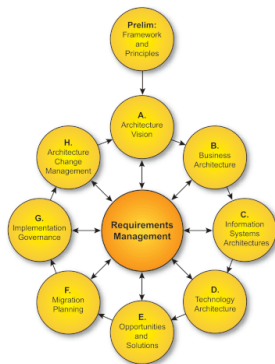


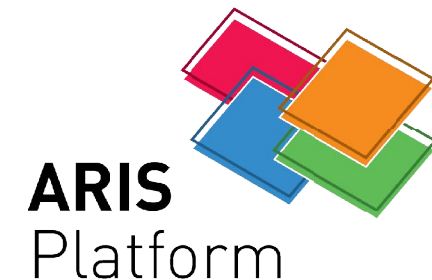


A Practical Approach to Implementing TOGAF Using the ARIS Platform

Enterprise Architecture Practitioners Conference
Johannesburg
4 – 6 June 2008



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triVector (Pty) Ltd
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Purpose of Presentation

- Presentation Objectives
 - Provide the audience with some insight into an approach for implementing the ARIS Platform in support of TOGAF
 - Will not attempt to provide a detailed method for applying TOGAF, but only some points to consider when implementing ARIS to support TOGAF
- Target Audience
 - Architecture communities who are considering or have decided to apply the ARIS Platform to implement TOGAF
 - ARIS users who are considering or who have decided to implement TOGAF



Agenda

- 1** Introduction to TOGAF
- 2** Introduction to ARIS Platform
- 3** Approach for Implementing TOGAF in ARIS
- 4** Forthcoming Attractions
- 5** Closure

Agenda

- 1** Introduction to TOGAF
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Introduction to TOGAF

The Open Group Architecture Framework (TOGAF) is a framework - a detailed method and a set of supporting tools - for developing an enterprise architecture.



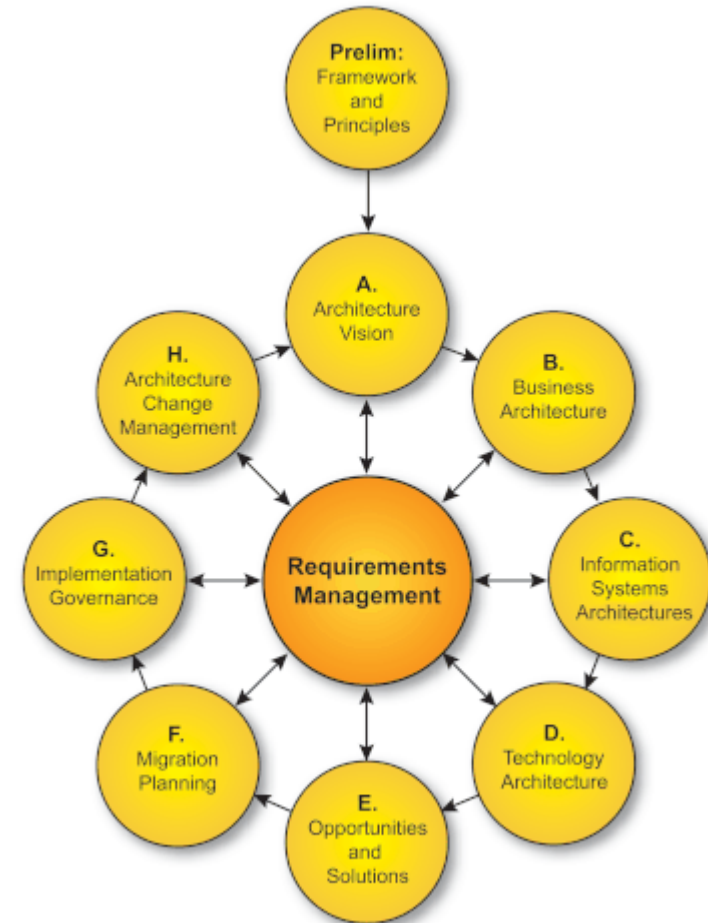
Components

- **ADM** - This is the core of TOGAF. It describes the TOGAF Architecture Development Method (ADM) - a step-by-step approach to developing an enterprise architecture.
- **Enterprise Continuum** - A virtual repository of architecture assets, which includes the TOGAF Foundation Architecture, and the Integrated Information Infrastructure Reference Model
- **TOGAF Resource Base** - a set of tools and techniques available for use in applying TOGAF and the TOGAF ADM.

Source: TOGAF 8.1.1

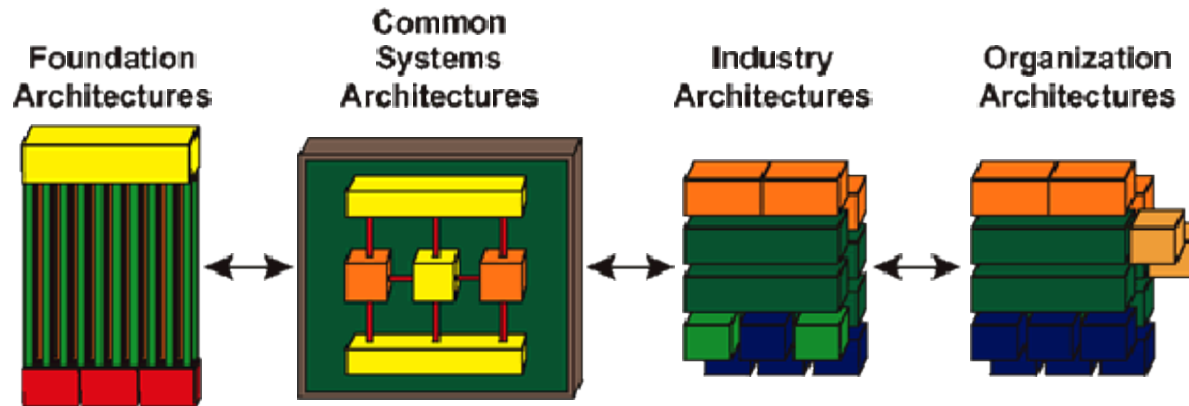
Architecture Development Methodology (ADM)

- The ADM is iterative
- For each iteration the following must be decided:
 - The breadth of coverage
 - The level of detail
 - The extent of the time horizon
 - The architectural assets to be leveraged
 - Assets created in previous iterations
 - Assets available elsewhere in the industry
- ADM is a generic method. It may however be tailored to specific needs
 - It may be used in conjunction with the set of deliverables of another framework
 - It may be used in conjunction with the Zachman Framework or other classification framework



Source: TOGAF 8.1.1

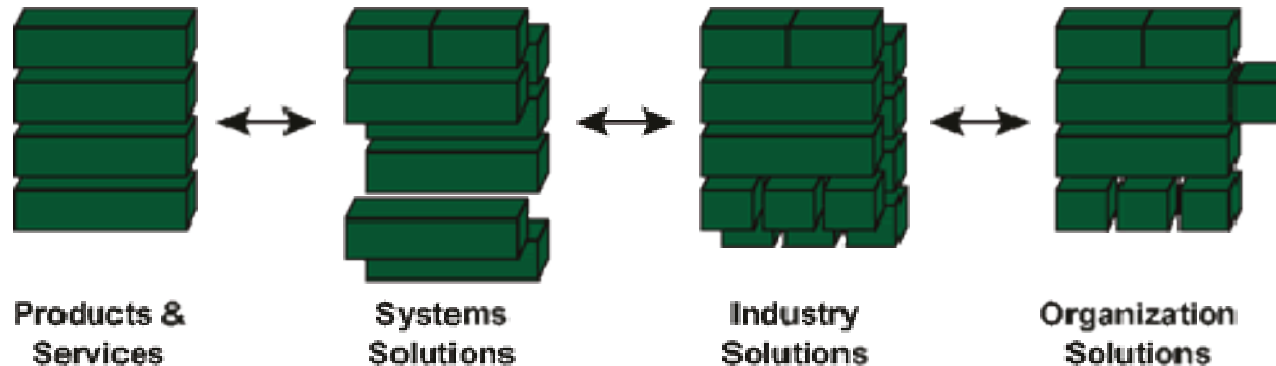
Enterprise Continuum - The Architecture Continuum



- **Foundation Architecture** - architecture of building blocks and corresponding standards that supports all the common systems architectures and, therefore, the complete computing environment.
- **Common Systems Architectures** - guides the selection and integration of specific services from the Foundation Architecture to create an architecture useful for building common (i.e., re-usable) solutions across a wide number of relevant domains.
- **Industry Architectures** - guide the integration of common systems components with industry-specific components, and guide the creation of industry solutions for targeted customer problems within a particular industry.
- **Organisation Architectures** - describe and guide the final deployment of user-written or third-party components that constitute effective solutions for a particular enterprise or enterprises that have a need to share information.

Source: TOGAF 8.1.1

Enterprise Continuum - The Solutions Continuum



- **Products and Services** - are separately procurable hardware, software, or service entities.
- **System Solution** - is an implementation of a Common Systems Architecture comprised of a set of products and services, which may be certified or branded.
- **Industry Solution** - is an implementation of an Industry Architecture, which provides re-usable packages of common components and services specific to an industry.
- **Organisation Solution** - is an implementation of the enterprise architecture that provides the required business functions. Contains the highest amount of organization specific unique content.

Source: TOGAF 8.1.1

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Introduction to ARIS Platform



ARIS Controlling Platform

ARIS Process Performance Manager
NEW ARIS Audit Manager
...



ARIS Strategy Platform

ARIS BSC
NEW ARIS Business Optimizer
NEW ARIS Business Simulator
...



