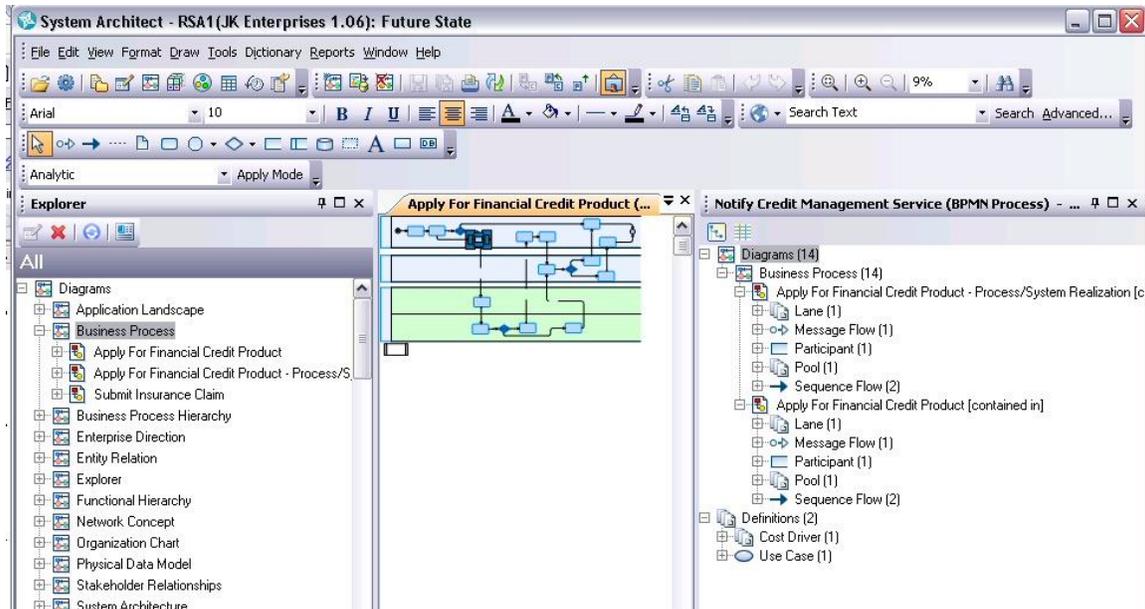
SCOR Reference Models

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.

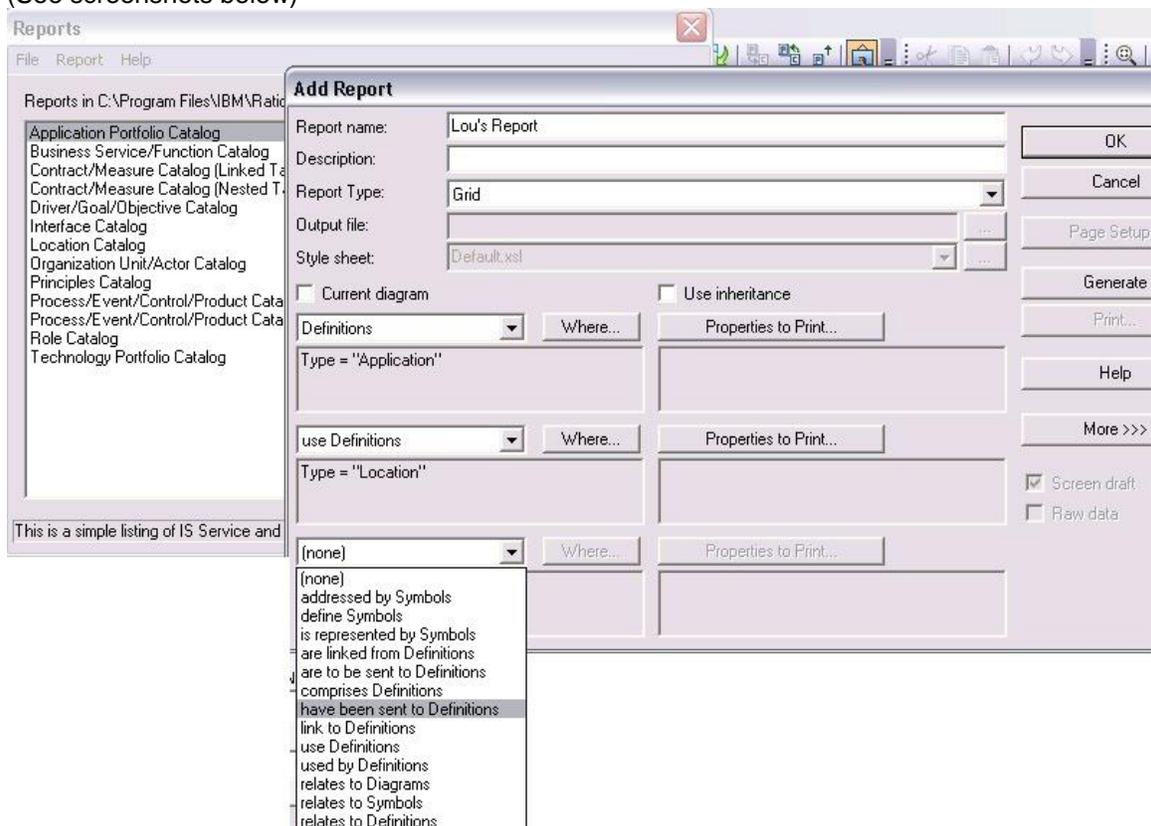
Analyze the Architecture

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.

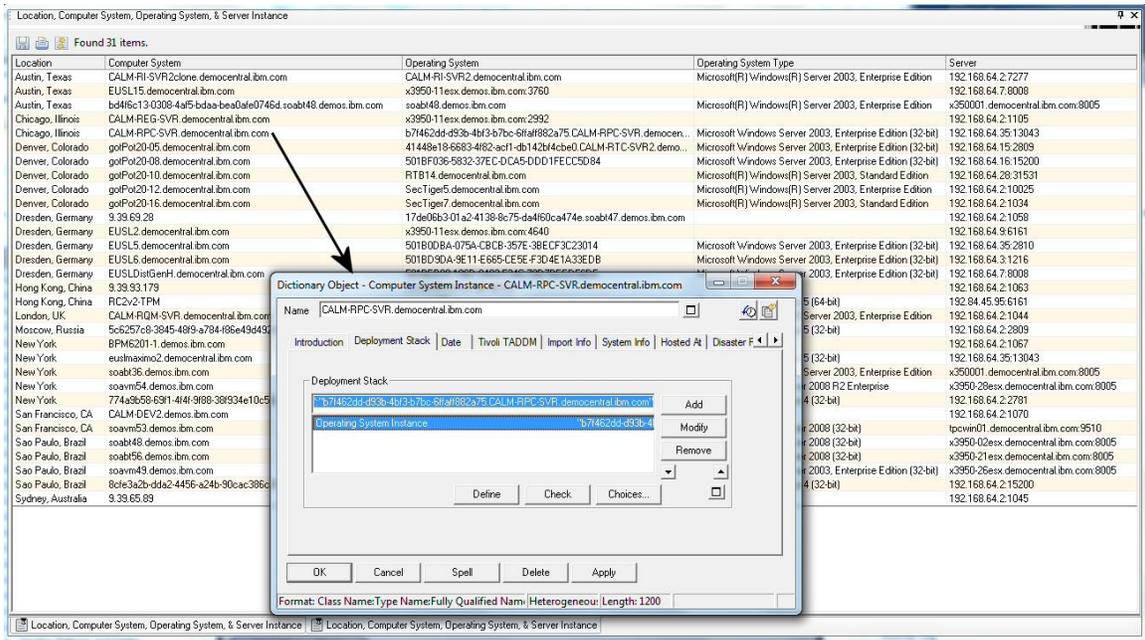
To use the Report Generator, select Reports, Report Generator. You'll see there are many report files that come with the product. In the Report Generator dialog, select File, Open Report File. Each Report File TOGAF9Catalog.rpt, for example comes with lots of out-of-box SQL Query based reports. You can 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)

