

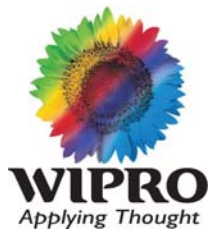


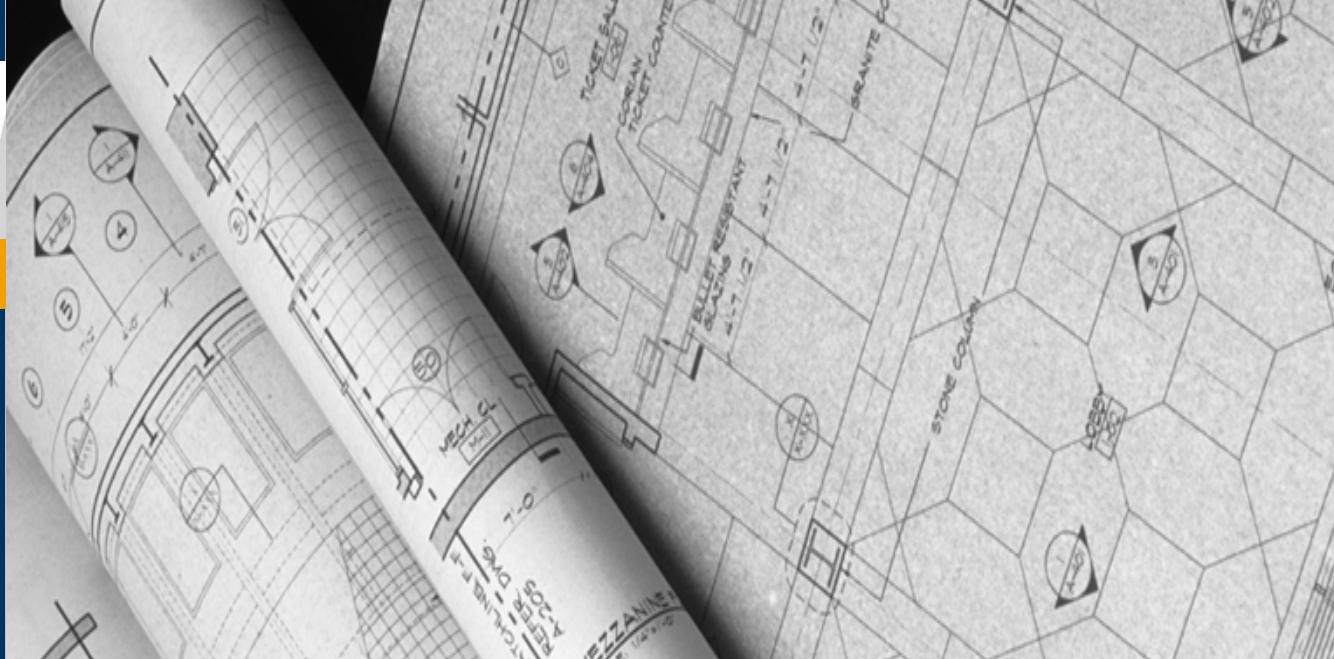
SAP Enterprise Architecture Framework Unveiled: Aligning IT to the Business

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Global Director, Enterprise Architecture & Enterprise SOA Portfolio
SAP Field Services, Global Strategic Initiatives

TechTour '07, Palo Alto, 9th August 2007





Drivers and benefits for Enterprise Architecture

The SAP Enterprise Architecture initiative:
a full package

■ Recognize any of these?

Some IT requests

- **“I wish I could get the business to recognize the need for an Enterprise Architecture”**
 - **“How can I explain the benefits of Enterprise Architecture?”**
- **“How can I get the business owners to listen to me?”**

Some Business requests

- **“Where can I get a big picture of IT?”**
- **“What are the best practices to drive enterprise SOA adoption?”**
 - **“Can you show me the value of EA... and the costs?”**
- **“We want short-term solutions with a demonstrable, early payback. Why do we need the grand vision?”**
 - **“Isn’t SOA the solution?”**

What is Enterprise Architecture?

Enterprise Architecture Definition

The description of the future state of an organization to best support the organization's business strategy

How to get from the current architecture to future desired state

Enterprise Architecture Goal

Bring together Business and IT people in a common understanding of how people, process, data and technology must converge to take the business strategy from vision to reality

Why Enterprise Architecture?

The successful adoption of enterprise SOA requires Enterprise Architecture:

- How do I get there? What are the best practices?
- How do I control and govern in the deployment of an enterprise SOA?
- How can I ensure that IT is aligned to the business?
- How do I integrate solutions across the organisation?

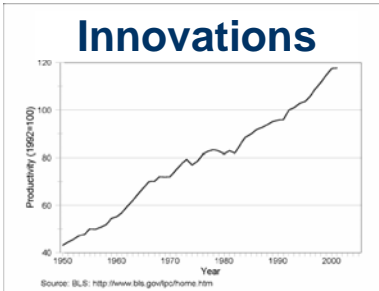
Benefits of Enterprise Architecture to the Business



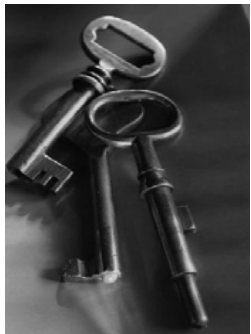
- **Achievement of a company's business strategy or of external drivers**
 - Without a full understanding of business, application and technical architectures, a business doesn't know what it has or doesn't have



- **Business processes and information consistency**
 - EA unlocks the power of information whilst unifying information silos that inhibit business processes
 - Identify processes, applications and data that need to be consistent

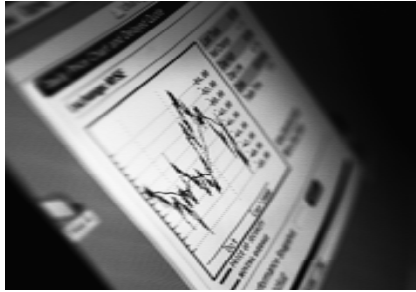


- **Faster time-to-market**
 - If IT can introduce new technologies and functionalities faster, the organization can respond to competitive pressures faster
 - These areas are most likely to be spotted when business and IT staff collaborate closely in the EA process



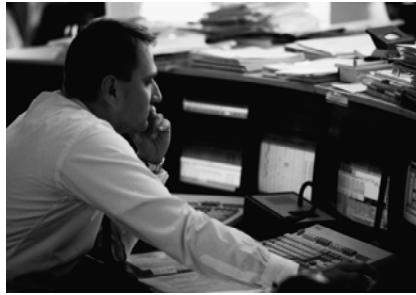
- **More reliability and security, less risk**
 - EA provides clear traceability between business processes, data, user roles, applications and infrastructure

■ Benefits of Enterprise Architecture to IT



■ Lower IT costs

- Faster design and development due to standard designs and components
- IT procurement efficiencies due to economies of scale



■ Better traceability of IT costs

- Greater understanding of the interrelated nature of business, application and infrastructure assets



■ More manageable complexity

- Clear vision of As-Is and To-Be architecture and migration plan
- Comprehensive view of apps, software, infrastructure and their interrelatedness diminishes duplication and overlap



■ Less IT risk

- Developing a managed transformation plan means IT is prepared to deliver new capabilities in a timely manner
- IT effort is aligned with the strategy and expectations set at the right level

The successful delivery of Enterprise SOA needs a guideline and an alignment model to the business

There is a need for a coherent delivery model to ensure the success of Enterprise SOA.

Enterprise SOA enables you to:

- Deploy **new capabilities rapidly**
- Remove the **point-to-point connections** between applications
- Deliver **encapsulated services** providing clearly defined capabilities
- Maximise **reuse** of these services

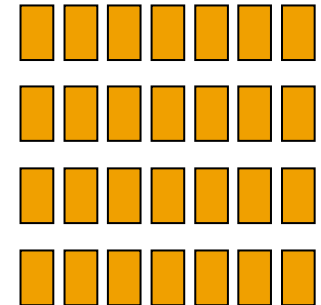
Enterprise SOA needs :

- **Control and governance** in the ES deployment
- **Clear understanding of business requirements and current architecture**
- **Integrated solutions** across the organisation

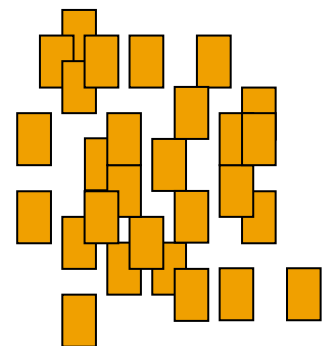
Without these, there are some serious risks:

- **Rapid increase in uncontrolled services that rapidly spin out of control**
- **Duplicated capabilities across services**
- **Gaps, unforeseen errors and data integrity issues**

The Plan



To avoid this



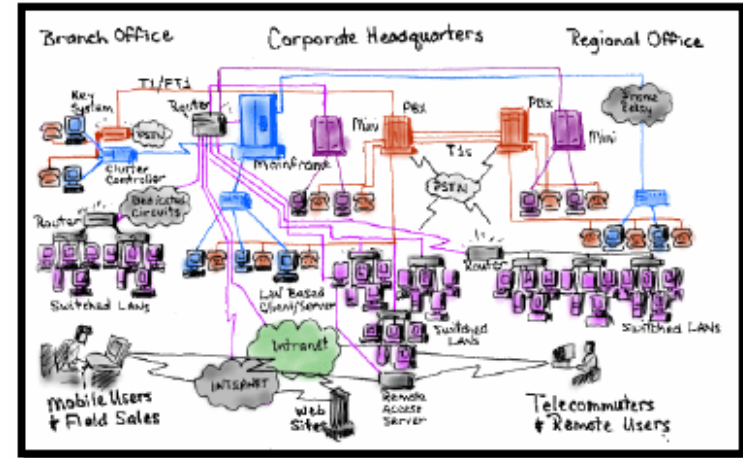
What happens when Architecture doesn't drive decision-making...