ARIS Platform



ARIS Implementation Platform

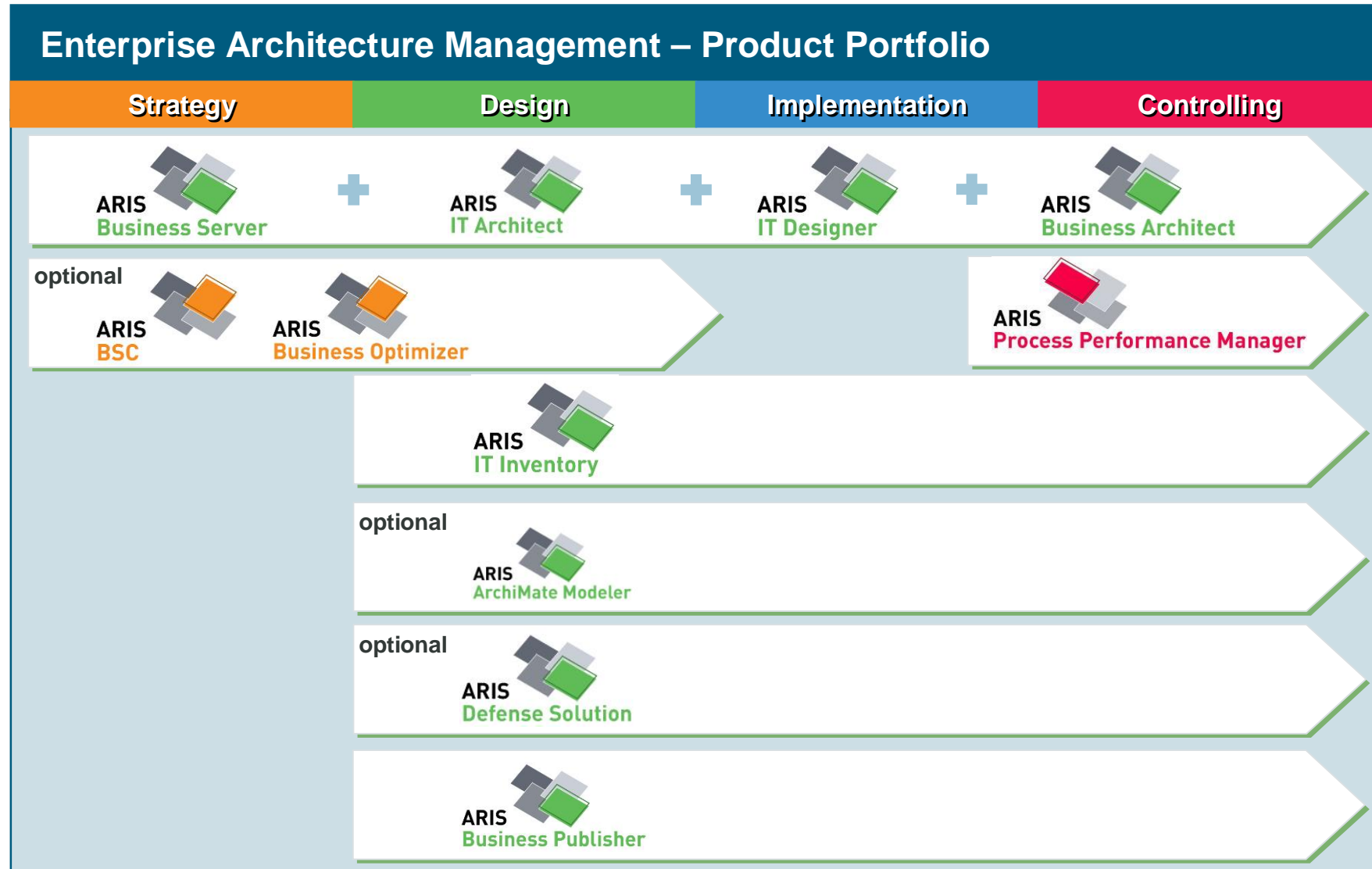
ARIS for SAP NetWeaver
NEW ARIS BI Modeler
NEW ARIS SOA Architect
NEW ARIS Business Rules Designer
ARIS UML Designer
...



ARIS Design Platform

ARIS Business Architect
ARIS Business Designer
ARIS Business Publisher
NEW ARIS IT Architect
NEW ARIS ArchiMate Modeler
...

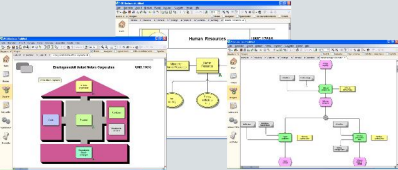

ARIS Solution for Enterprise Architecture



ARIS Business Designer & ARIS Business Architect

ARIS Business Designer

Ms. Rosenfeld
→ Person in charge of the process



Worldwide process design

ARIS Business Architect

Ms. Meyer
→ Project manager



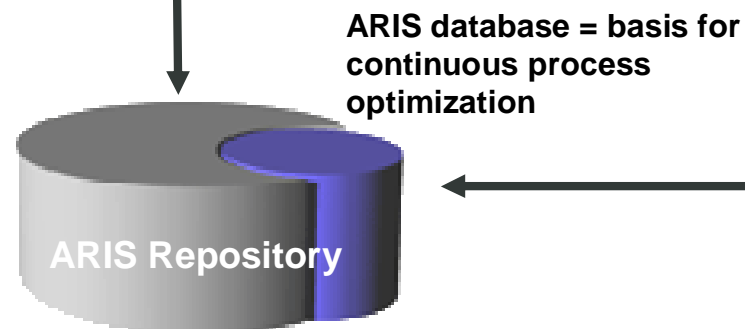
Analysis, optimization, and administration

ARIS Business Publisher

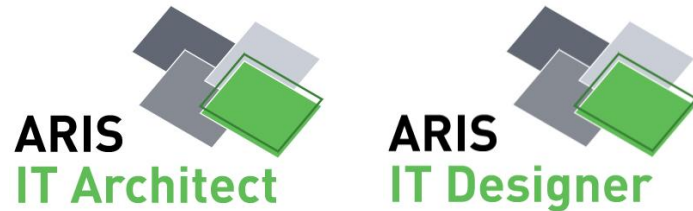
Technical departments
→ Staff in charge



Worldwide communication of process knowledge to all employees

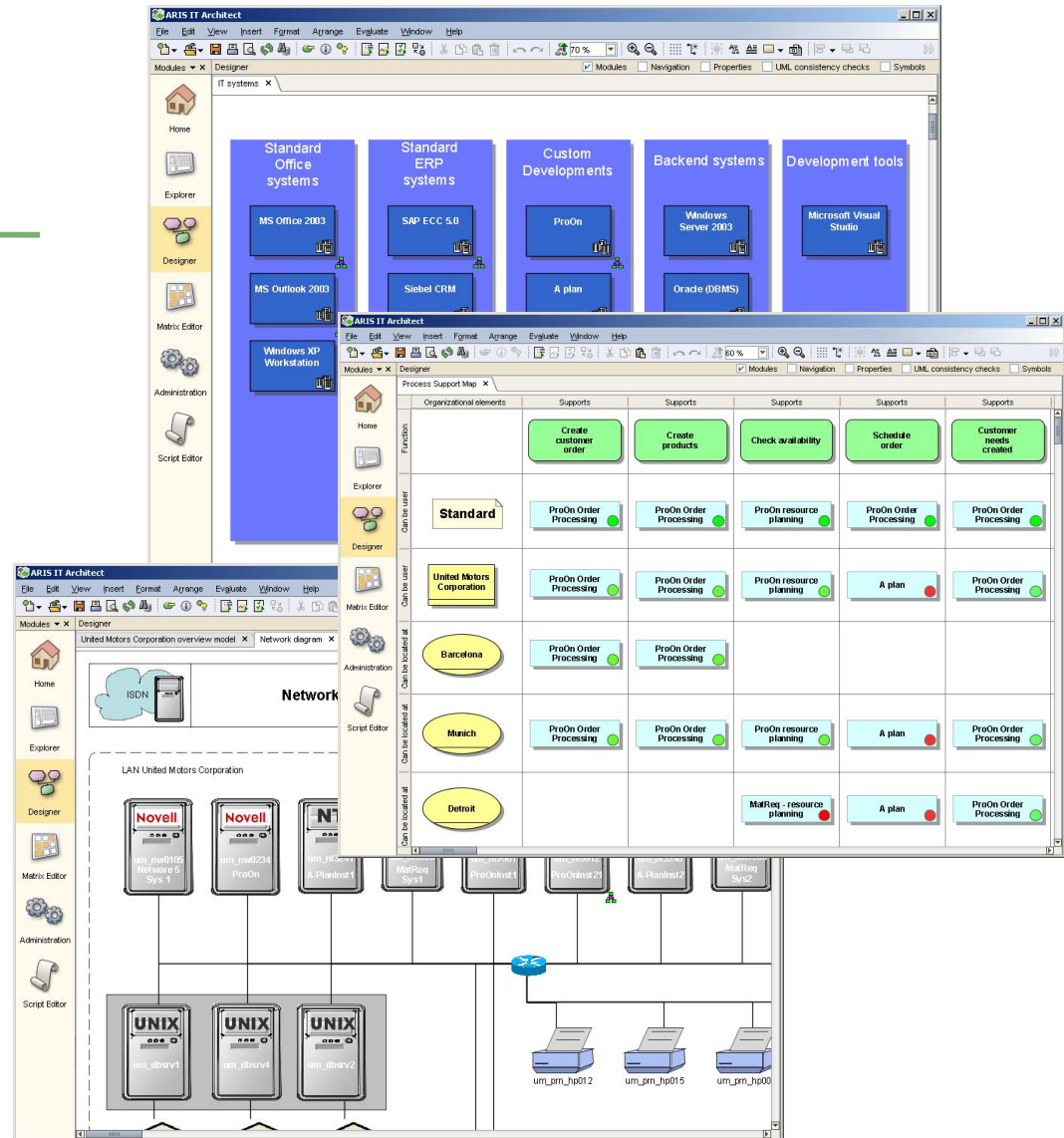


ARIS IT Architect – Managing IT Architectures

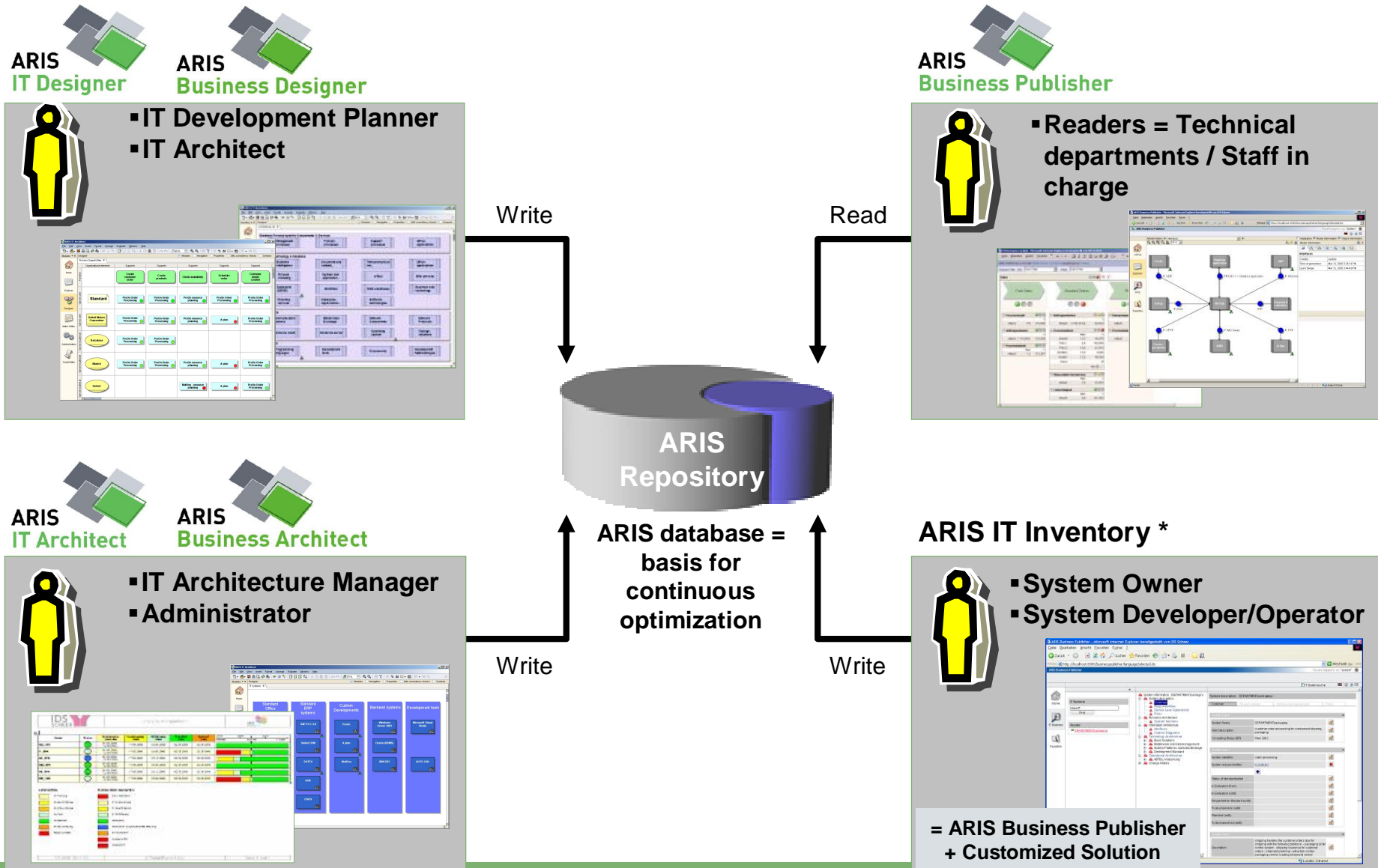


- **Build** application and technology inventories
- **Specify, document and propagate** group wide IT standards
- **Describe** system landscapes from a logical level down to the infrastructure details
- Integrate IT architecture and process management to align the IT planning to your business demands