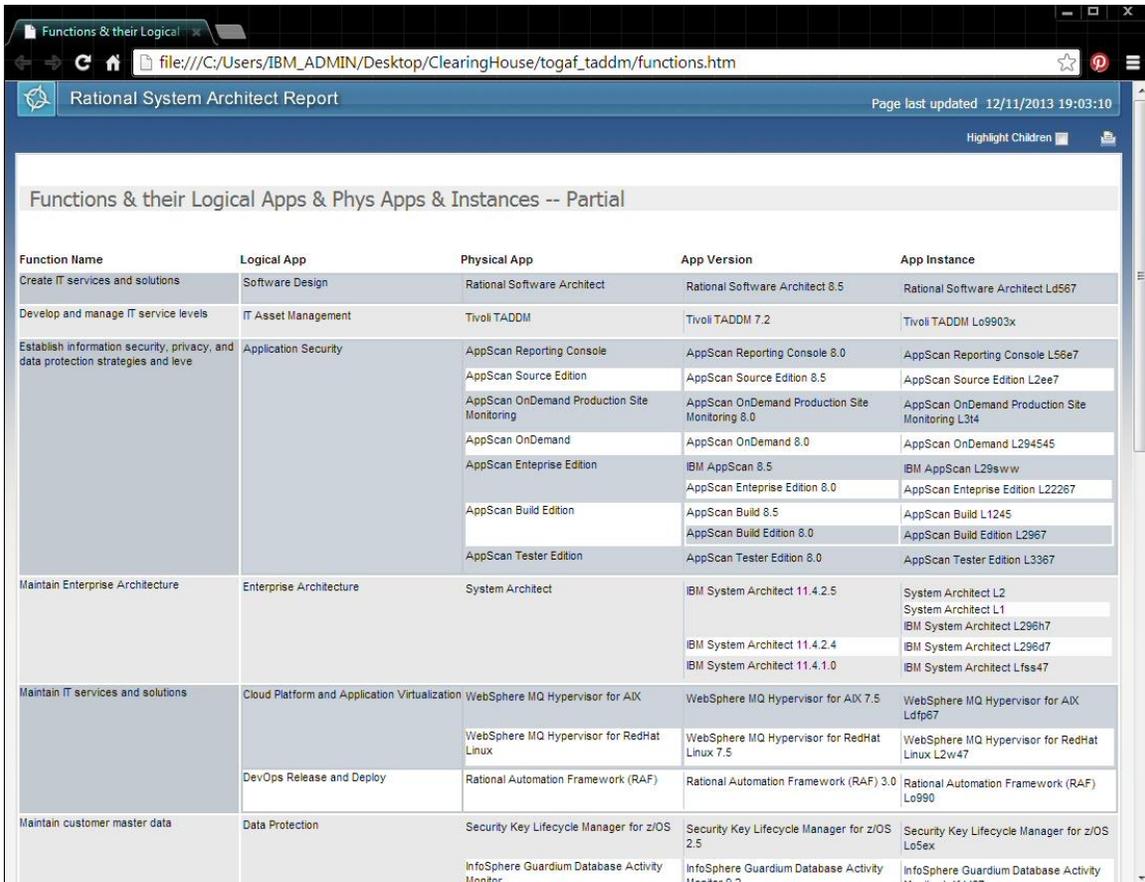


Example of Report GUI used to navigate and build SQL-like queries

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



Example of Report output to HTML using a CSS stylesheet

Computer Systems w Operating Systems w Applications

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 L2dfdf IBM System Architect Lfss47
5c6257c8-3845-48f9-a784-f86e49d492b8.ldapb.democentral.ibm.com	ldapb.democentral.ibm.com	192.168.64.2:2809
774a9b58-69f1-414f-9f88-38f934e10c5b.rce05.democentral.ibm.com_NeedsIAT	564D1F5E-FED8-7583-6238-048D5001647A	192.168.64.2:2781
8cfe3a2b-dda2-4456-a24b-90cac386c31e.rcc-wat-tpm-bak	501B03C8-2C14-045B-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-REG-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-6ffa8f82a75.CALM-RPC-SVR.democentral.ibm.com	192.168.64.35:13043
CALM-RQM-SVR.democentral.ibm.com	CALM-RQM-SVR2.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	192.168.64.9:6161
EUSL5.democentral.ibm.com	501B0DBA-075A-CBCB-357E-38ECF3C23014	192.168.64.35:2810
EUSL6.democentral.ibm.com	501BD9DA-9E11-E665-CE5E-F3D4E1A33EDB	192.168.64.3:1216
EUSLDistGenH.democentral.ibm.com	501BEB09-196D-0493-F24C-79D7BEED96DE	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 -- to Grid

Found 220 items.

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 Pr...	AppScan OnDemand Produ...	AppScan OnDemand Production Site Monitoring L34
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 L293sw
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 the enterprise risk framework and policies	Application Security	IBM Rational Policy Tester		
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 Lfss47
Maintain IT services and solutions	Cloud Platform and Application Vit...	WebSphere MQ Hypervi...	WebSphere MQ Hypervisor f...	WebSphere MQ Hypervisor for AIX Ldtp67
Maintain IT services and solutions	Cloud Platform and Application Vit...	WebSphere MQ Hypervi...	WebSphere MQ Hypervisor f...	WebSphere MQ Hypervisor for RedHat Linux L2w47
Maintain IT services and solutions	Cloud Platform and Application Vit...	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 IT services and solutions	DevOps Release and Deploy	Rational Automation Fra...	Rational Automation Framew...	Rational Automation Framework (RAF) Lc090
Maintain customer master data	Data Protection	Security Key Lifecycle M...	Security Key Lifecycle Mana...	Security Key Lifecycle Manager for z/OS Lo5ex
Maintain customer master data	Data Protection	InfoSphere Guardium Da...	InfoSphere Guardium Dalab...	InfoSphere Guardium Database Activity Monitor Lfd657
Maintain customer master data	Data Protection	InfoSphere Optim Data ...	InfoSphere Optim Data Priva...	InfoSphere Optim Data Privacy Workgroup Edition L2td67
Maintain customer master data	Data Protection	Tivoli Key Lifecycle Man...	Tivoli Key Lifecycle Manager...	Tivoli Key Lifecycle Manager L097
Maintain customer master data	Data Modeling	Infosphere Data Architect	Infosphere Data Architect 9.1	Infosphere Data Architect L277g67
Manage Business Compliance				
Manage Corporate Cash				