Winchester House

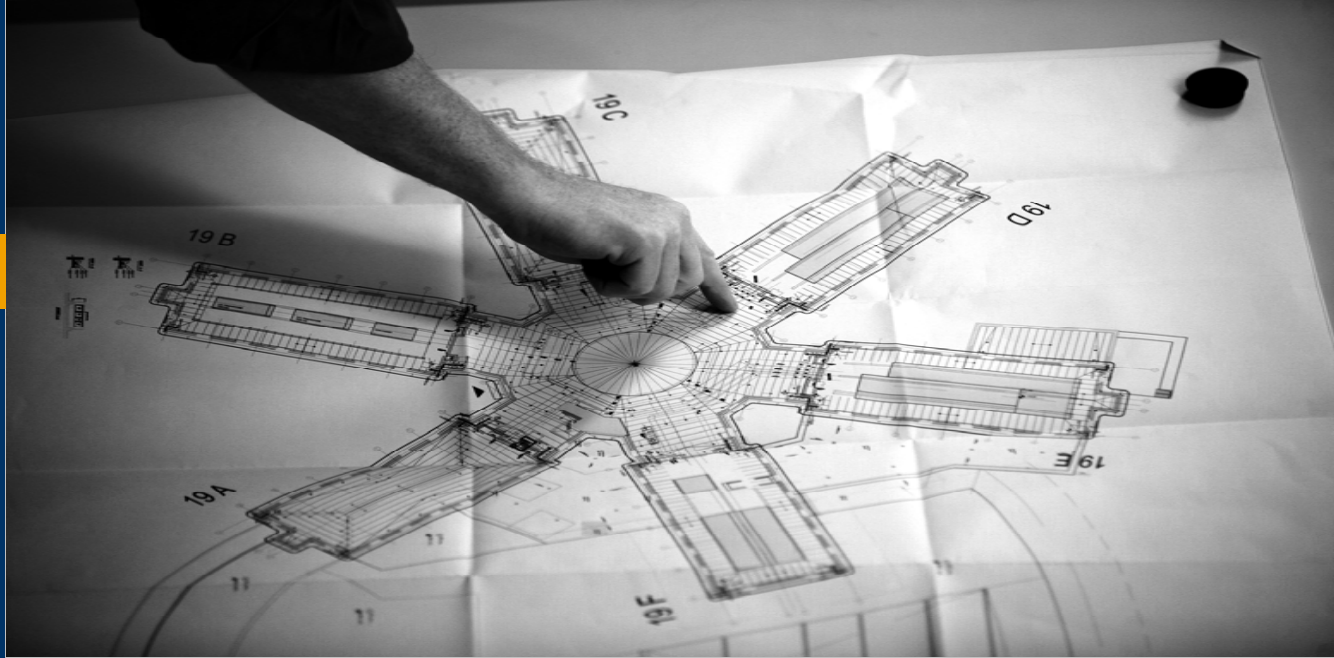


- 38 years of construction
- 160 rooms, 40 bedrooms, 6 kitchens, 2 basements, 950 doors
- 65 doors to blank walls, 13 staircases abandoned, 24 skylights in floors
- 147 builders, 0 architects
- No architectural blueprint

Enterprise Complexity



- Unmanageable project durations
- Inconsistent data across business units
- Sub-utilized applications and investment
- Lack of documented process models
- ...



Drivers and benefits for Enterprise Architecture

The SAP Enterprise Architecture initiative: a full package

A strategic initiative for SAP

SAP

BOARD UPDATE

May/June 2007



CONFIDENTIAL – For internal use only

- **SAP Consulting: SAP Enterprise Architecture Framework for Enterprise SOA**

The framework methodology has been gaining rave reviews from customers, guiding them through their business and IT architectures to ensure smooth transitions to enterprise SOA. The framework not only provides a tool to drive business network transformation with customers, but it also contains a fully packaged toolset that reconciles the views of all stakeholders from a business and IT perspective. To support demand, a global hub of enterprise architects has been created to assist customers, supported by a three-tier certification program and an enterprise architect training curriculum available to partners, customers, and SAP employees.

Enterprise Architecture initiative

NEW
SKILLS & RESOURCES



- Global Hub of Enterprise Architects

NEW
METHODOLOGY



- SAP Enterprise Architecture Framework for Enterprise SOA

NEW
TOOLS & PRODUCTS



- SAP EAF toolset
- Available under Roadmap Composer
- Integrated with SAP tools

NEW
SERVICES



- Enterprise Architecture Services
- Enhanced eSOA Portfolio

NEW
TRAINING



- Dedicated training and certification for Enterprise SOA roles

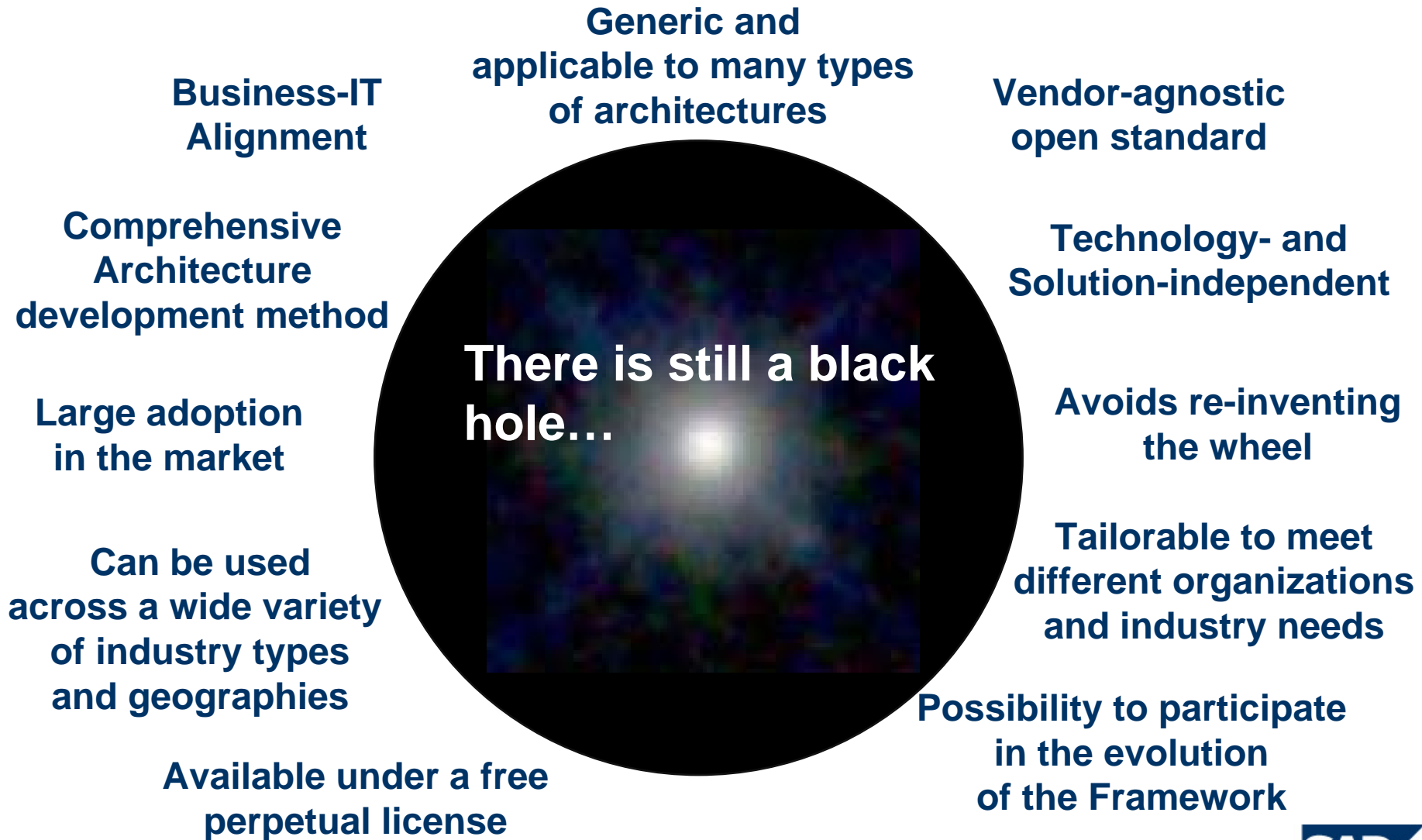
NEW
COMMUNITY



- Global EA Community, including user groups, customers and partners

How can Enterprise Architecture Frameworks help?