➔ *The Web-Based Tools for IT Architecture Management*



Roles in IT Architecture Management



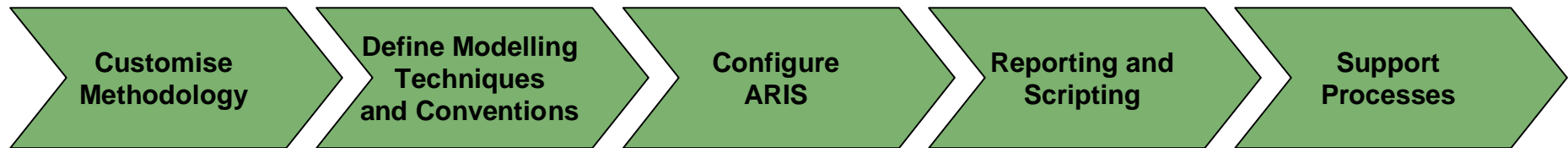
Agenda

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Approach for Implementing TOGAF in ARIS

Prerequisites

- Defined architecture scope
- Established governance structures
- Architecture principles and policies

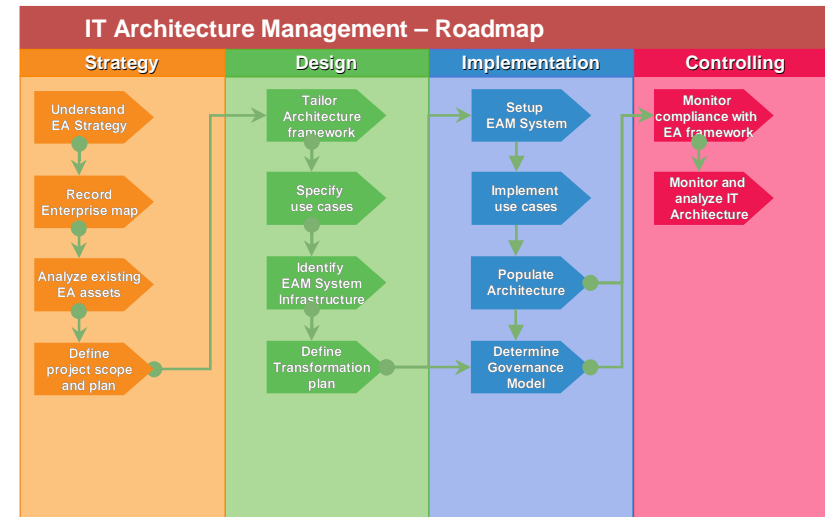
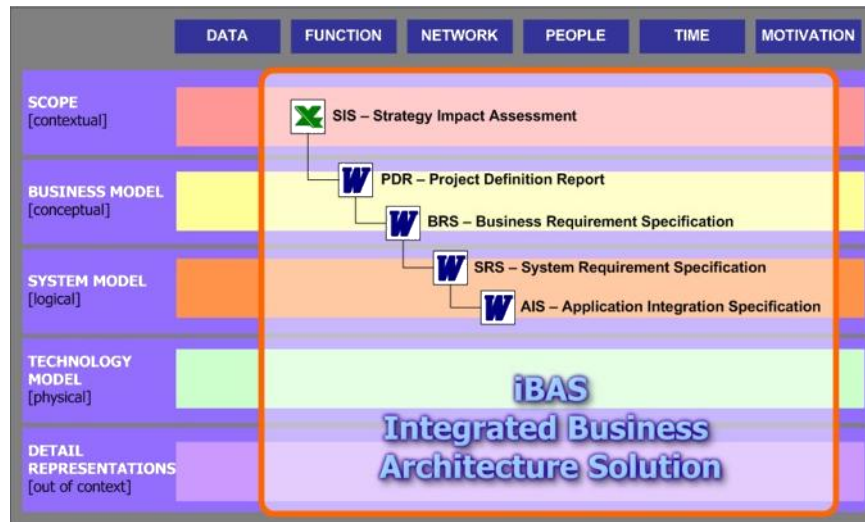
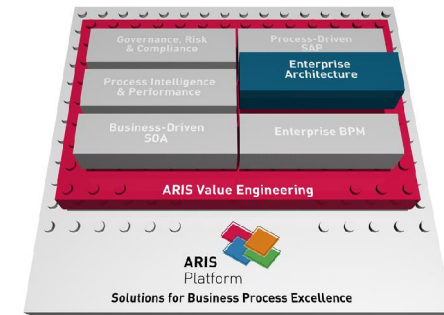
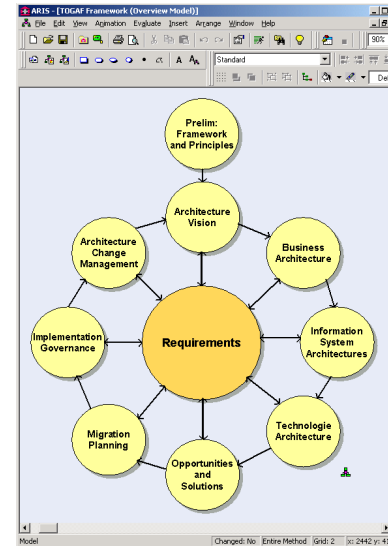


- These activities would usually be performed during the Preliminary Phase, but do require some outputs from Phase A as well
- Often extended in iterations

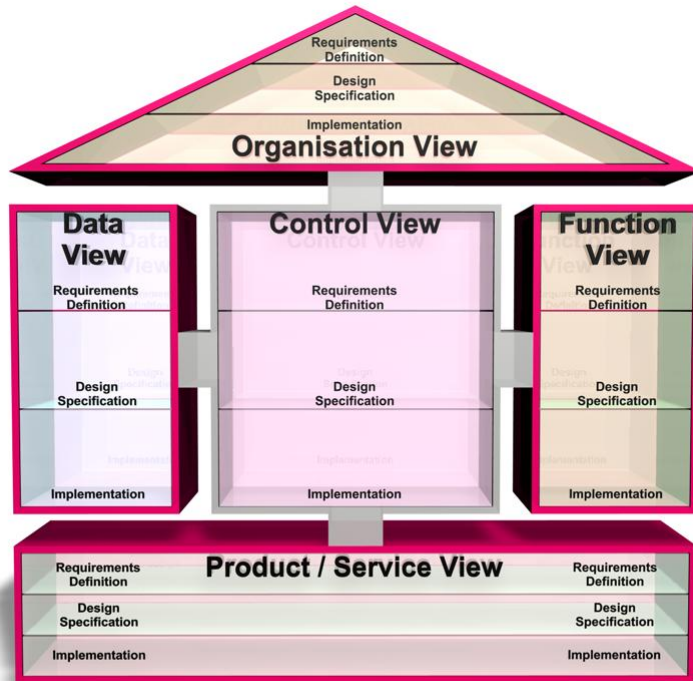
Customise Methodology

Some Options

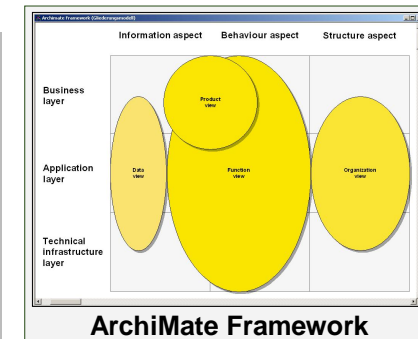
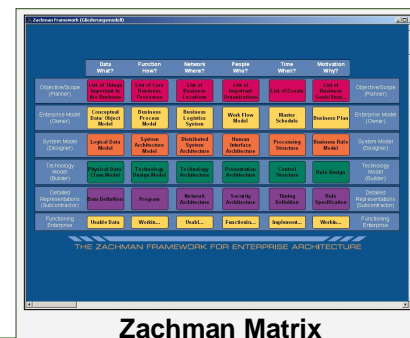
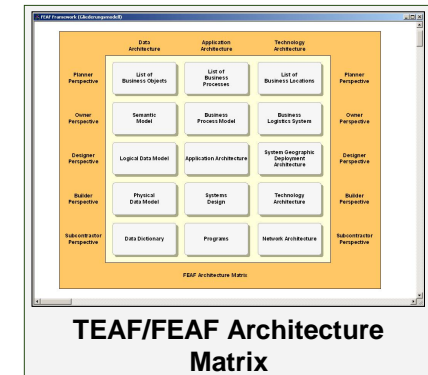
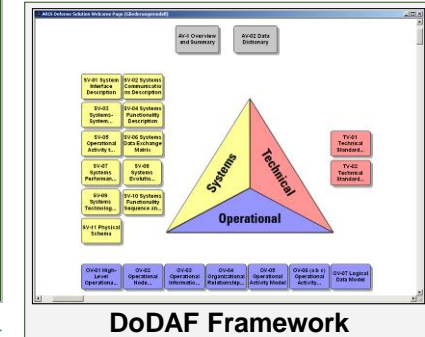
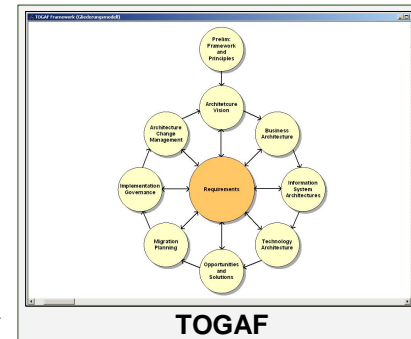
- Adopt ADM
- Customise ADM
- Adopt alternate out the box method
- Develop method from scratch