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

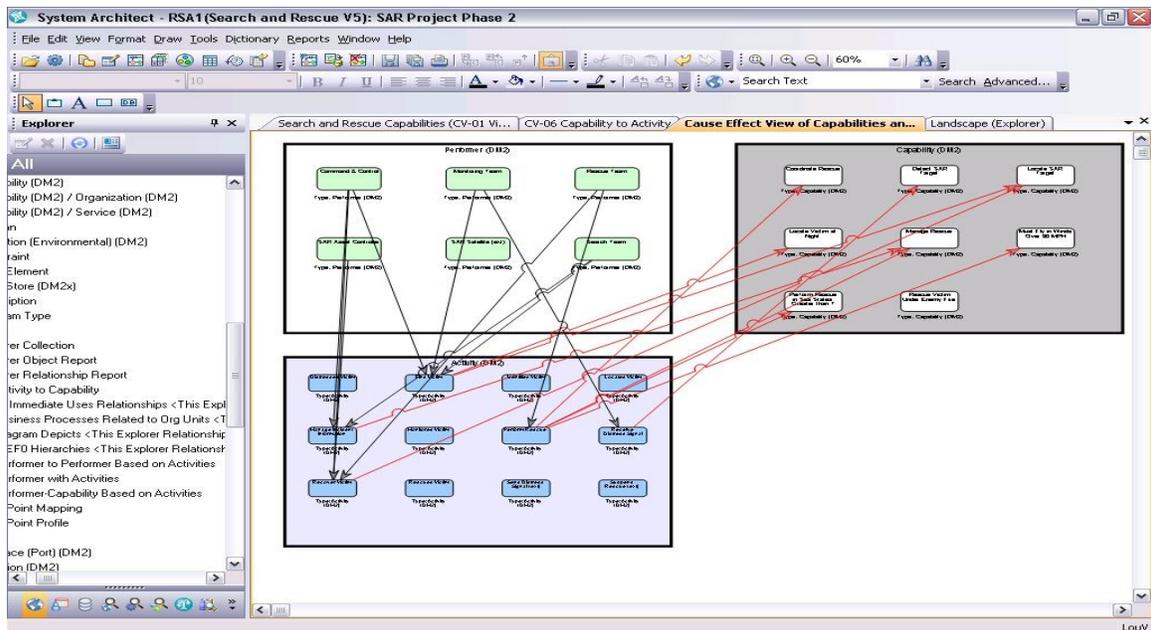
Explorer Diagrams for Cause-Effect & Gap Analysis

1. 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.

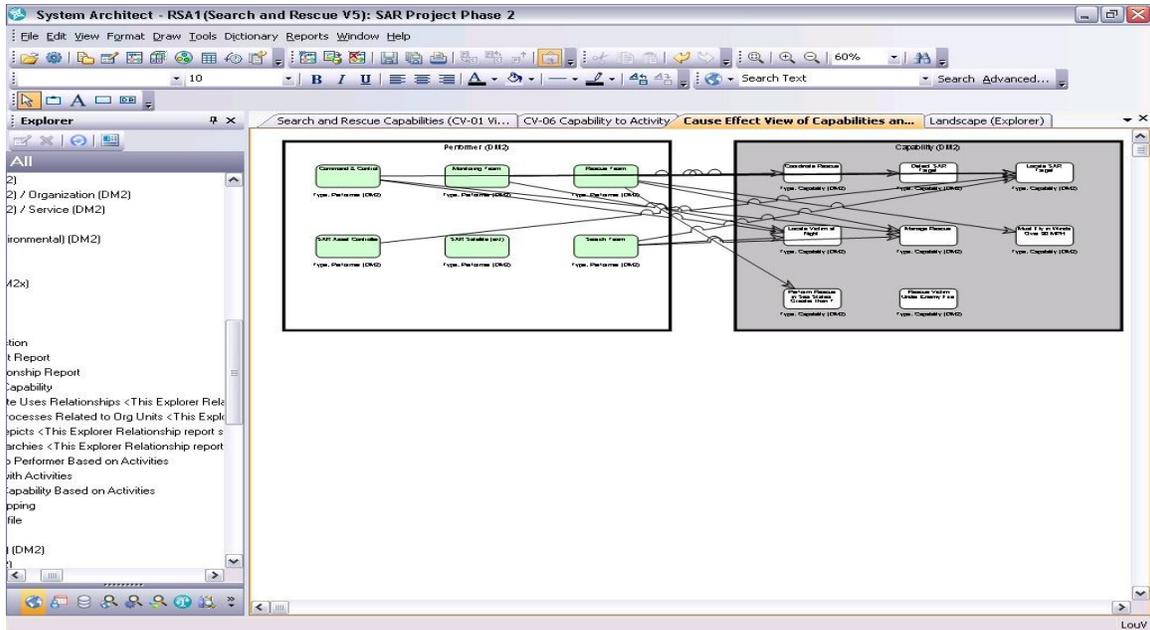
Standard Network-Style Explorer Diagrams

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

- a. 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)
- b. See a view of the relationships between 'collections' of any objects, and their type, to all other objects, and type, they are related to.
- c. 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*.
- d. 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 .*



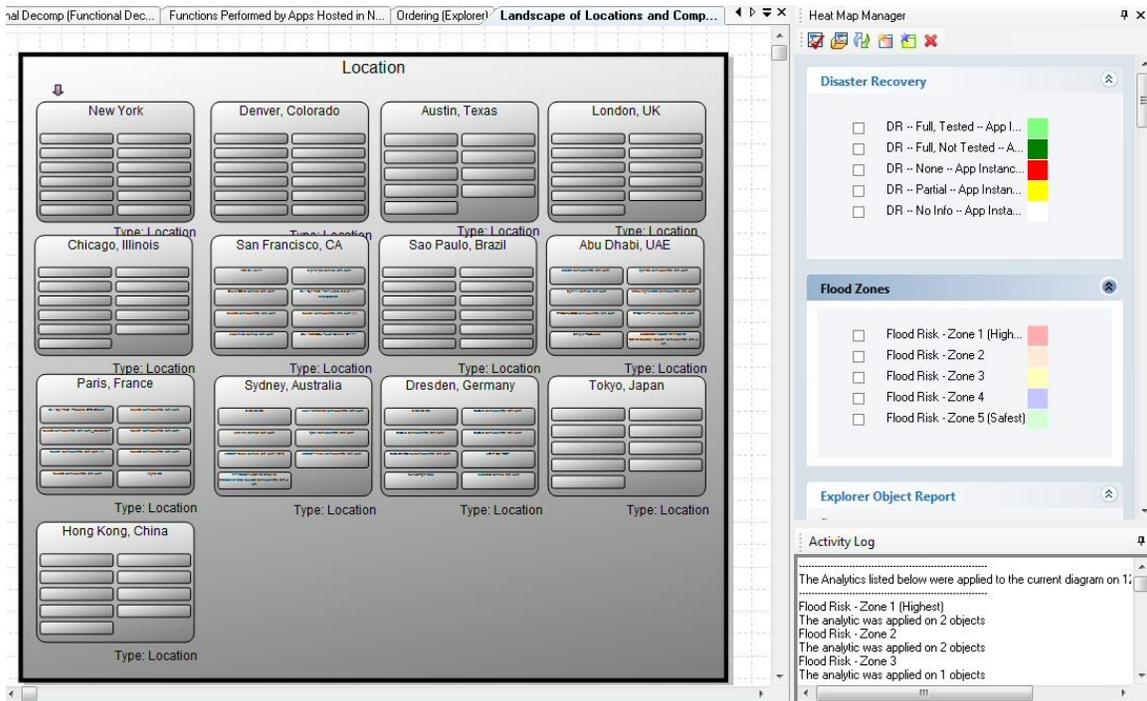
- e. *This is another Explorer Cause-Effect Diagram, this time showing direct relationships between Capability and Performer.*