Traditional EA Frameworks generate a wealth of benefits for the Enterprise



Two critical features are missing in traditional Enterprise Architecture Frameworks

- Packaged Applications



- Enterprise Service Oriented Architecture



What is missing in the traditional EA Frameworks?

Traditional Enterprise Architecture Frameworks also lack...

A clear definition of process

A clear definition of terms

Accelerated timelines

Practical guidance

Comprehensive Enterprise description

■ **Packaged Applications**



Best Practices

■ **Enterprise Service Oriented Architecture**



An explicit Metamodel

A clear transition between Enterprise Architecture and Solution delivery

Robust and mature reference models

A complete delivery tool

Templates, concrete examples and an applied case study

Fully packaged toolset incl. methodology



THE BEST-RUN BUSINESSES RUN SAP™

The SAP Enterprise Architecture Framework is a methodology and toolset primarily to support the effective adoption of Enterprise SOA.

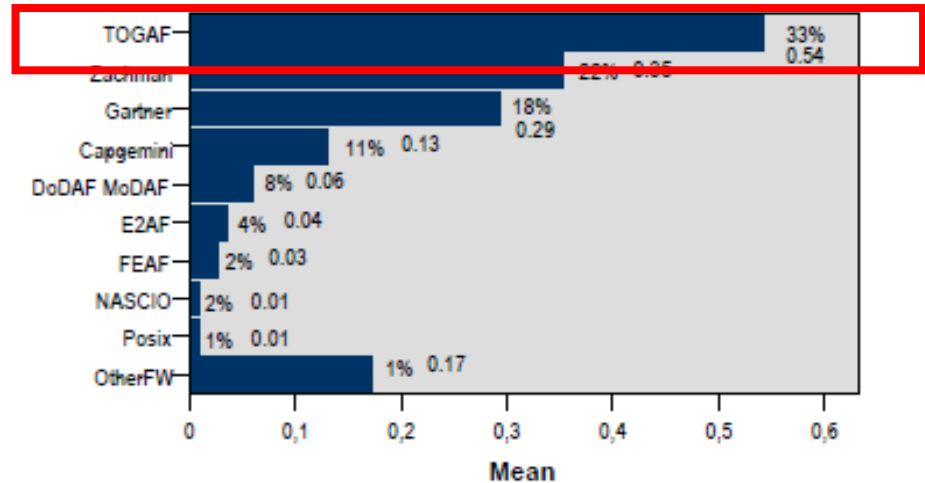
It is based on an extension of The Open Group Architecture Framework specifically designed for packaged solutions and enterprise SOA.



Why TOGAF?

- **The Open Group Architecture Framework**
- **A reliable, proven method for developing an Enterprise the Open Group**
- **An open standard**
- **Vendor neutral**
- **TOGAF considered to be the most relevant Framework (54 % of ASUG members and 2006 TechEd attendees)**
- **Freely licensed**
- **Intended to be tailored**
- **<http://www.opengroup.org>**

Question III.3: What are relevant frameworks for your sector?



Graph 11: Importance of enterprise architecture frameworks (108 responses)

Results from 2006 survey of TechEd attendees and online ASUG survey

Customer quotes regarding the SAP EAF

“I am really impressed by the work your team has done. This is something SAP-shops like us needed. Our Enterprise Architecture and CIO Board have just decided to adopt SAP-EAF.”

Lead Enterprise Architect, Fortune 100 Healthcare and Technology Company

“We are really excited about what you and your team are doing. As we talked about, we are looking at a couple of initiatives to bring in the SAP EA framework to review and align with.”

Enterprise Architect, Fortune 100 Consumer Products Company

“I am very interested in leveraging the SAP EA framework offering. I would like to promote the SAP EAF internally within my organization and with the EA research group from Ohio State University.”

Chief Enterprise Architect, Fortune 500 Manufacturing Company

“SAP EAF is the best framework I have seen, and I have seen them all.”

Chief Enterprise Architect (SAP and non-SAP), Top 3 Automotive Company

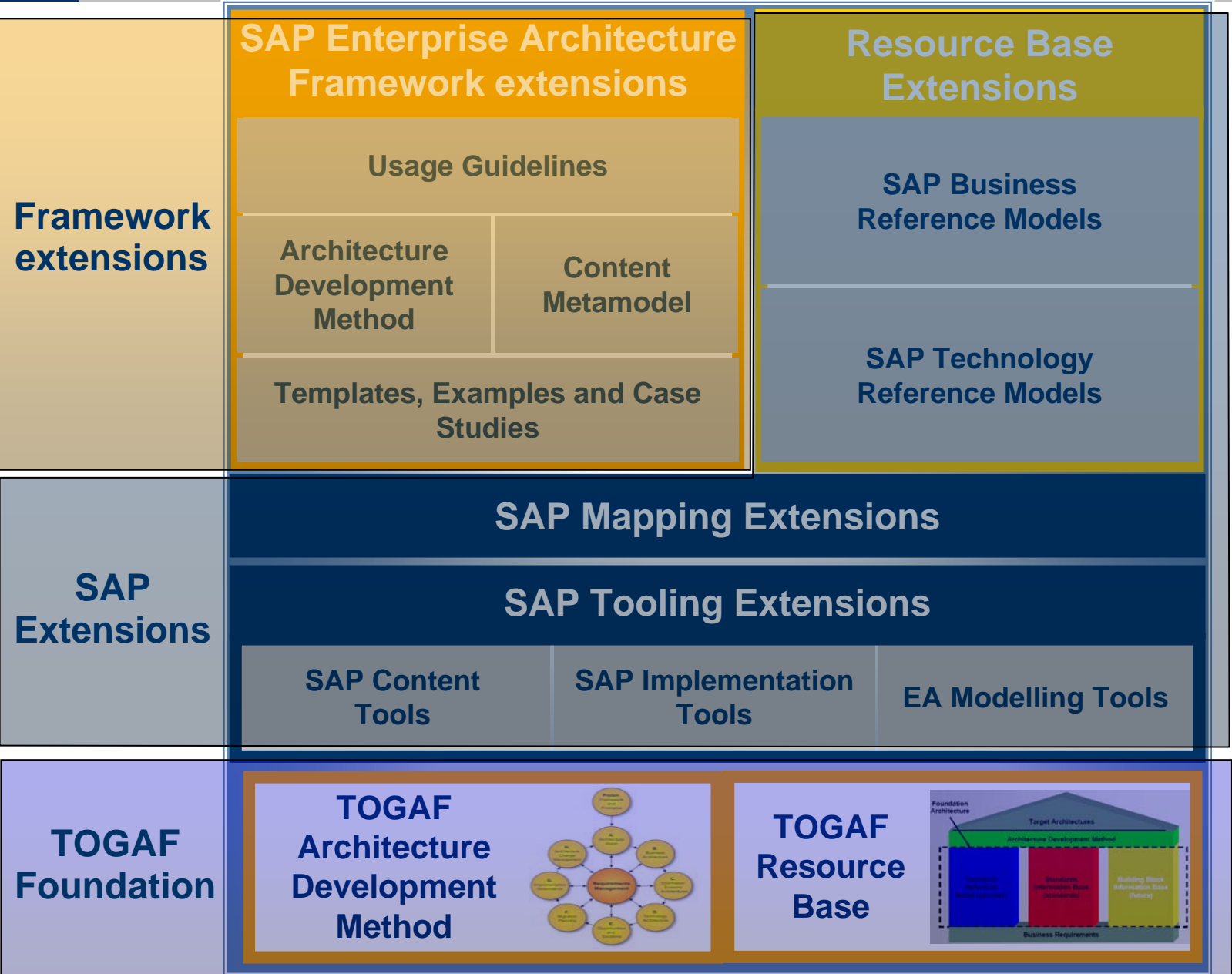
“This will be very valuable to us as we are, like many, an SAP shop focused on using [a generic framework which needed an Enterprise SOA approach].”