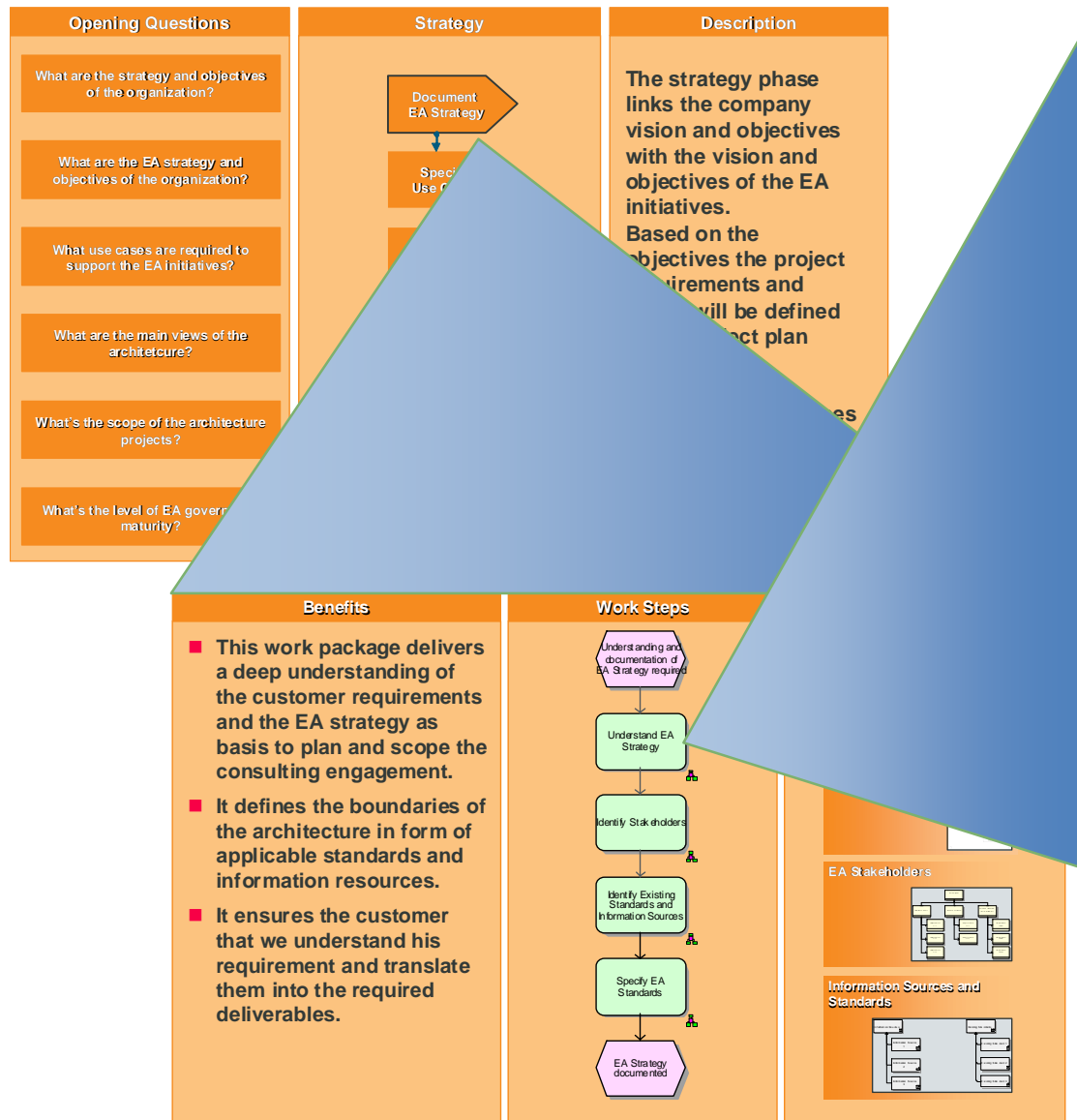
Select Classification Framework



- Architecture Vision
- Industry



Method Elements



Work Step Description

- This work steps consists in conducting interviews in order to capture the exact objectives the company wishes to reach by conducting an Enterprise Architecture project.
- The outline of the EA strategy paper is created in this step.

Inputs

- EA strategy paper template

Outputs

- EA strategy paper
- Review organizations vision and strategy
- Review organizations EA vision and strategy
- Conduct interviews with project sponsors and stakeholders to identify program and EA objectives
- List program, project and EA objectives in EA strategy paper

Accelerators

- EA strategy paper template

Roles

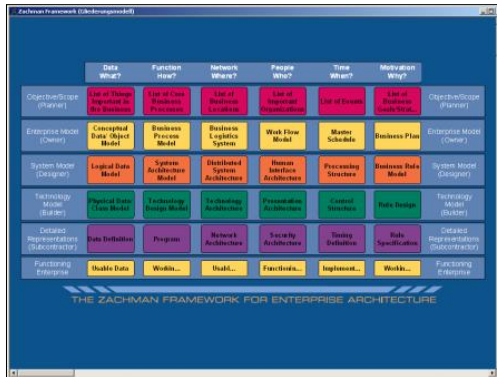
- Chief Enterprise Architect

ARIS Products

- ARIS BSC

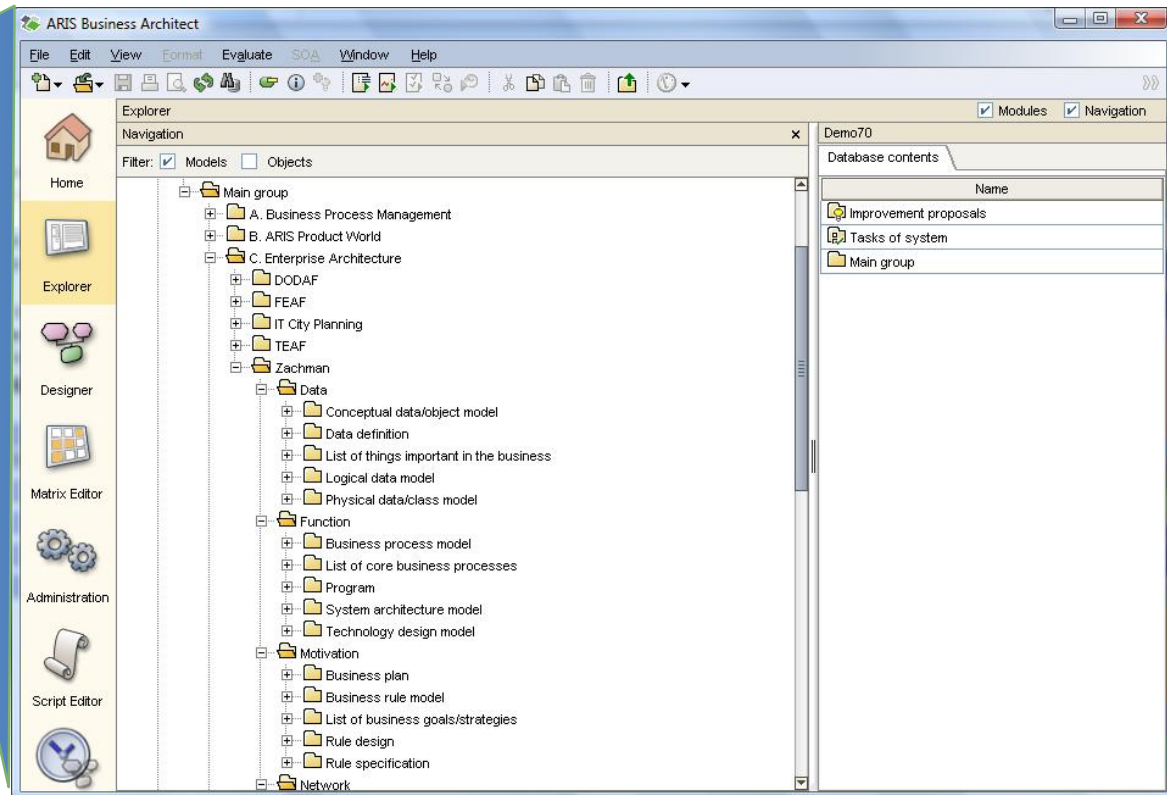
TIP
Model method in ARIS

Define Repository Structures



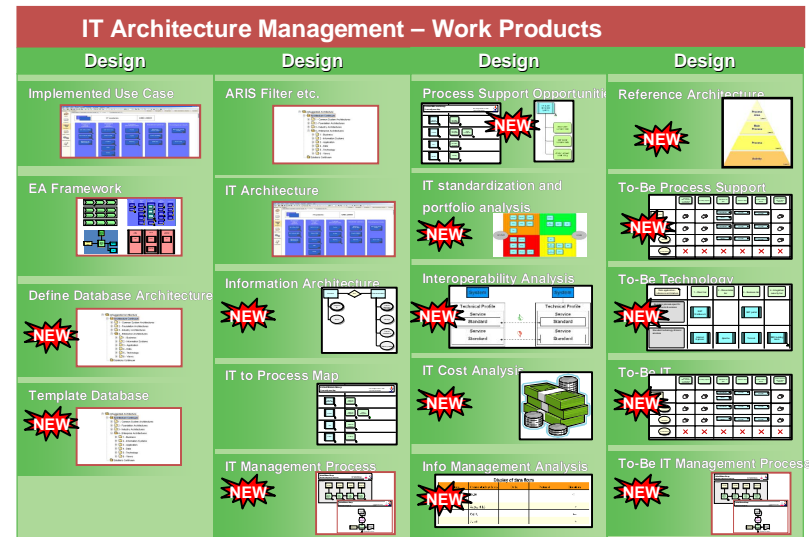
Some Options

- Project based
- Life cycle based
- Value chain based
- Domain based
- Based on classification framework



Identify Deliverables and Templates

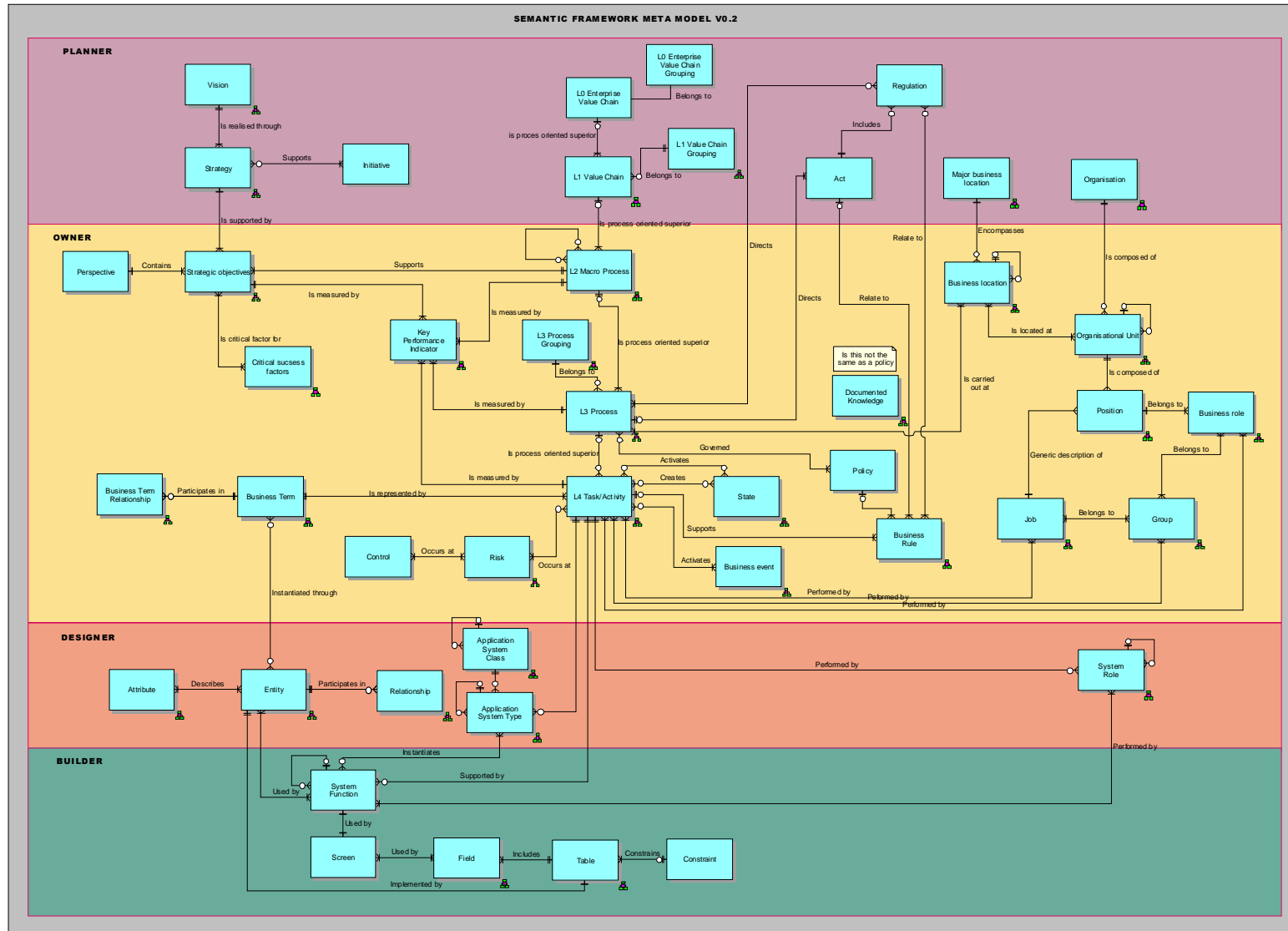
- Identify deliverables that may contain repository based content
- Obtain/develop templates for deliverables
- Identify the specific repository based content in deliverable
- Identify deliverables which may be generated directly from repository