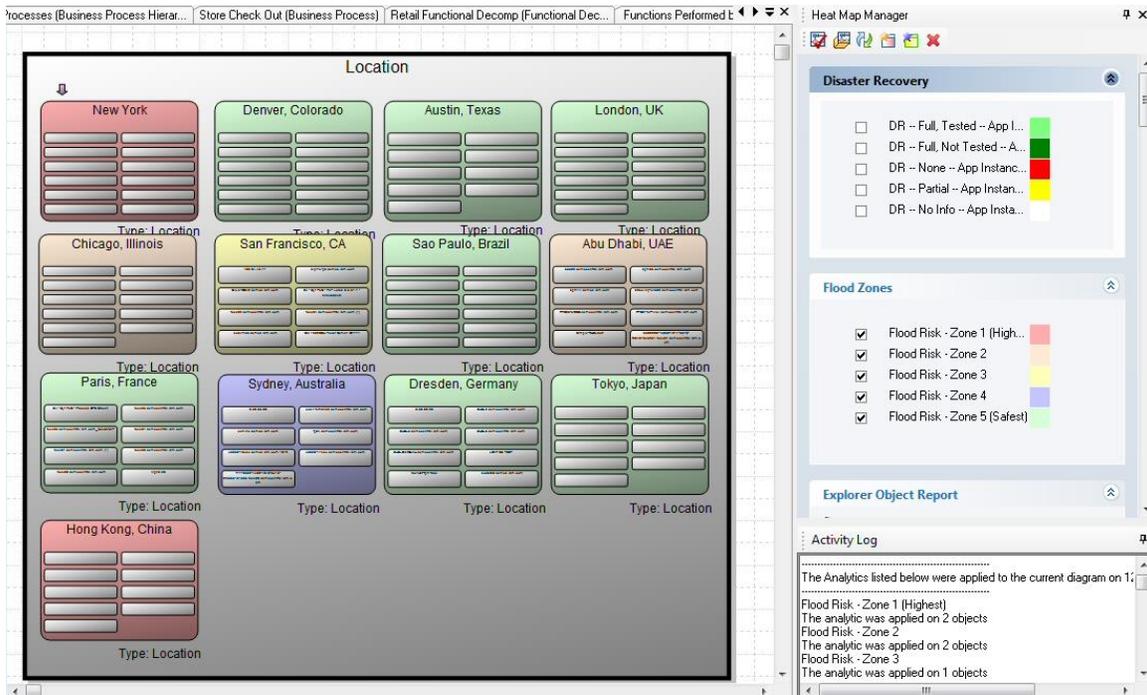
Explorer Diagrams for Landscape & Heatmap Analysis

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

- a. Run the same SQL queries to auto create diagrams, but this time as box-in-box Landscape diagrams.
- b. 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.

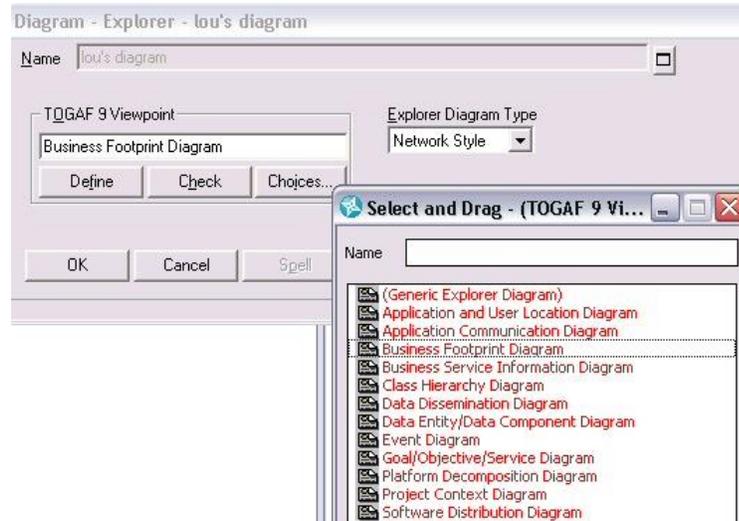


c. This is a Landscape-style Explorer diagram with analytics applied – a report is run to color the new Locations based on their Flood Zone information– in this case, Locations in Flood Zone 1 are colored red, Flood Zone 2 is orange, etc. You can build and run a report to turn something a color based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

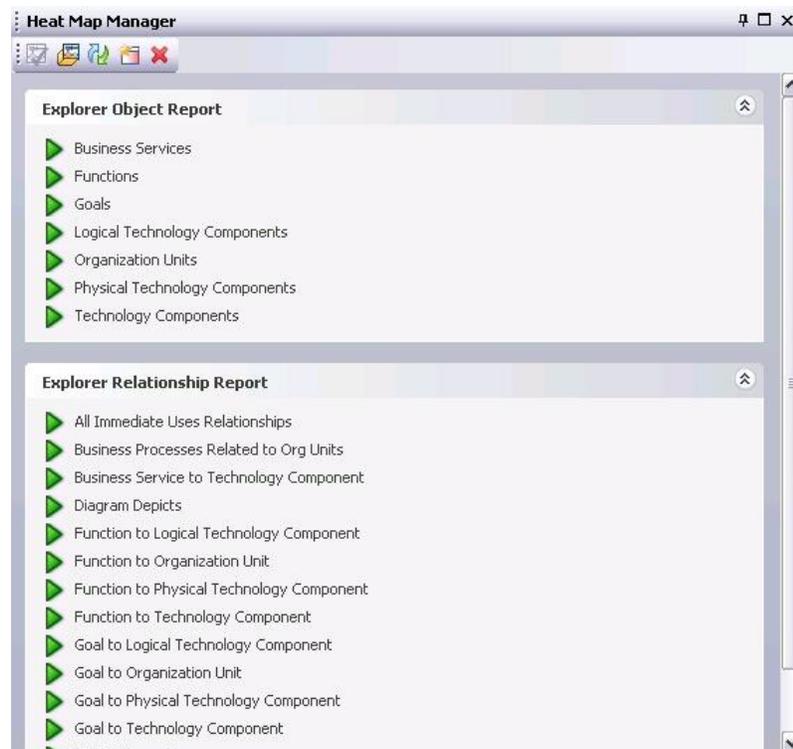


TOGAF 9 Comes with Pre-Configured Set of Explorer Diagrams

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.

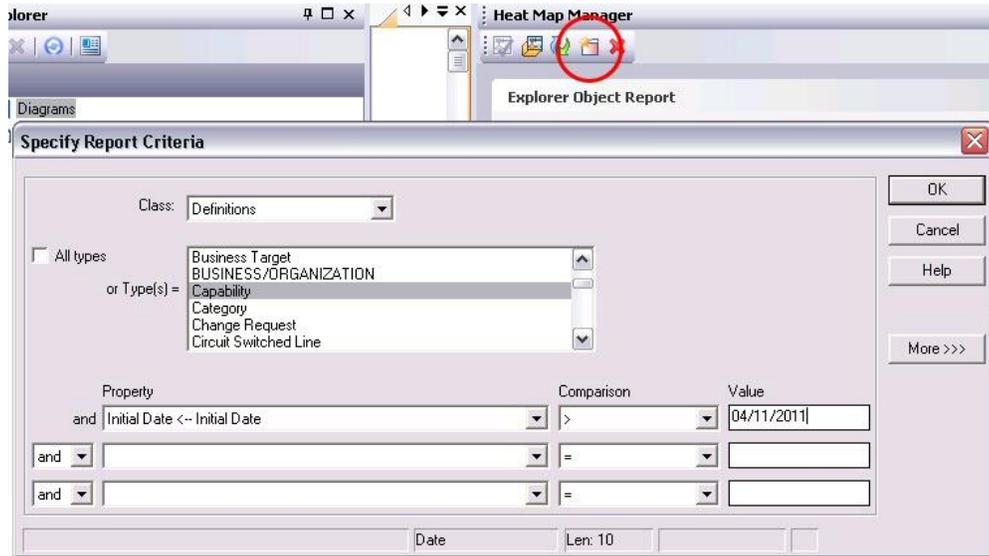


- g. Select View, Heatmap Manager to open a dialog that presents you with the pre-built reports to run to build the diagram.