Group ERP Architect, Top 3 Oil & Gas Company

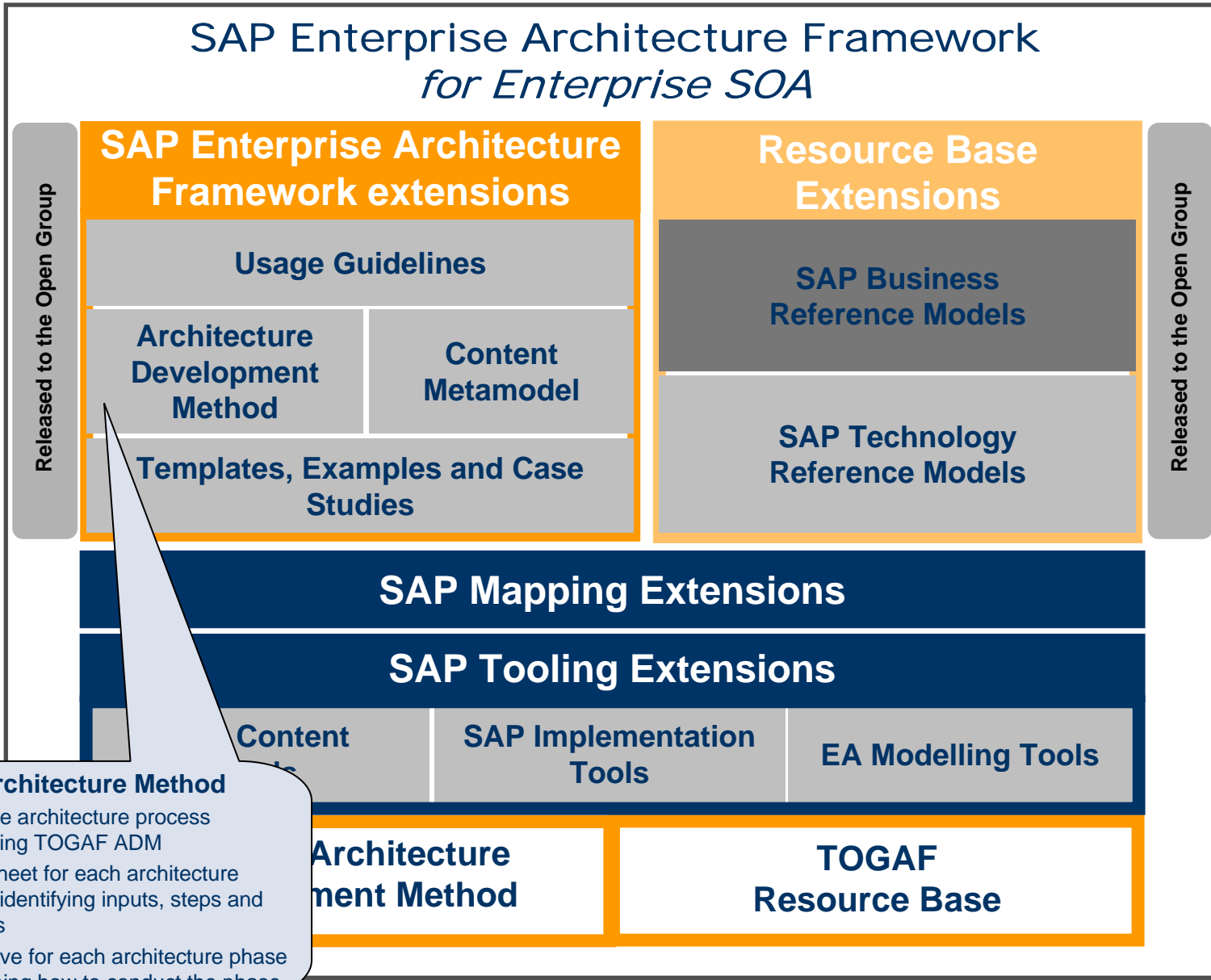
"I am very optimistic about the applicability of many of the already-delivered objects in the SAP EA framework. "

Architecture Manager, World-leading composite manufacturer

SAP Enterprise Architecture Framework: Overview

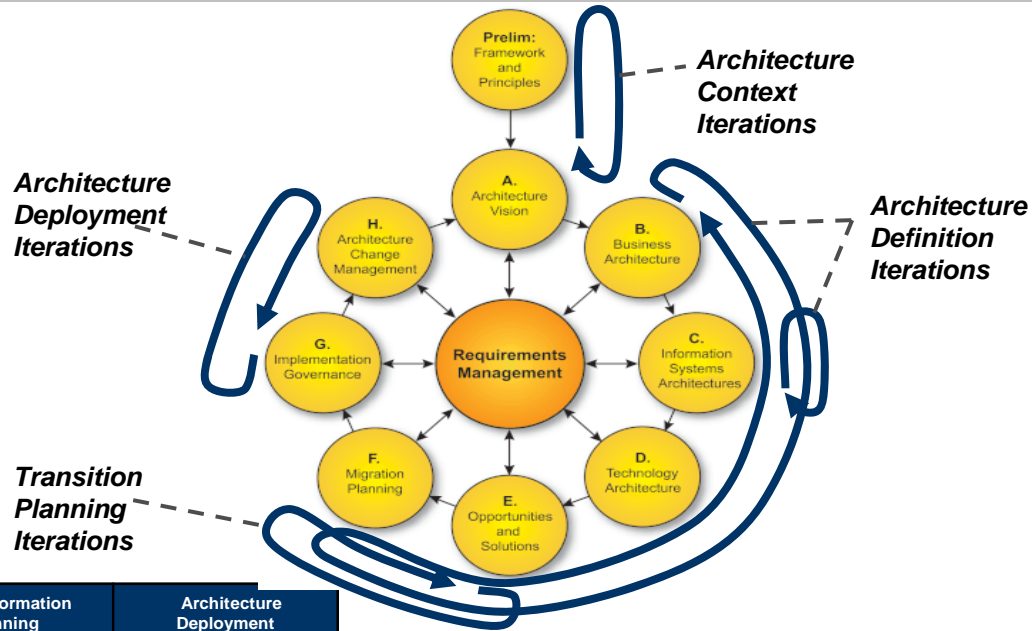


The Key Differentiators



The SAP EAF Agile Iterative Process

- Can be tuned for different engagement models instead of a “one size fits all” waterfall approach
- Defined Iterations more suited to Package and SOA-based scenarios