IDS SCHEER		System description A plan		AMS	
A plan					
System description:					
Name:	A plan				
Short description:	Order Processing for CDD shipments				
Description:	This system provides functionality for order management, price calculation and product data management.				
Vendor:	Proprietary system.				
Internal Users:	500-1000				
External Users:	0				
Importance:	Very high				
Status of Standardisation:	<input checked="" type="radio"/> Standard				
	01.07.2004			30.09.2004	
System owner:					
John Smith, +1 19800 908 688; j.smith@umg_is.com					
Service Level Agreements:					
Mto: Downtime per month:	15				
Availability:	99%				
Warranty/Support level:	3x1200				
Business Services:					
Order management					
Price calculation					
Product data management					
2006/07/17 11:04		C:\Temp\Report26.doc		Seite 1 von 1	

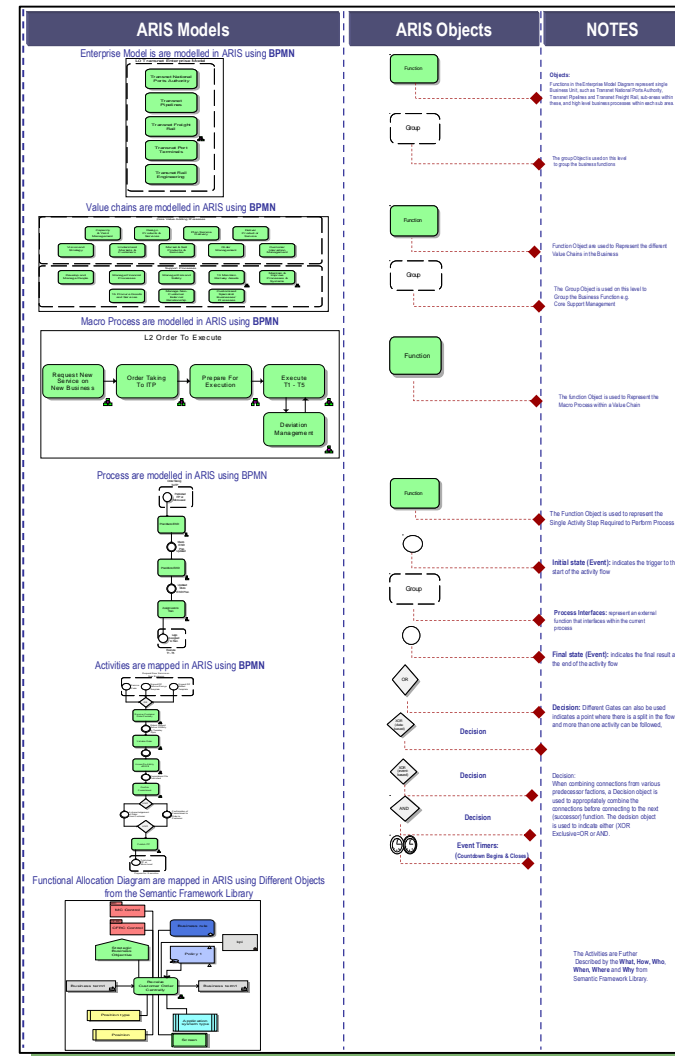


Define Meta Model



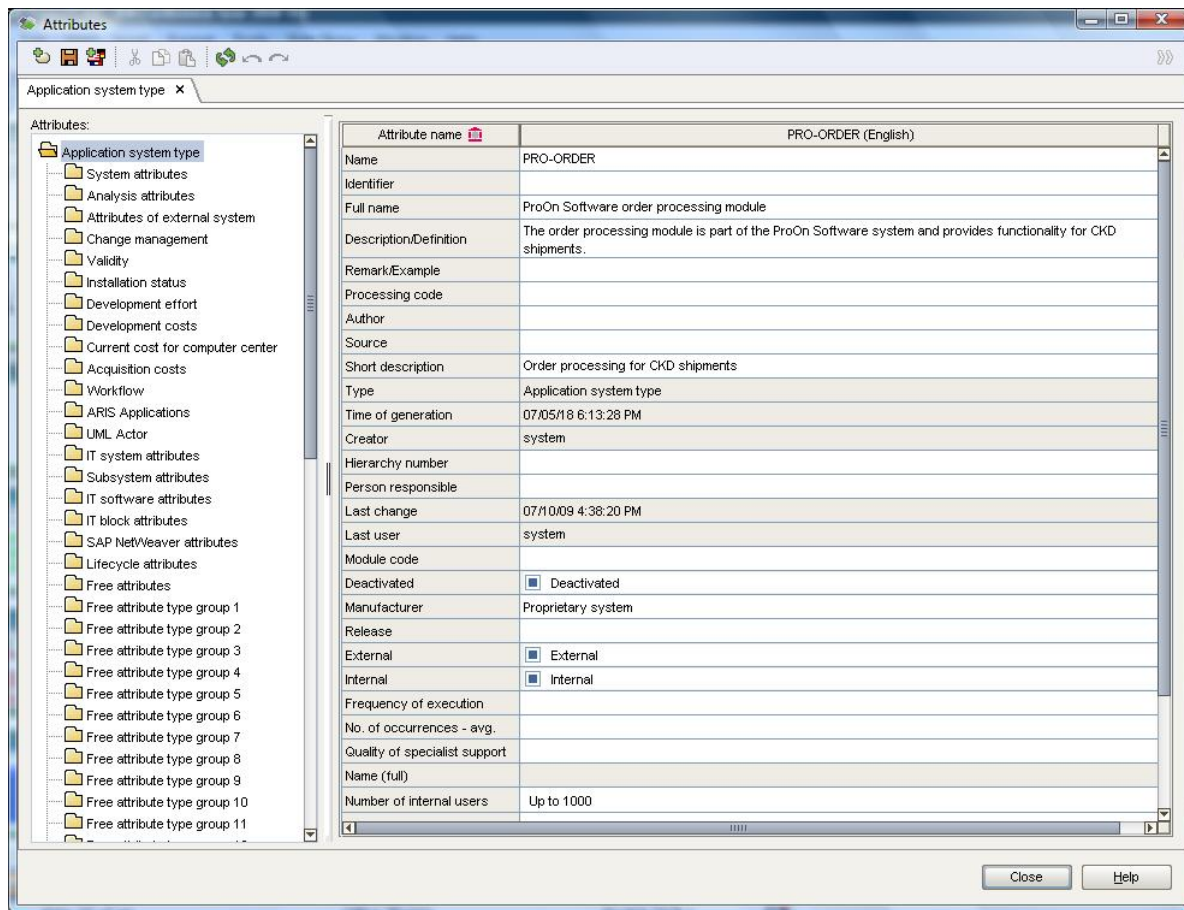
Define Modelling Conventions

- Identify domains
- Define levels
- Select modelling techniques
- Identify models
- Identify model assignments
- Select object type
- Select relationships