- 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

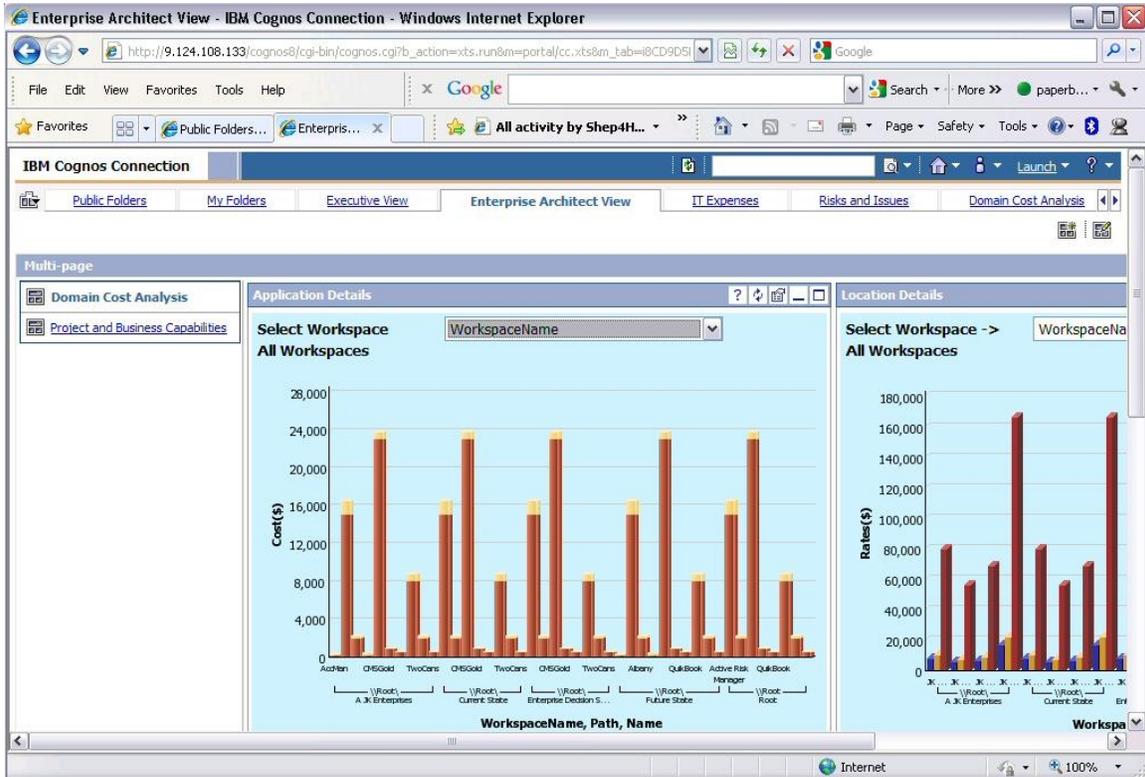
the Wizard to get at the GUI to SA's SQL-query reporting system (shown below), and specify your report-based analytic (you also have the option of building very complex VBA-based analytic algorithms).



- 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

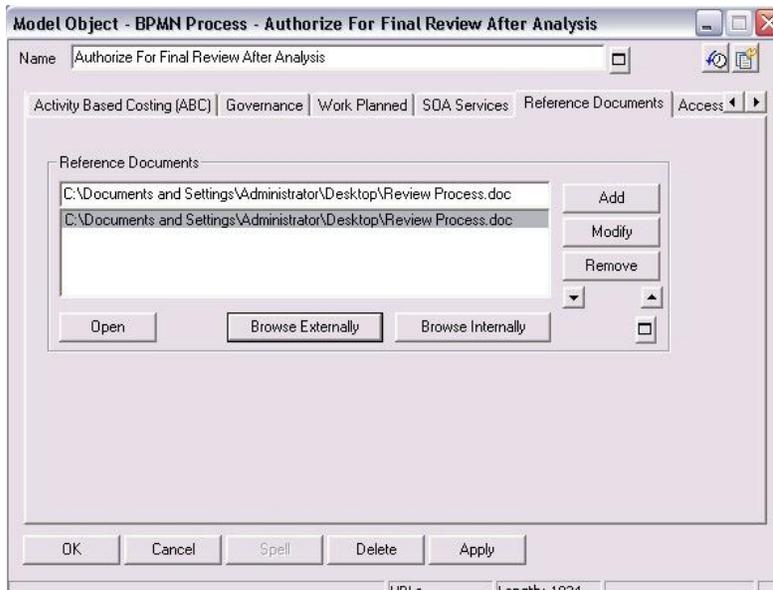
Access Control

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

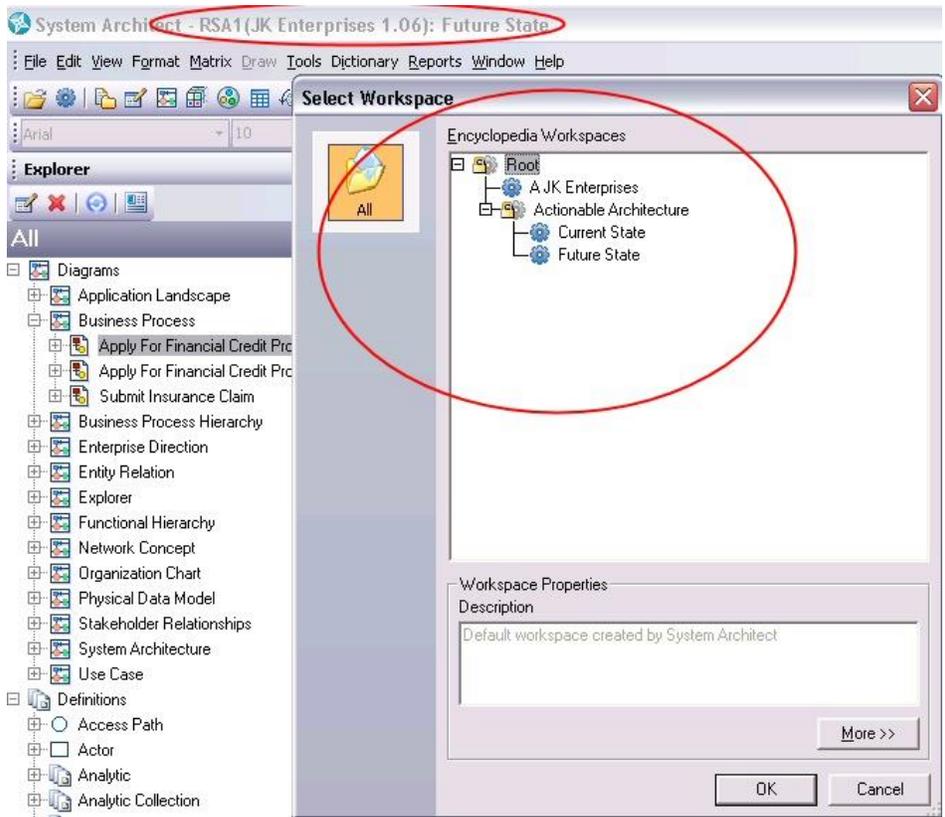
What this approach does not cover, however, is ‘governing’ those related documents. What if the URL changes? What if someone replaces the document with a new version, with a new suffix to the named, such as StandardV2.doc. IBM provides a tool to enable governance of files and documents – it is called 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.