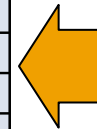


Transition Planning Iterations

Architecture Deployment Iterations

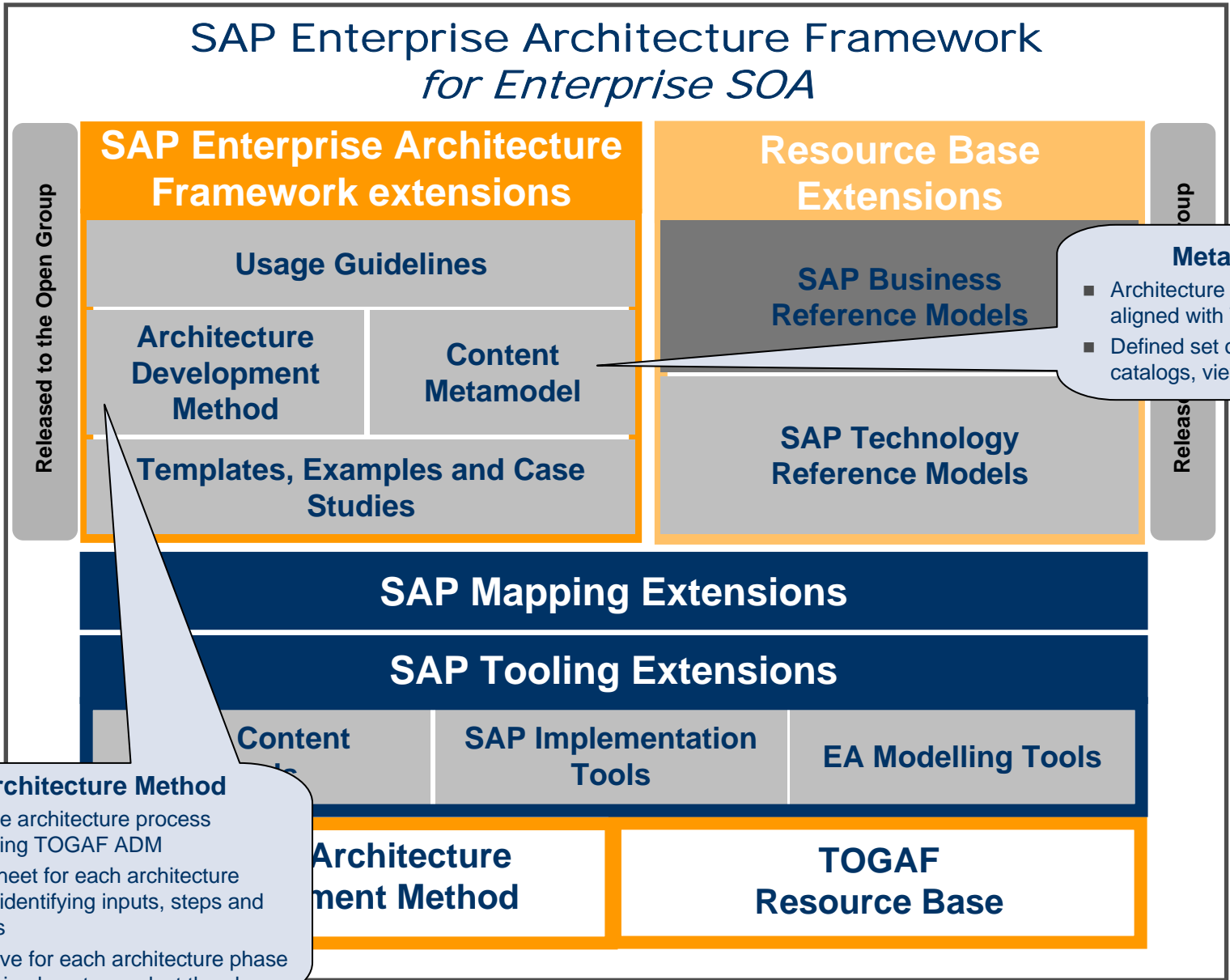
Architecture Definition Iterations

SAP EAF Phase		Architecture Context	Architecture Definition			Transformation Planning		Architecture Deployment	
		Initial Iteration	Iteration 1	Iteration 2	Iteration n	Iteration n 1	Iteration n n	Iteration n 1	Iteration n n
Prelim		Core	Informal	Informal	Informal				Light
Vision		Core	Informal	Informal	Informal	Informal	Informal		Light
Business Architecture	As-Is	Informal	Core	Light	Core	Informal	Informal		Light
	To-Be	Informal	Informal	Core	Core	Informal	Informal		Light
Application Architecture	As-Is	Informal	Core	Light	Core	Informal	Informal		Light
	To-Be	Informal	Informal	Core	Core	Informal	Informal		Light
Data Architecture	As-Is	Informal	Core	Light	Core	Informal	Informal		Light
	To-Be	Informal	Informal	Core	Core	Informal	Informal		Light
Technology Architecture	As-Is	Informal	Core	Light	Core	Informal	Informal		Light
	To-Be	Informal	Informal	Core	Core	Informal	Informal		Light
Opportunities and Solutions		Informal	Light	Light	Light	Core	Core	Informal	Informal
Migration Planning		Informal	Light	Light	Light	Core	Core	Informal	Informal
Implementation Governance						Informal	Informal	Core	Core
Change Management			Informal	Informal	Informal	Informal	Informal	Core	Core



SAP EAF provides a set of pre-defined patterns depending on the Architecture development style

The Key Differentiators



Metamodel

- Architecture metamodel, aligned with TOGAF terms
- Defined set of architecture catalogs, views and matrices

Architecture Method

- Iterative architecture process extending TOGAF ADM
- Worksheet for each architecture phase identifying inputs, steps and outputs
- Narrative for each architecture phase explaining how to conduct the phase

The SAP EAF Holistic Metamodel

- Formalizes the definition of your enterprise Architecture

- Aids communication and understanding
- We know what we need when

- Formalizes the relationships between objects

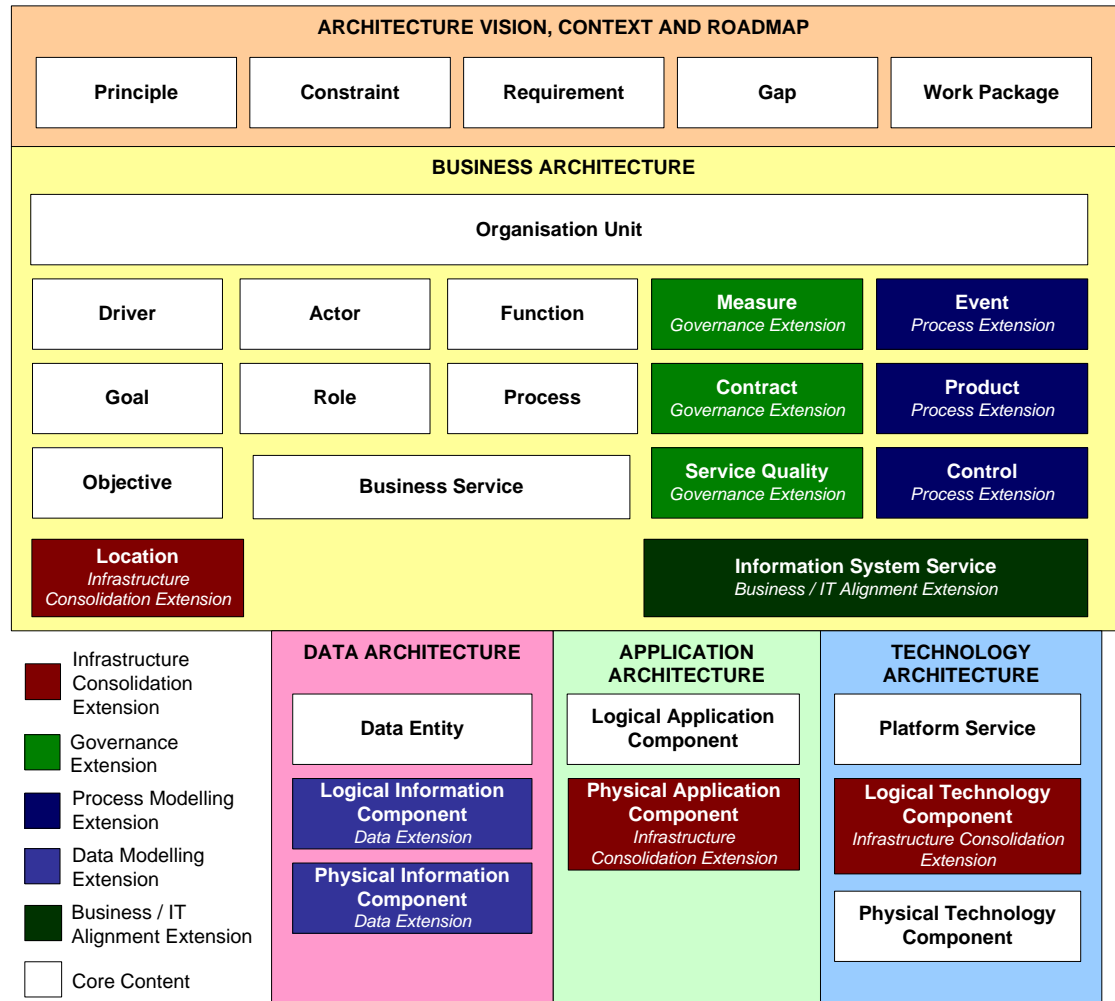
- Clearer Business-IT traceability and alignment

- Enables SAP Specific Mapping

- Allows the use of SAP Reference Models

- Enables EA Tool Mapping

- Allows a 'quick start' for an EA Tool implementation



Example of a Governance Metamodel extension: Service Contract

■ General

- ◆ Reference
- ◆ Name
- ◆ Description
- ◆ Source
- ◆ Owner
- ◆ Type
- ◆ Version

■ Technical

- ◆ Invocation
- ◆ Invocation Preconditions
- ◆ Master Data Impacted
- ◆ Behaviour Characteristics
- ◆ Post Condition