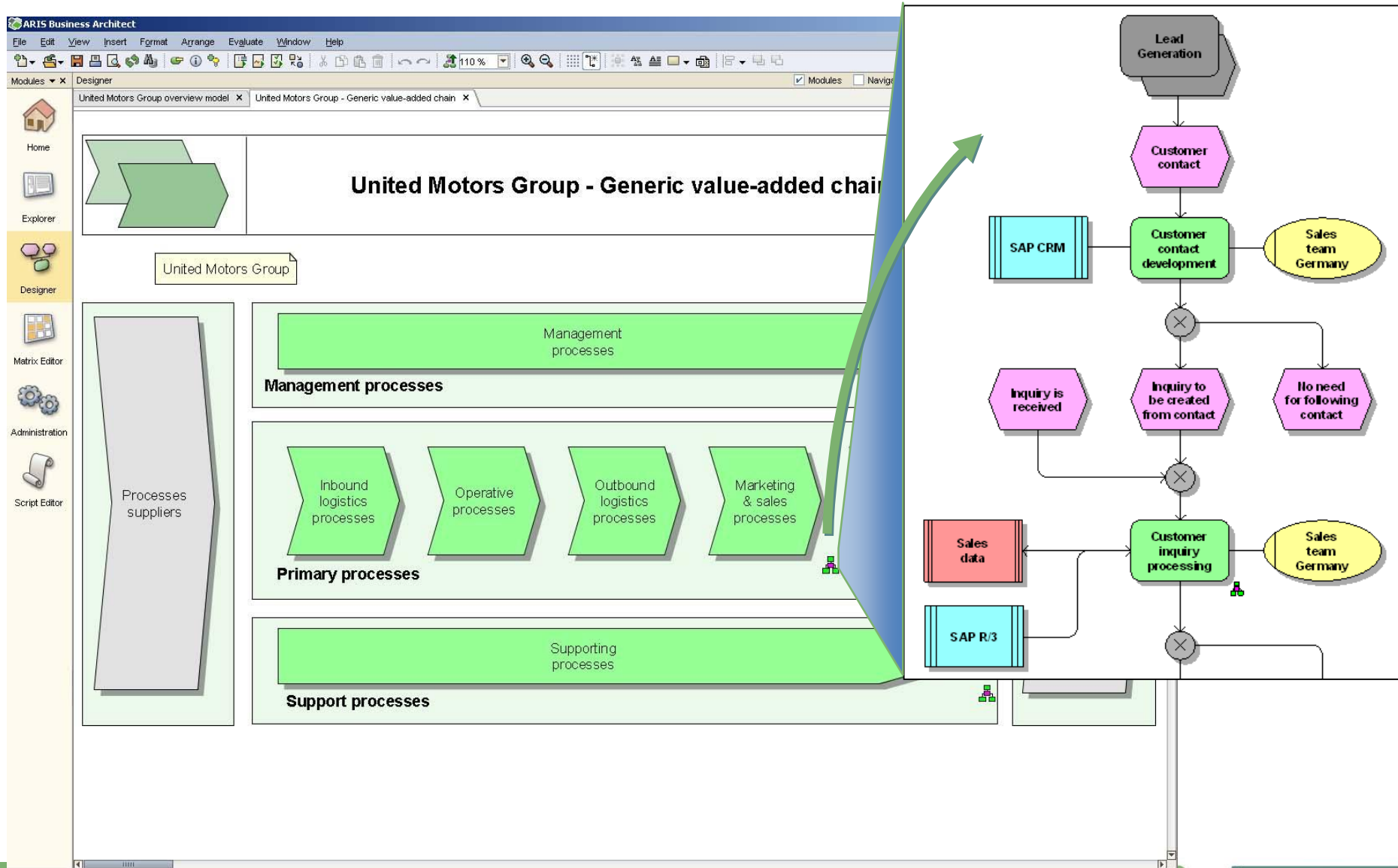


Define Attributes

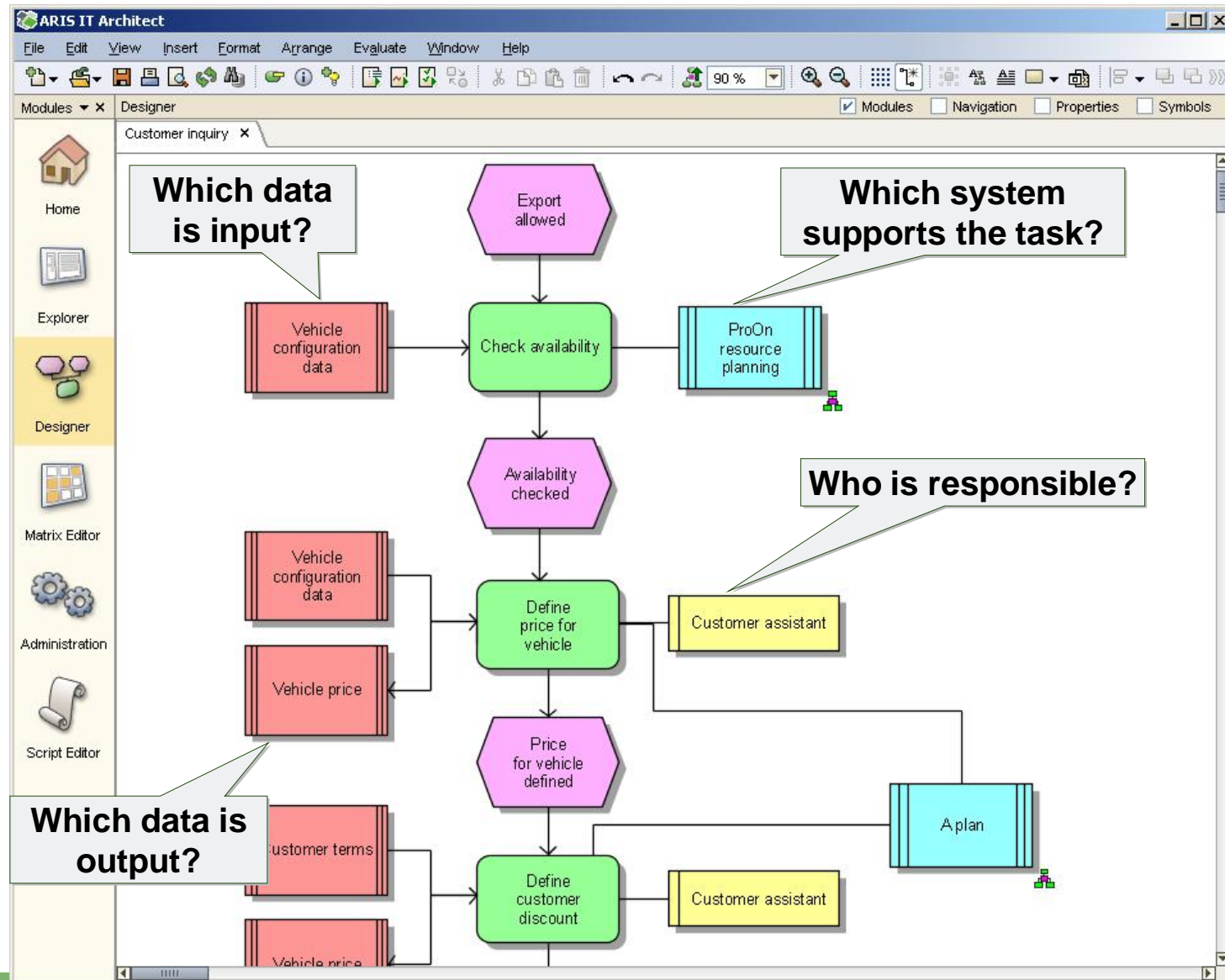
- Identify attributes for:
 - Models
 - Objects
 - Relationship
- Select standard attributes
- Define customised attributes
- Identify mandatory attributes