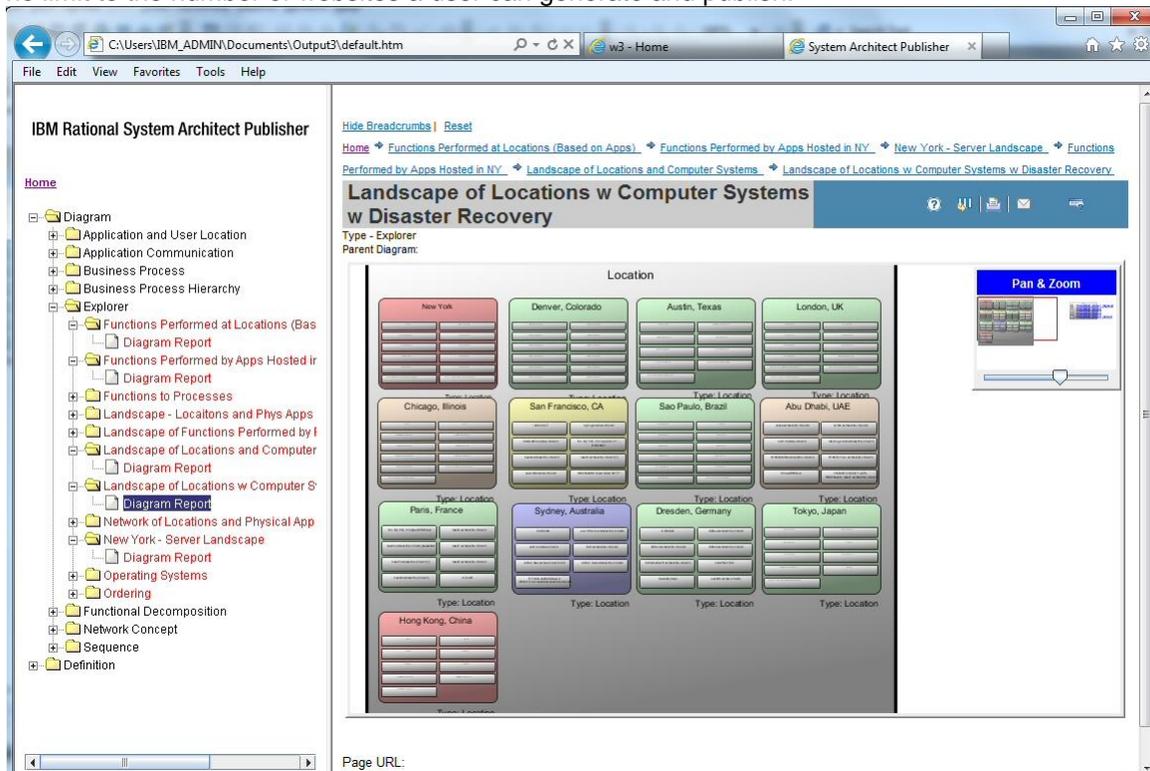
Communicating the EA

Publishing the EA

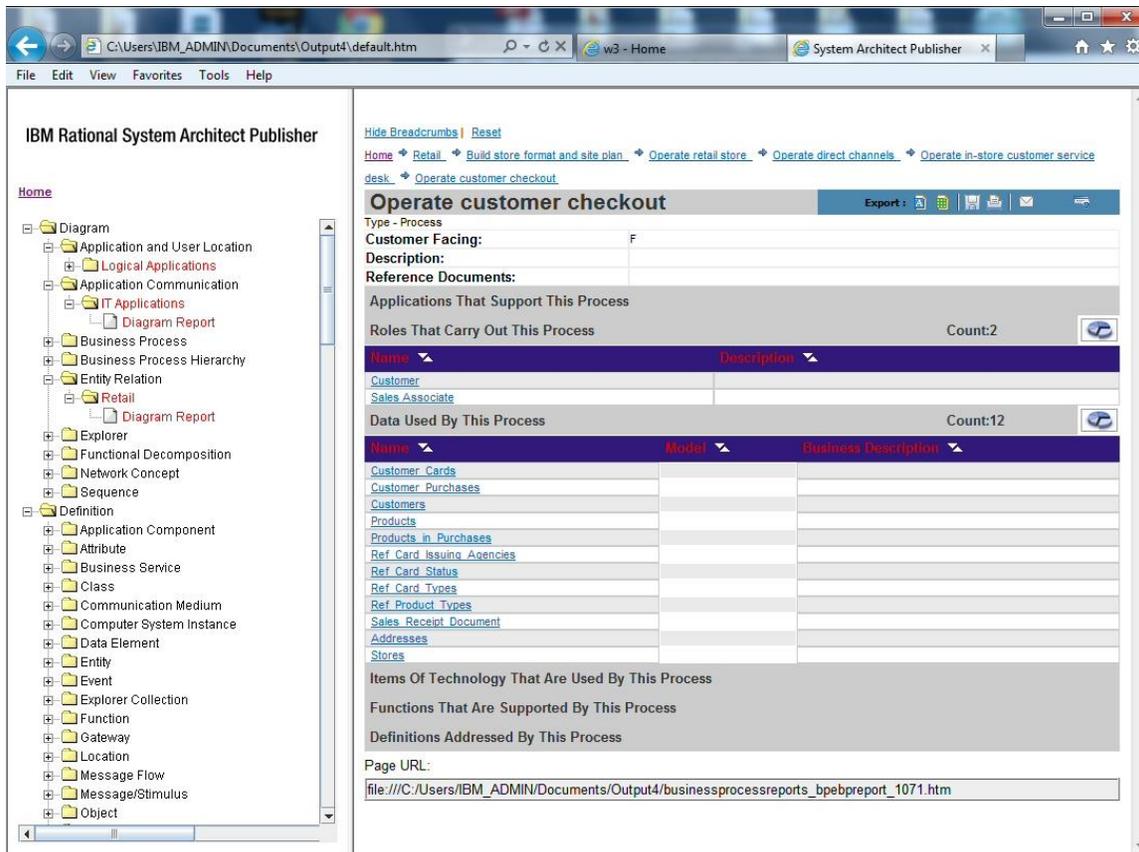
SA/Publisher Paid Add-On

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.

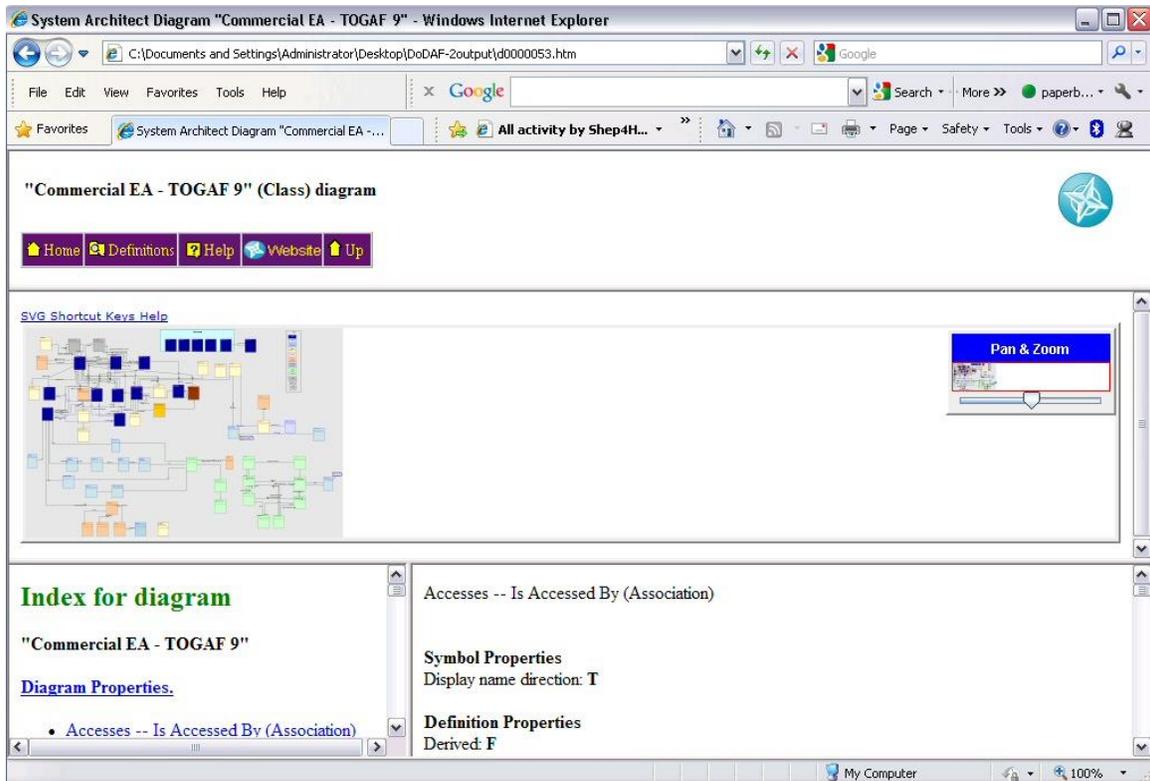


Example output of the SA/Publisher -- several different reports output to same page for an entity. Notice unique Page URL generated (bottom right) that can be referenced in Sharepoint, etc.