■ Business

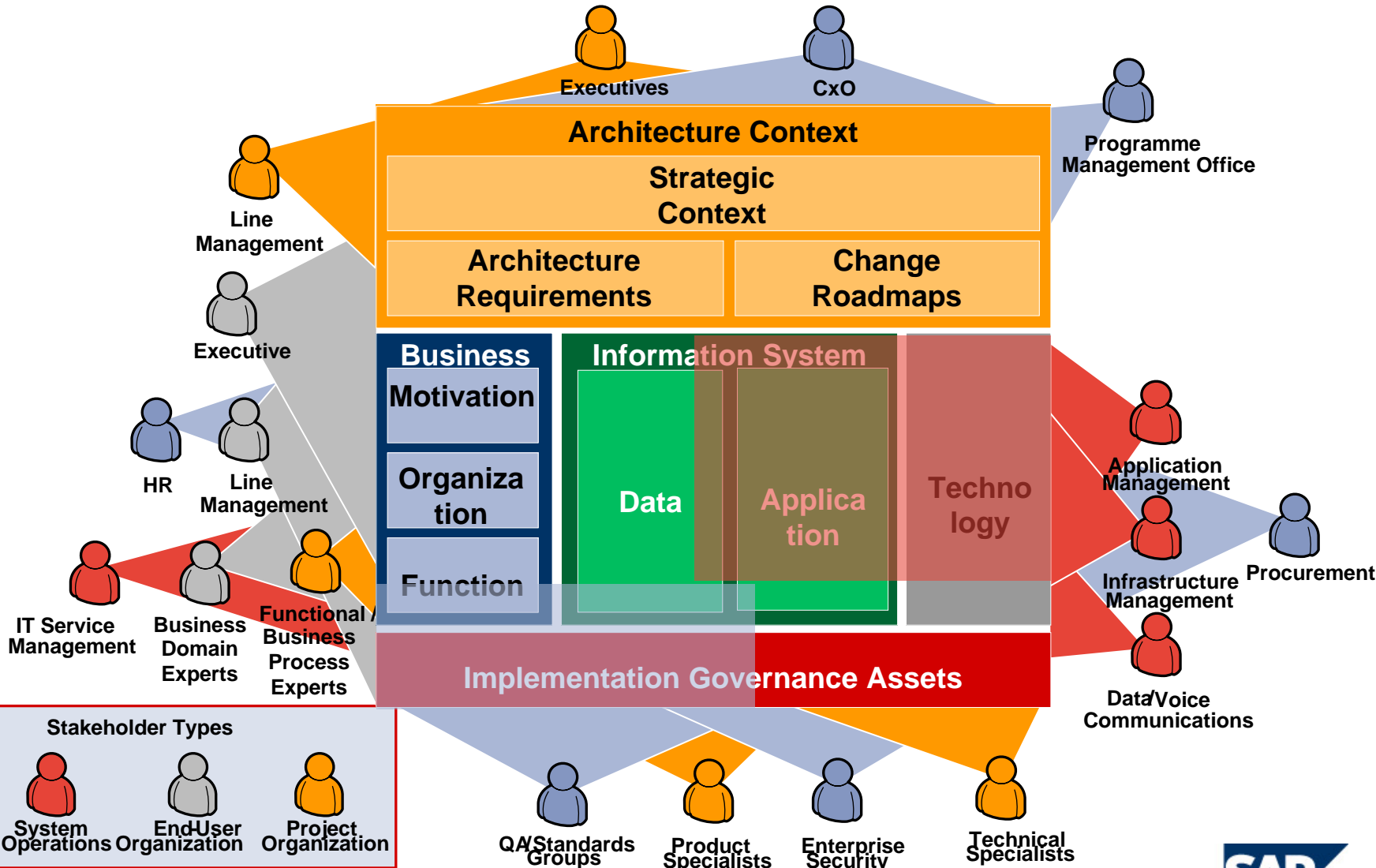
- ◆ RACI
- ◆ Service name 'caller'
- ◆ Service name 'called'
- ◆ Business Objects (CRUD)
- ◆ Functional Requirements
- ◆ Importance to the process.
- ◆ Quality of information required
- ◆ Contract control requirements
- ◆ Result control requirements
- ◆ Quality of Service
- ◆ Service Level Agreement

■ Non-Functional Requirements

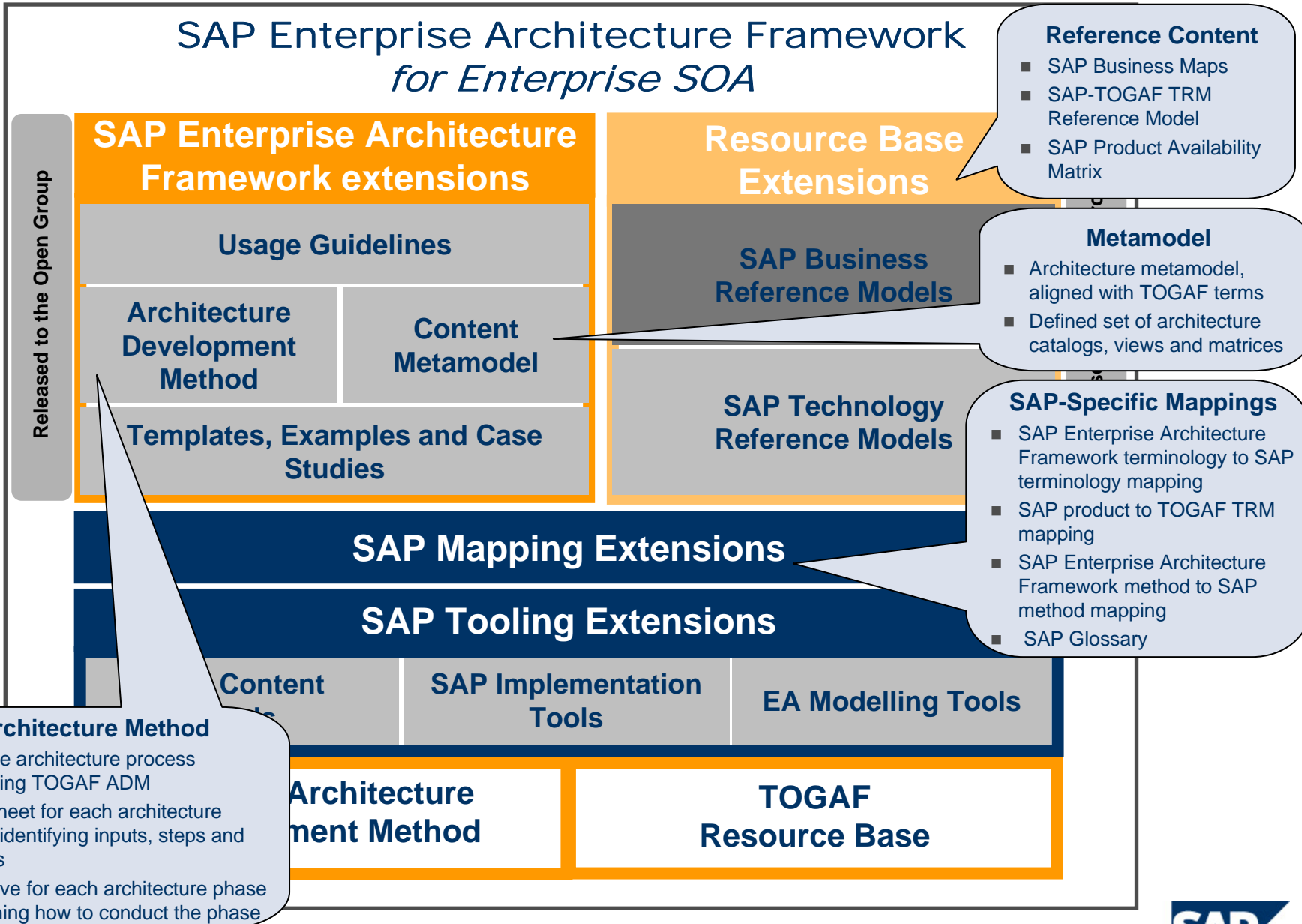
- ◆ Throughput
- ◆ Throughput period
- ◆ Growth
- ◆ Growth period
- ◆ Service times
- ◆ Peak profile short term
- ◆ Peak profile long term
- ◆ Security requirements
- ◆ Response requirements

How SAP EAF addresses Stakeholders

An EA Stakeholder Map determines the views that are relevant for each stakeholders' groups.



The Key Differentiators



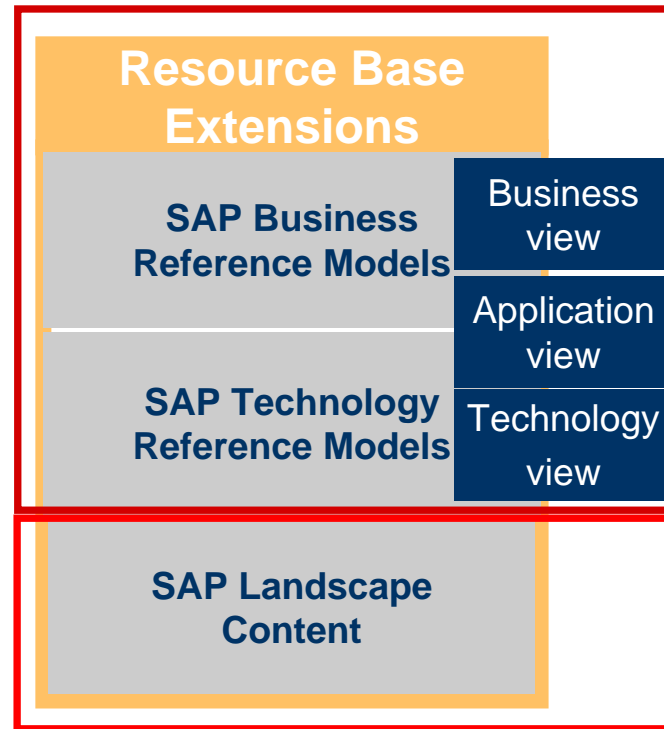
Benefits of SAP Specific Mappings

SAP Reference Model content

- Reusable models and patterns
- Use directly or as template

SAP Landscape content

- Accurate view of the AS-IS situation
- What is running?
- What is installable?
- What is buyable?