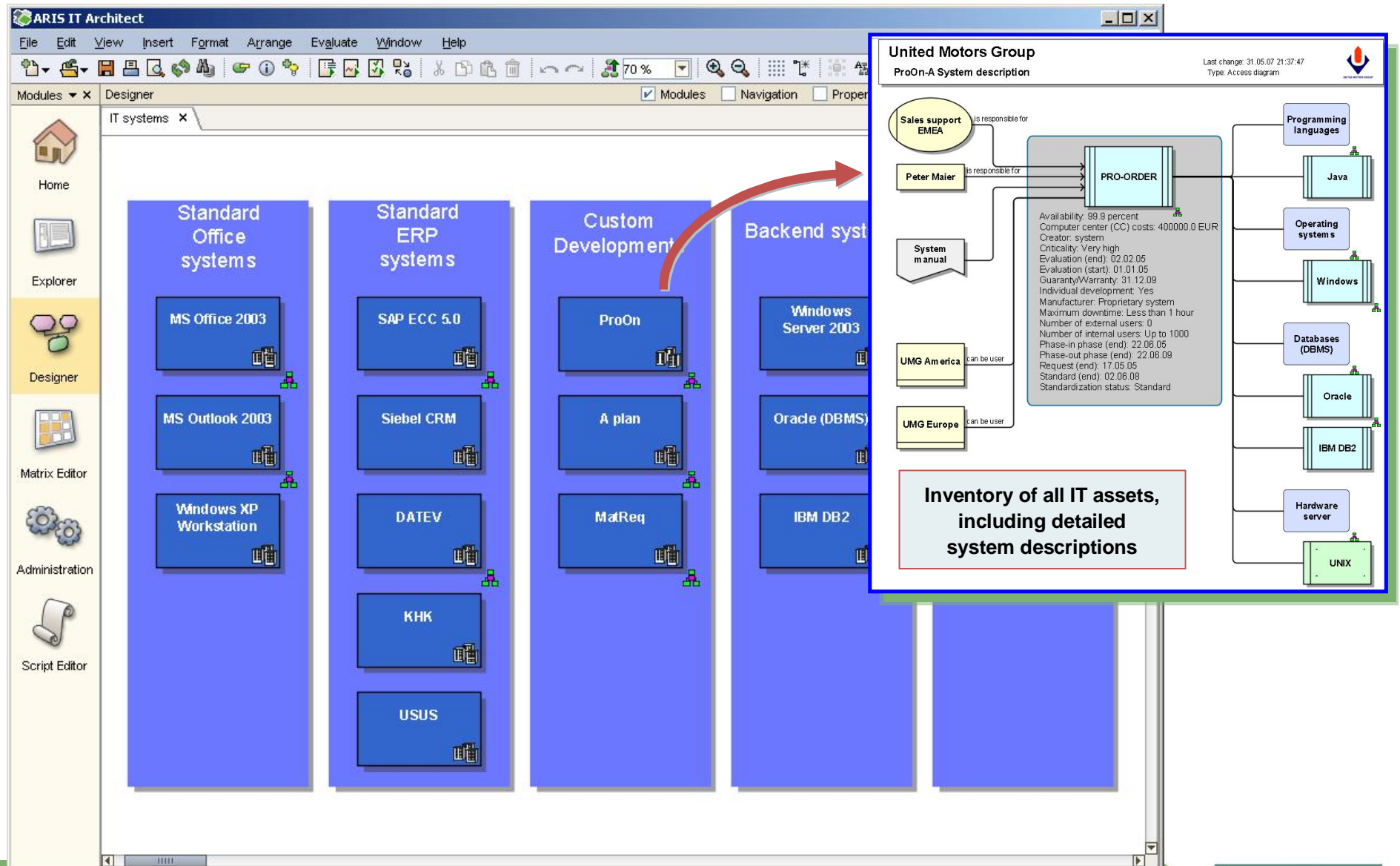
Model Example



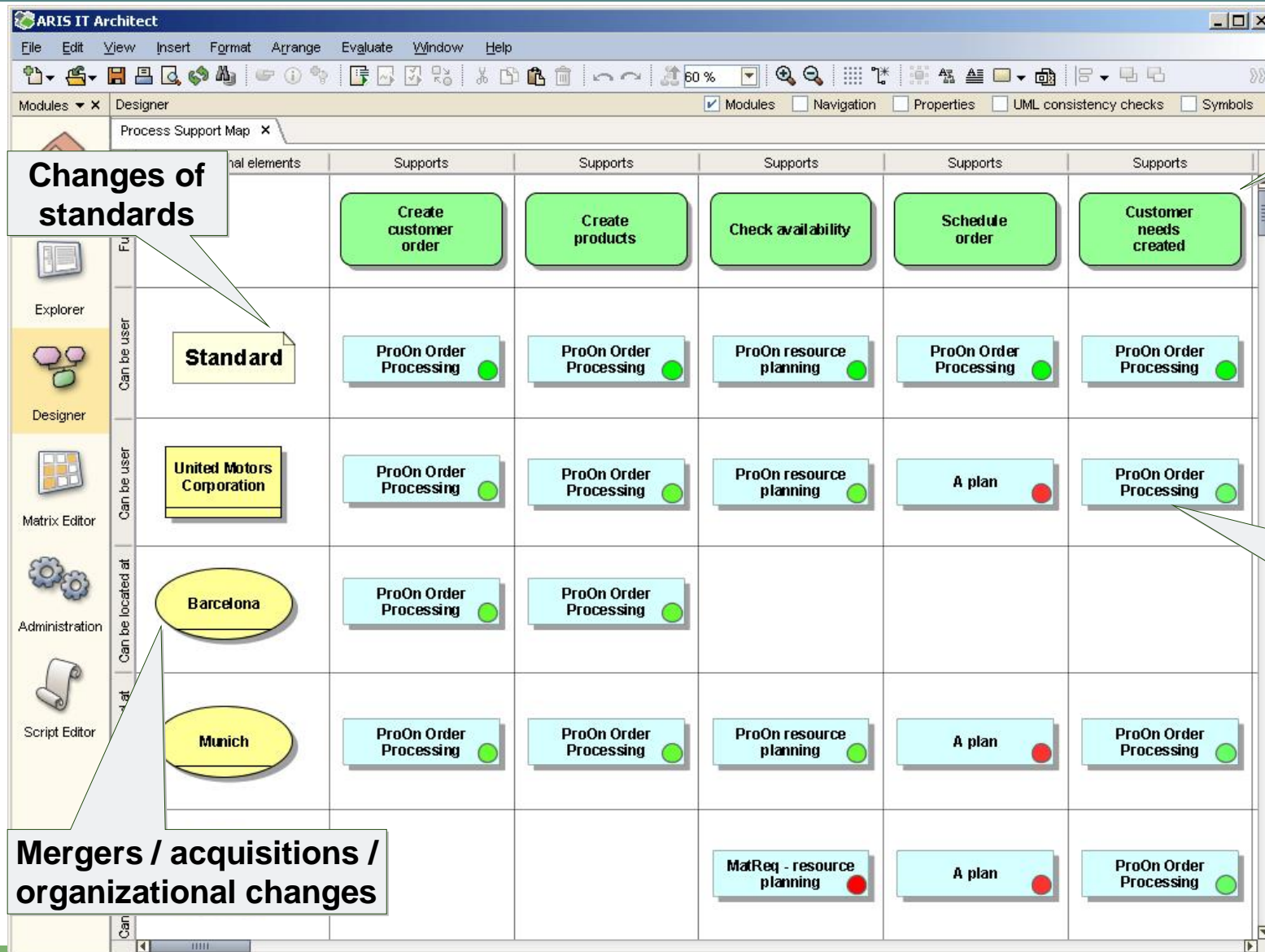
Model Example



Model Example



Model Example



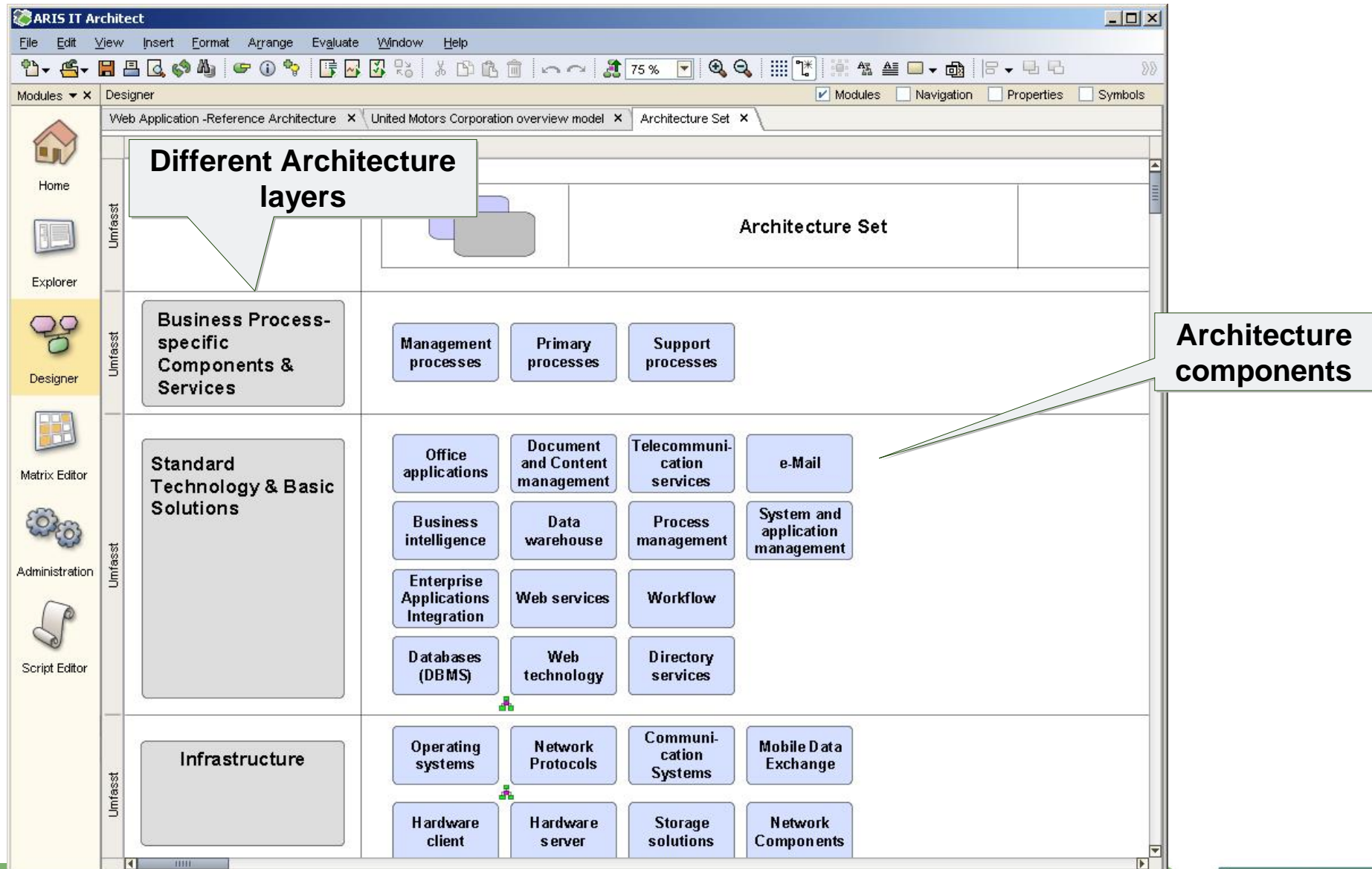
Process changes

Changes of standards

Life cycle of systems (traffic lights)

Mergers / acquisitions / organizational changes

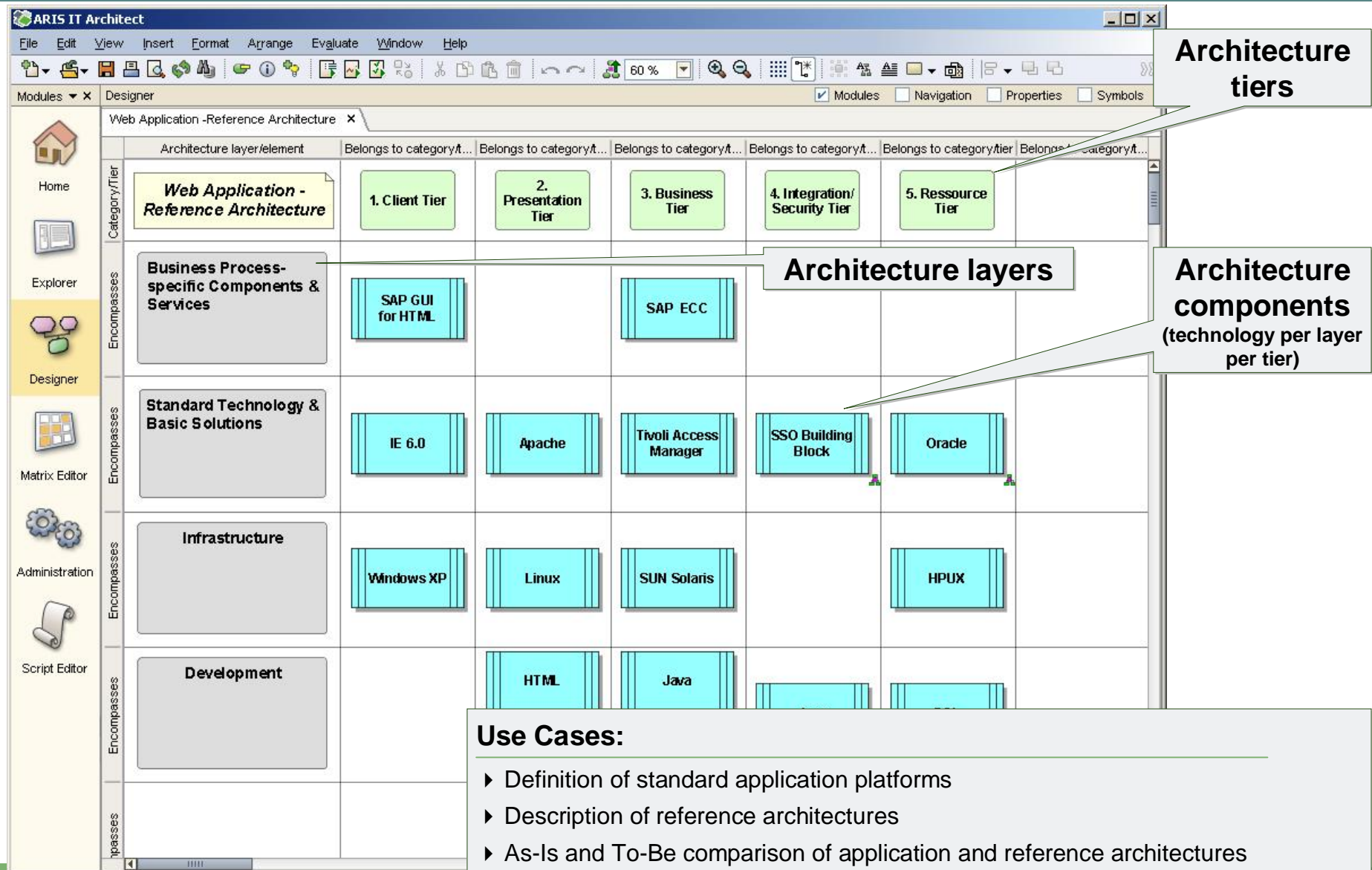
Model Example



Model Example

The screenshot displays the ARIS IT Architect software interface. The main window shows a layered architecture model with several layers. The top layer is labeled 'Architekturschicht'. Below it, there are layers for 'Management processes', 'Primary processes', and 'Support processes'. The next layer contains various business applications such as 'Office applications', 'Document and Content management', 'Telecommunication services', and 'e-Mail'. The layer below that includes 'Business intelligence', 'Data warehouse', 'Process management', and 'System application management'. The layer below that contains 'Enterprise Applications Integration', 'Web services', 'Workflow', and 'Directory services'. The layer below that includes 'Databases (DBMS)', 'Web technology', and 'Directory services'. The layer below that contains 'Operating systems', 'Network Protocols', 'Communication Systems', and 'Mobile Data Exchange'. The bottom layer includes 'Hardware client', 'Hardware server', 'Storage solutions', and 'Network Component'. A red arrow points to the 'Databases (DBMS)' layer in the main model. A callout window is open, showing a detailed view of the 'Databases (DBMS)' layer. This window contains a list of database technologies with their standardization status indicated by colored circles: Oracle (green), Oracle Lite (red), IBM DB2 (green), IBM DL1 (orange), IBM IMS (orange), SAP DB (blue), MS SQL Server (yellow), MS Access (blue), and Flat file (red). A legend at the bottom left of the callout window defines the standardization status: red for 'No standard', yellow for 'Being evaluated', light yellow for 'Being requested', and green for 'Being implemented'. A text box at the bottom of the callout window reads: 'View attributes of the technologies to see & check the standardization status'.

Model Example



Configure Filters and Templates

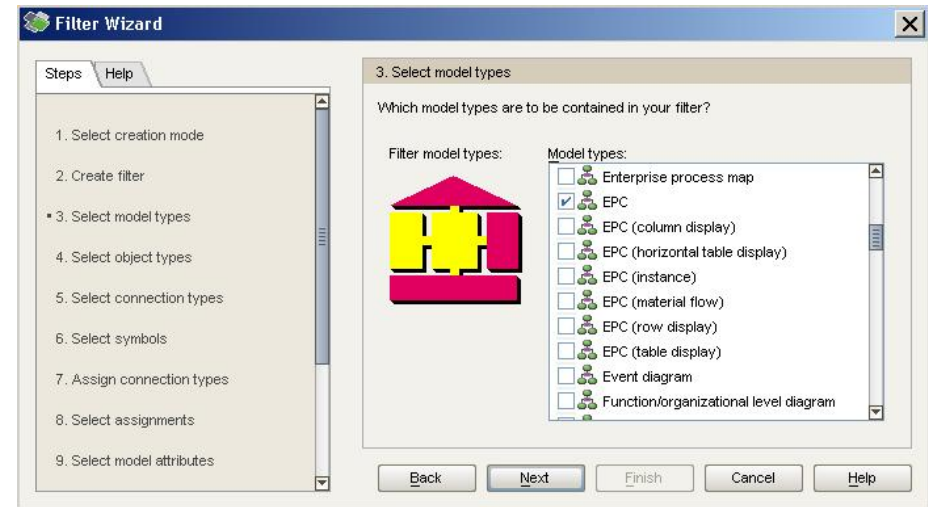
FILTERS

Purpose:

- Restricting the ARIS method to the model constructs relevant for modelling or evaluation
- Hiding model constructs that are not required

Advantage:

- Reduced complexity during modelling
- Focused restriction of the database contents to be evaluated



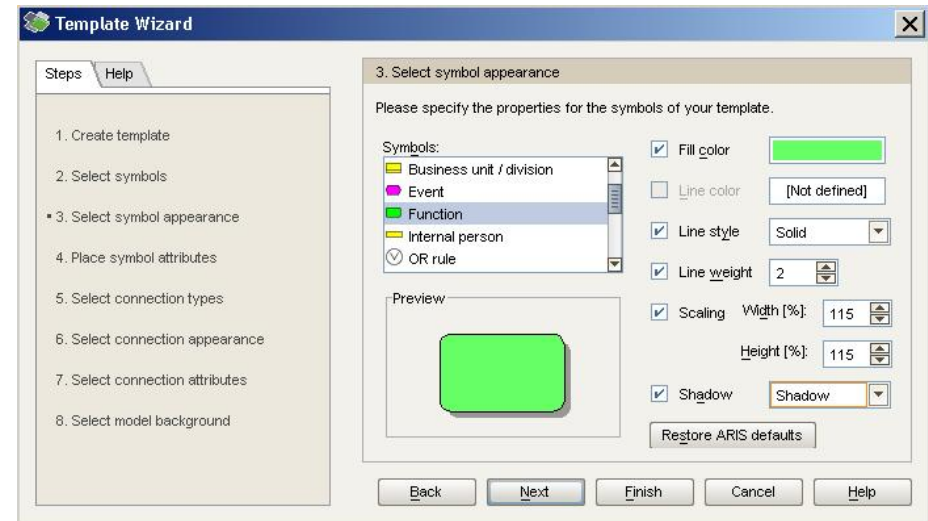
TEMPLATES

Purpose

- Templates can be used to define the appearance of models.