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

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.

SEARCH FOR SA ITEMS

[Advanced Search](#)

MY BOOKMARKS

[Manage my bookmarks](#)

MY LINKS

[Manage my links](#)

- DEFENCE QUESTIONS
- HEALTH OF ARCHITECTURE
- CREATE MY OWN QUESTION/QUERY
- SYSTEM ARCHITECT XT BROWSER
- SYSTEM ARCHITECT XT BROWSER
- SA-COGNOS REPORTS

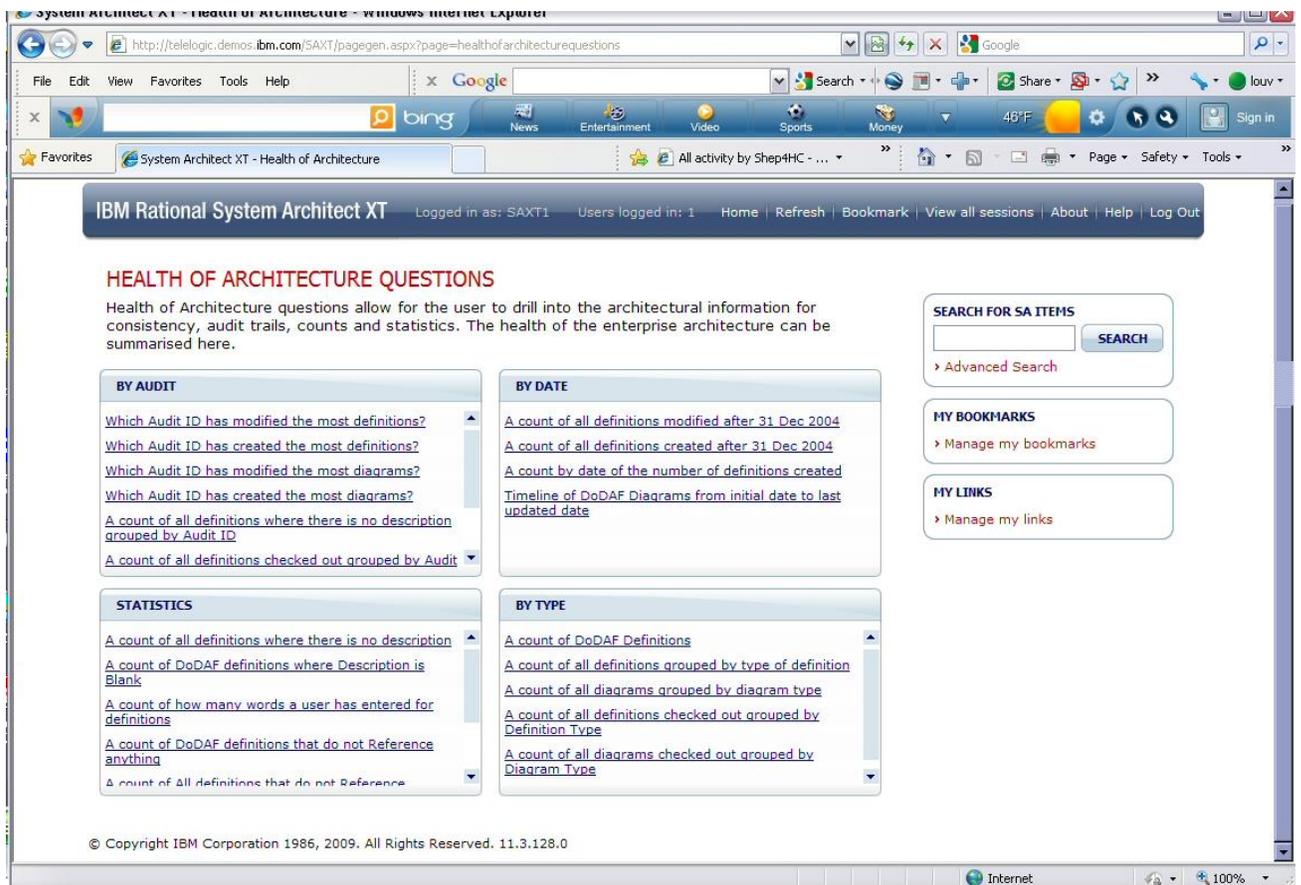
SITE MANAGEMENT

[Encyclopedia Profile](#)

LATEST ADDITIONS

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

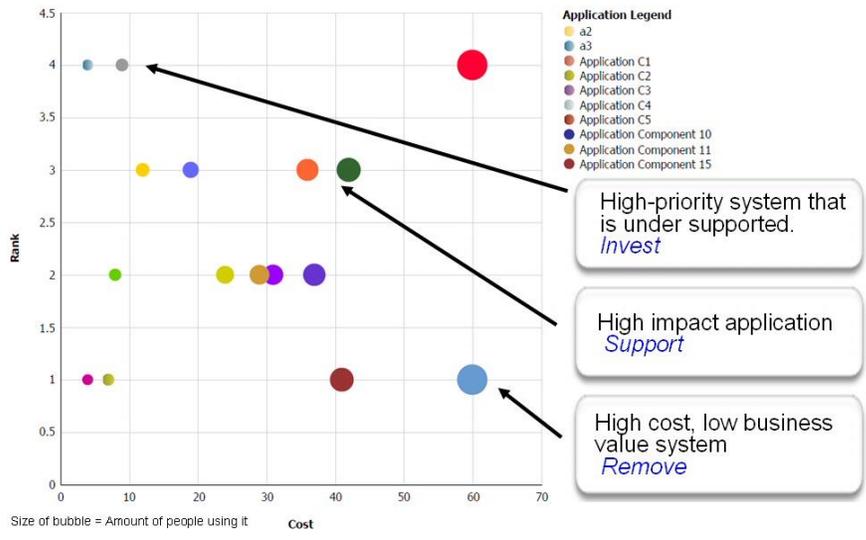
System Architect XT - Home - Windows Internet Explorer



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.

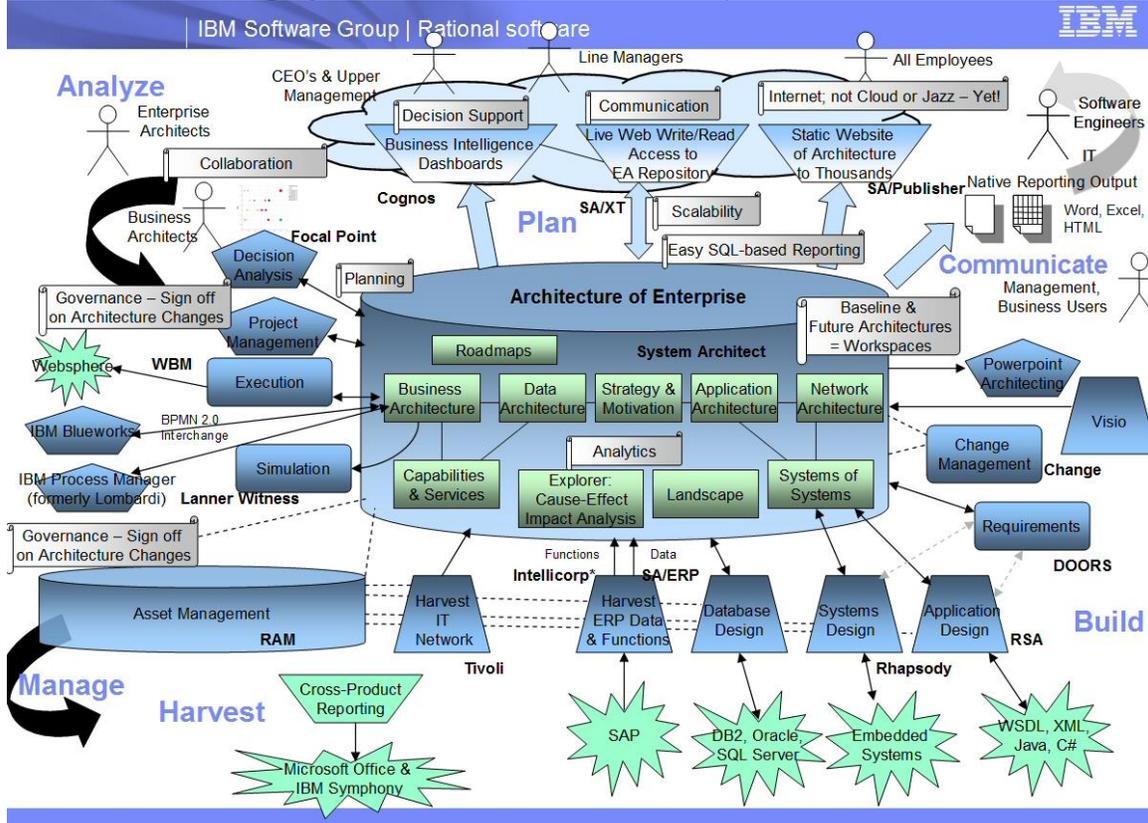
Decision Based Analysis – SA with Focal Point