Solution Composer
(Solution Maps)

Product Availability
Matrix (PAM)

Enterprise Service
Repository (ESR)

Scenario & Process
Component List

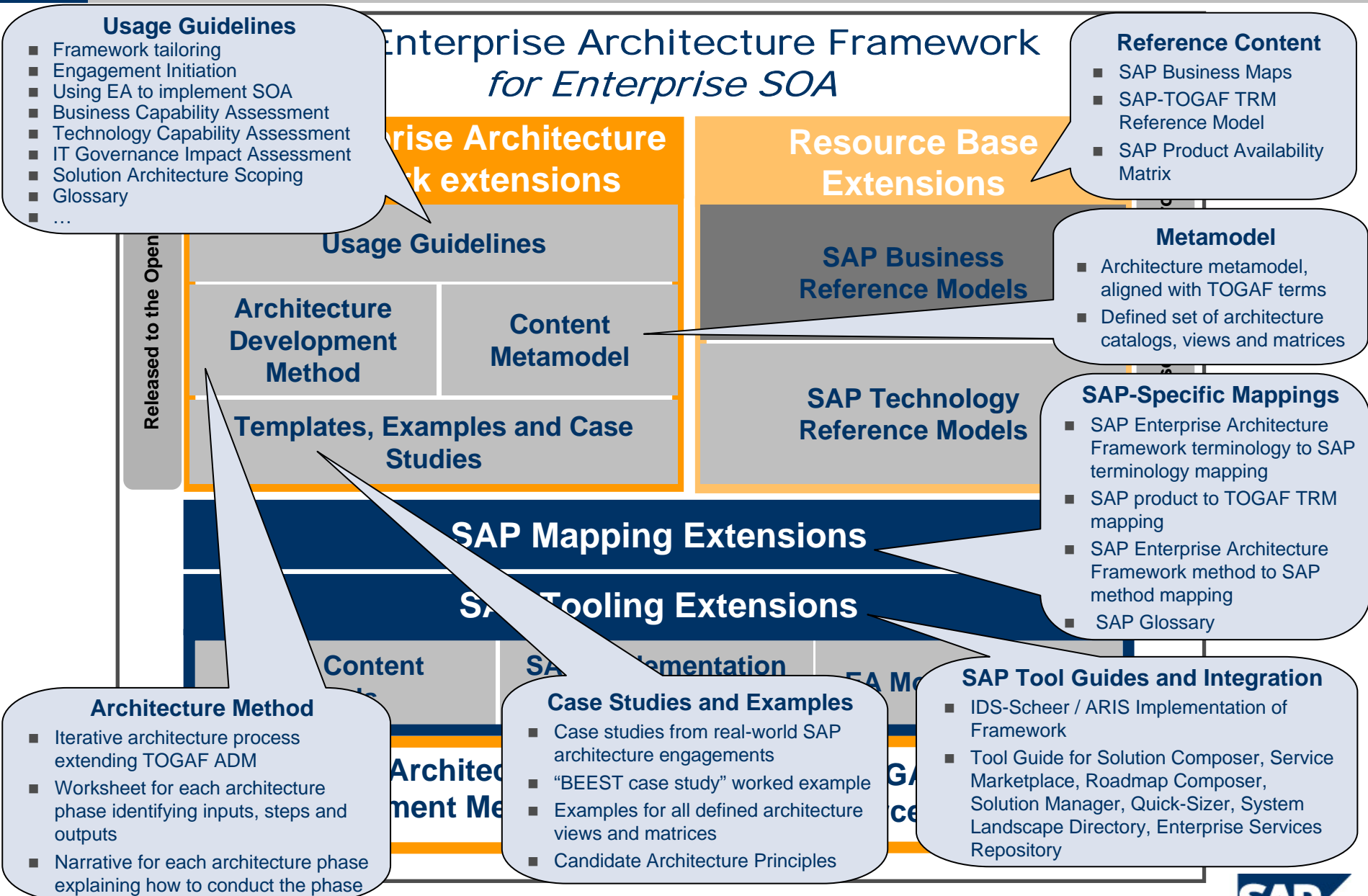
System Landscape
Directory (SLD)

Solution Manager

- Accelerate Enterprise Architecture development
- Use SAP's Product Architecture standards
- Achieve a consistent taxonomy
- Promote Standardization and Re-use

Create consistent, quality
architectures quicker

The Key Differentiators



Usage Guidelines

- Framework tailoring
- Engagement Initiation
- Using EA to implement SOA
- Business Capability Assessment
- Technology Capability Assessment
- IT Governance Impact Assessment
- Solution Architecture Scoping
- Glossary
- ...

Reference Content

- SAP Business Maps
- SAP-TOGAF TRM Reference Model
- SAP Product Availability Matrix

Metamodel

- Architecture metamodel, aligned with TOGAF terms
- Defined set of architecture catalogs, views and matrices

SAP-Specific Mappings

- SAP Enterprise Architecture Framework terminology to SAP terminology mapping
- SAP product to TOGAF TRM mapping
- SAP Enterprise Architecture Framework method to SAP method mapping
- SAP Glossary

SAP Tool Guides and Integration

- IDS-Scheer / ARIS Implementation of Framework
- Tool Guide for Solution Composer, Service Marketplace, Roadmap Composer, Solution Manager, Quick-Sizer, System Landscape Directory, Enterprise Services Repository

Case Studies and Examples

- Case studies from real-world SAP architecture engagements
- "BEEST case study" worked example
- Examples for all defined architecture views and matrices
- Candidate Architecture Principles

Architecture Method

- Iterative architecture process extending TOGAF ADM
- Worksheet for each architecture phase identifying inputs, steps and outputs
- Narrative for each architecture phase explaining how to conduct the phase

EAF Case Study and Reference Implementation in ARIS IT Architect

- Easier maintenance of architecture as the business and IT landscape changes
- More effective knowledge sharing across the whole organization
- Provides stakeholders with models most relevant to their role
- More effective governance
- Promotes re-use of models
- Promotes more consistent quality as the models are integrated
- Provides one source of the truth properly managed
-not unmaintained, unconnected Visio and Excel files !

ARIS IT Architect

Organizational Architectures

- BEEST Catalog
 - BEEST Dealer Systems Architecture
 - Dealer Systems 2007 Baseline
 - _Context
 - Business
 - Name: _Context
 - Matrices
 - Views
 - Business Footprint
 - Functional Decomposition
 - Goals / Objective / Service Model
 - Organization/Actor/Location
 - Organization Chart
 - Process Flow
 - Service Information
 - BEEST L0 abc [Function tree]
 - BEEST L0 - Functional Decomposition do not use [Fu]
 - BEEST Value Chain [Value-added chain diagram]
 - Events View [EPC]
 - Function - Application S&M [Program flow chart]
 - Function - Application SCOP [Program flow chart]
 - Goals-Objective [Objective diagram]

Home

Explorer

Designer

Matrix Editor

Administration

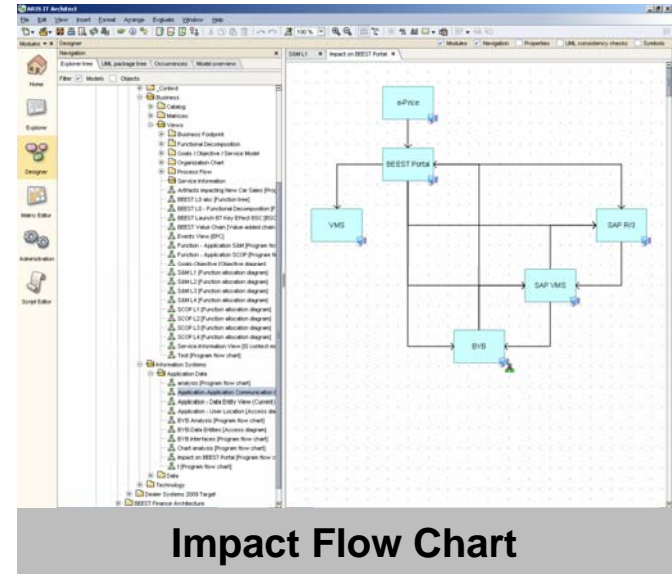
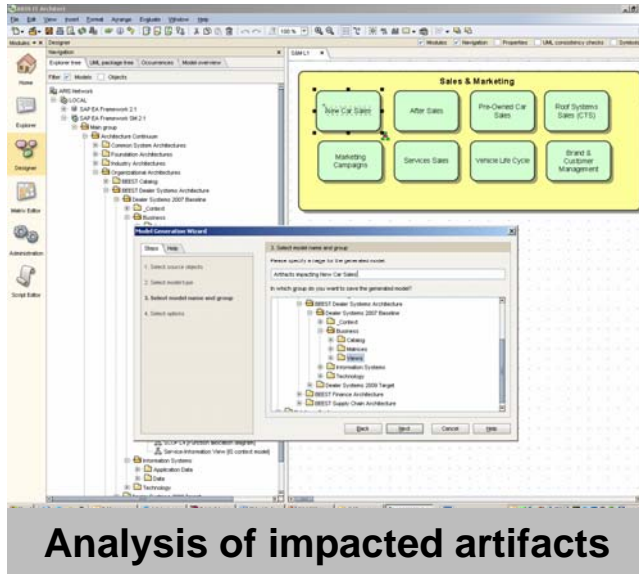
Script Editor