Advantage:

- Uniform appearance of models



Report Example



Lifecycle management



Standardization cycle:

Name	Status	Evaluation (from-until)	Request (until)	Implementation (until)	Standard (until)	Phase-out (until)	Timeline (2001-2009)
A plan		Jun 1, 2005 - Nov 1, 2005	Mar 1, 2006	Aug 8, 2006	Nov 17, 2008	Dec 31, 2008	Timeline: 01.01.2001 to 31.12.2010. A plan bar shows phases: In planning (yellow), In procurement (orange), In development (light green), In testing (green), In operation (red), In shut-down (orange), and Out of operation (red).
MatReq - resource planning		Jul 1, 2001 - Jul 31, 2001	Sep 13, 2001	Dec 13, 2001	Nov 30, 2005	Oct 31, 2006	Timeline: 01.01.2001 to 31.12.2010. MatReq bar shows phases: In planning (yellow), In procurement (orange), In development (light green), In testing (green), In operation (red), In shut-down (orange), and Out of operation (red).
ProOn Order Processing		Jan 1, 2004 - Feb 2, 2004	May 17, 2004	Jun 22, 2004	Jun 2, 2008	Jun 22, 2009	Timeline: 01.01.2001 to 31.12.2010. ProOn bar shows phases: In planning (yellow), In procurement (orange), In development (light green), In testing (green), In operation (red), In shut-down (orange), and Out of operation (red).
ProOn resource planning		Jan 1, 2005 - Feb 2, 2005	Sep 17, 2005	Dec 22, 2005	Jun 2, 2010	Jun 22, 2011	Timeline: 01.01.2001 to 31.12.2010. ProOn bar shows phases: In planning (yellow), In procurement (orange), In development (light green), In testing (green), In operation (red), In shut-down (orange), and Out of operation (red).

Lifecycle

- In planning
- In procurement
- In development
- In testing
- In operation
- In shut-down
- Out of operation

Standardization cycle

- Non-standard
- In evaluation
- Requested for standard
- To be phased in
- Standard
- Standard - limited use
- To be phased out
- Phased out
- Rejected

Lifecycle reports show the standardization cycle of IT systems in the company.

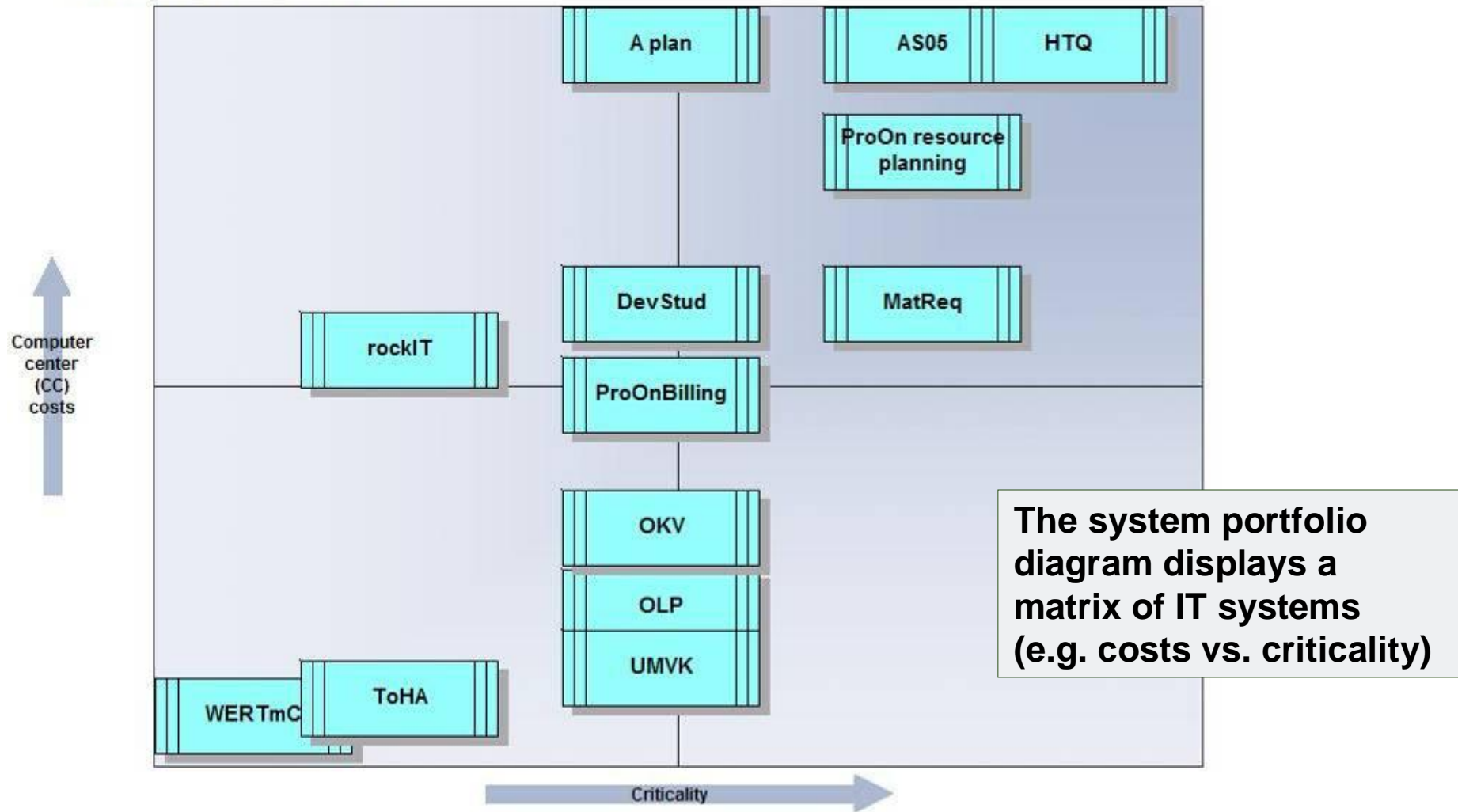
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Lifecycle_management_en.doc





Page 1 of 1

Report Example

System Portfolio Diagram



Report Example

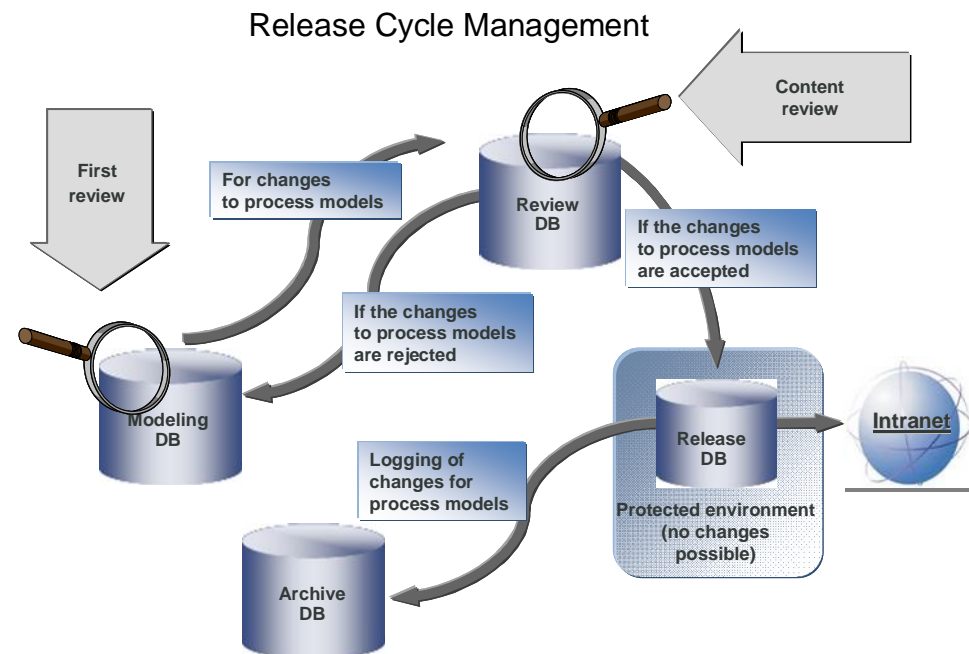
	System description A plan	
A plan		
System description:		
Name:	A plan	
Short description:	Order Processing for CKD shipments	
Description:	This system provides functionalities for order management, prices calculation and product data management.	
Vendor:	Proprietary system	
Internal Users:	500-1000	
External Users:	0	
Importancy:	Very high	
Status of Standardization:		Standard
		
System owner: John Smith; +1 19888 988 688; j.smith@umg_is.com		
Service Level Agreements:		
Max. Downtime per month:	1h	
Availability:	99%	
Warranty/Support until:	31-12-08	
Business Services:		
Order management		
Price calculation		
Product data management		
2006/9/7 17:41:04	C:\Temp\Report26.doc	Seite 1 von 1

The system information report gives a detailed description of the selected IT system:

- Life cycle information
- Usage (processes, services, organizations)
- Ownership, operation, support, etc.
- and many more ...

Support Processes

- Method and filter maintenance
- Repository structure management
- Release cycle management
- Technical quality assurance
- User administration
- Locals and merges
- Repository reorganisations
- Installations and license management
- First line support
- Tool and method training



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Forthcoming Attractions

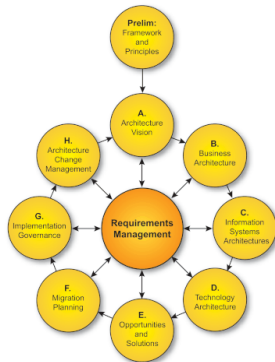
- ARIS Certification
 - TOGAF certification of ARIS Platform
 - Target July 2008
- ARIS for TOGAF Training
 - Combination of tool and method training for implementing ARIS in support of ARIS
 - Target for first course during August 2008



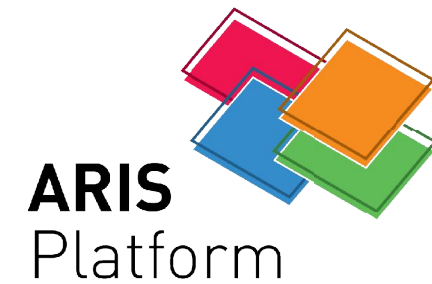
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Closure



THANK YOU



Mike Steyn
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mike.steyn@trivector.co.za