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.



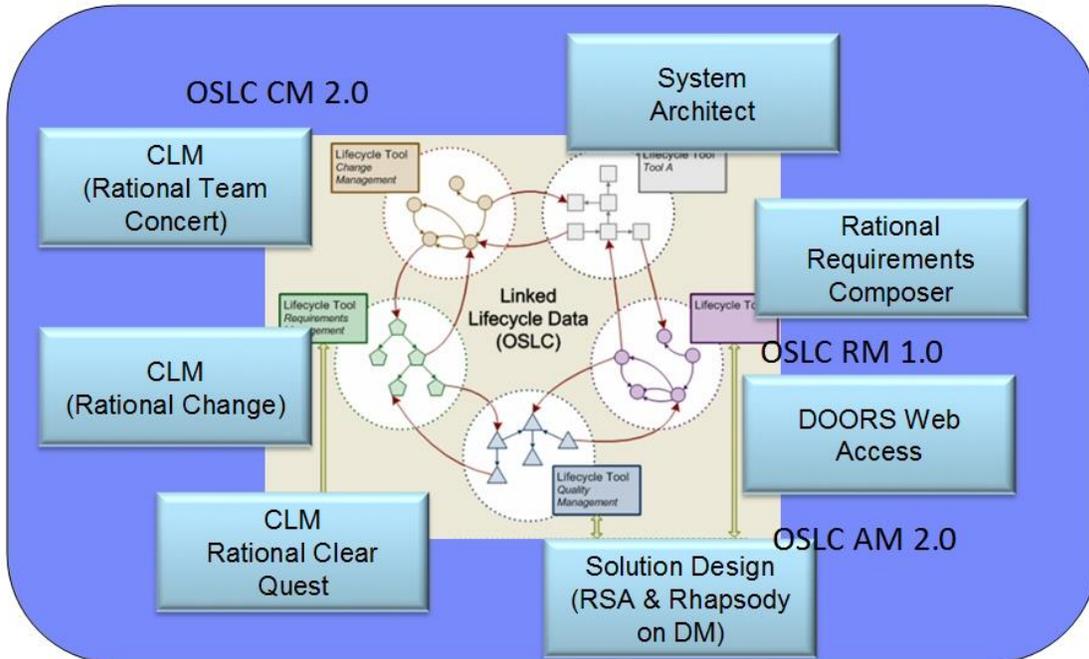
Starting to Get the Full Scope

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:

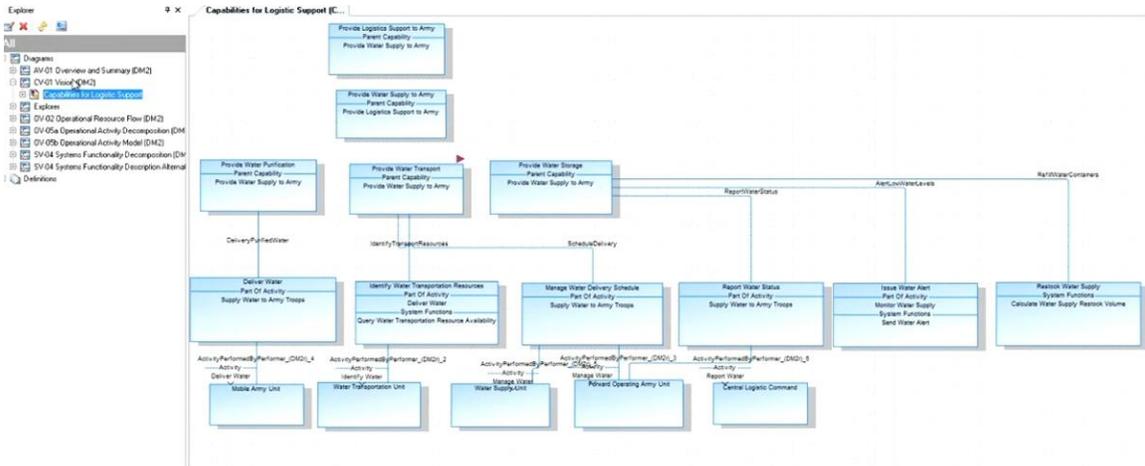


- System Architect can consume artifacts from the following products:
 - ▶ Rational Team Concert (RTC) 4.0 (OSLC CM 2.0)
 - ▶ Rational Doors Web Access (DWA) 1.5 (OSLC RM 1.0)
 - ▶ Rational Change 5.3 (OSLC CM 2.0)
 - ▶ Rational Clear Quest 8.0.0.3
 - ▶ Rational Requirements Composer 4.0
 - ▶ Rational 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)

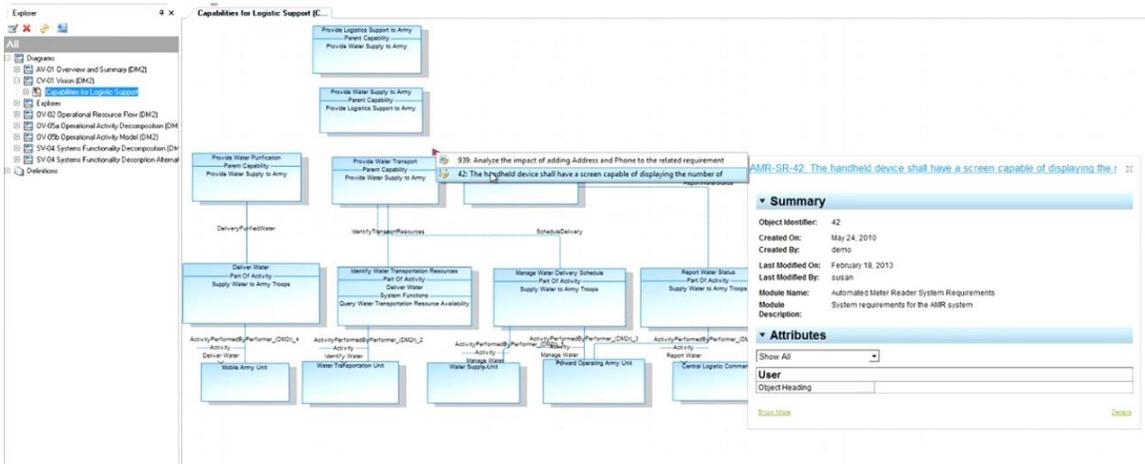
How Does It Work

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:

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

Appendix A -- List of TOGAF 9 Explorer Diagrams

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

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

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