UML consistency checks

| Origin | Element type | Participating element | Element type | Note |
|--------|--------------|-----------------------|--------------|------|
| | | | | |

Enable consistency checks

Analysis of the Resource Base



This screenshot shows a search query in SAP Business Architect. The query is 'SAP Equations used by a function (P-IMP)'. The results are displayed in a table below.

| Name | Type | Group |
|---------|-------------------------|---|
| EVIS | Application system type | Other group/architecture Continuous/Organic |
| CMC | Application system type | Other group/architecture Continuous/Organic |
| mySAP | Application system type | Other group/architecture Continuous/Organic |
| mySAP | Application system type | Other group/architecture Continuous/Organic |
| Car RIS | Application system type | Other group/architecture Continuous/Organic |
| VMG | Application system type | Other group/architecture Continuous/Organic |

Systems impacted by a Function

SAP EAF content populated within Roadmap Composer

The screenshot shows the SAP Roadmap Composer application. The left-hand pane displays a tree view of roadmaps, with the 'My Roadmaps' section expanded to show the 'SAP Enterprise Architecture Framework' (EAF) content, which is highlighted with a red box. An upward-pointing arrow is positioned below this box, pointing towards the text 'TOGAF ADM Phases'. The main pane displays 'Standard SAP Roadmaps' with a list of 17 roadmaps and their corresponding icons (numbered 1-5). The right-hand pane contains text explaining that these roadmaps are available for viewing and can be used to compose a customer project specific structure. The bottom of the interface shows a table with columns for Title, File, Document Type, and SAP.

Standard SAP Roadmaps

SAP provides some standard roadmaps for projects across the Customer Engagement Lifecycle. These roadmaps are either activity based, or more recently produced, deliverable based. It will be possible to update these roadmaps with the latest content when connected to the SAP network.

These standard SAP roadmaps are available to view but can also be used to compose a customer project specific structure using the My Roadmaps structure.

It is possible to load the following Standard SAP Roadmaps into the Roadmap Composer:

1. Customer Solution Strategy
2. SAP Field Services Project Management Methodology
3. ASAP Implementation Roadmap (v3.5 May 2006)
4. Global Template
5. Upgrade Roadmap (v3.1)
6. Global ASAP Template (v3.5 Oct 2006)
7. Global ASAP Rollout (v3.5 Oct 2006)
8. ASAP Focus - Evaluation
9. ASAP Focus - Implementation
10. ASAP Focus - Evaluation - Español
11. ASAP Focus - Implementation - Español
12. ASAP Focus - Evaluation - Portuguese
13. ASAP Focus - Implementation - Portuguese
14. Solution Management
15. CBI (Continuous Business Improvements)
16. ESA Composer-INTERNAL
17. Project Management Review

Accelerators | Roles | Subject Areas | References | Predecessors

| Title | File | Document Type | SAP |
|-------|------|---------------|-----|
| | | | |

Filter: Flavor | Role | Subject Area | Scope | KC

↑
TOGAF ADM Phases

A vertical navigation menu on the right side of the slide, listing various SAP content categories. The 'NEW TOOLS & PRODUCTS' category is highlighted with a yellow oval. The categories listed are:

- NEW SKILLS & RESOURCES
- NEW METHODOLOGY
- NEW TOOLS & PRODUCTS**
- NEW PROCESSES
- NEW SERVICES
- NEW TRAINING



SAP EAF content populated within Roadmap Composer

The screenshot displays the SAP Roadmap Composer interface. On the left, a tree view shows the project structure under 'SAP Enterprise Architecture Framework', including sections like '1 Preliminary', '2 Architecture Vision', '3 Business Architecture', '4 Information System Architecture', '5 Technology Architecture', '6 Opportunities and Solutions', '7 Migration Planning', '8 Implementation Governance', and '9 Architecture Change Management'. The main window shows a detailed diagram of the 'SAP Enterprise Architecture Framework for Enterprise SOA'. This diagram is organized into several layers: 'SAP Enterprise Architecture Framework extensions' (containing Usage Guidelines, Architecture Development Method, Content Metamodel, and Templates, Examples and Case Studies), 'Resource Base Extensions' (containing SAP Business Reference Models and SAP Technology Reference Models), 'SAP Mapping Extensions', 'SAP Tooling Extensions' (containing SAP Content Tools, SAP Implementation Tools, and EA Modelling Tools), and 'TOGAF Architecture Development Method' and 'TOGAF Resource Base'. Vertical labels 'Released to the Open Group' are on the sides. At the bottom, a table lists accelerators:

| Title | File | Document Type | SAP |
|-------------------------------------|---------------------------------|----------------------|--------------------------|
| SAP EA Framework MetaModel Overview | C:\Documents and Settings\N0... | Methodology Descr... | <input type="checkbox"/> |
| TOGAF 8.1 Reference Manual | http://www.opengroup.org/ar... | Methodology Descr... | <input type="checkbox"/> |

Accelerators added

- Overview Manual
- MetaModel
- Useful URL links



SAP EAF content populated within Roadmap Composer

The screenshot shows the SAP Roadmap Composer interface. On the left, a tree view displays various roadmaps, with the 'SAP Enterprise Architecture Framework' selected and highlighted in red. This framework is broken down into TOGAF ADM steps, numbered 1 through 9. An arrow points from the text 'TOGAF ADM Steps' to this tree view.

The main pane displays the 'SAP Enterprise Architecture Framework for Enterprise SOA' diagram. This diagram is structured as follows:

- SAP Enterprise Architecture Framework extensions** (left side, yellow box):
 - Usage Guidelines
 - Architecture Development Method
 - Templates, Examples and Case Studies
- Resource Base Extensions** (right side, yellow box):
 - SAP Business Reference Models
 - SAP Technology Reference Models
- SAP Mapping Extensions** (dark blue box)
- SAP Tooling Extensions** (dark blue box):
 - SAP Content Tools
 - SAP Implementation Tools
 - EA Modelling Tools
- TOGAF Architecture Development Method** (bottom left, yellow box)
- TOGAF Resource Base** (bottom right, yellow box)

Vertical labels 'Released to the Open Group' are positioned on both sides of the top two yellow boxes. At the bottom of the interface, a table lists accelerators:

| Accelerators | Roles | Subject Areas | References | Predecessors |
|-------------------------------------|---------------------------------|----------------------|------------|--------------|
| Title | File | Document Type | SAP | |
| SAP EA Framework MetaModel Overview | C:\Documents and Settings\N0... | Methodology Descr... | | |
| TOGAF 8.1 Reference Manual | http://www.opengroup.org/ar... | Methodology Descr... | | |

**TOGAF ADM
Steps**



SAP EAF content populated within Roadmap Composer

The screenshot displays the SAP Roadmap Composer interface. On the left, a tree view shows the project structure under 'SAP Enterprise Architecture Framework'. The '3 Business Architecture' folder is selected, and its contents are displayed in the main pane. The main pane shows a detailed description of the Business Architecture phase, including its objectives, approach, and accelerators. A red box highlights the main content area, and another red box highlights the 'Accelerators' table at the bottom.

3 Business Architecture

The SAP Enterprise Architecture Framework is an extension of the TOGAF Enterprise Architecture Framework specifically designed to support the effective adoption of packaged solutions in the Service-Oriented Enterprise.

This description describes how to complete this task.

BUSINESS ARCHITECTURE

OBJECTIVES

The TOGAF ADM is a generic method for architecture development, which is designed to deal with most system and organisational requirements. However it will often be necessary to modify or extend the ADM to suit specific needs. The SAP Enterprise Architecture Framework (SAP EAF) provides specific information and guidance to deliver an Enterprise Architecture definition within a package and services oriented environment

The business architecture phase is about defining the As-Is and To-Be Business Architectures for the organisation, detailing the roadmap towards the To-Be architecture, and to identify key work packages in the roadmap.

In SAP EAF, the Business Architecture phase also provides the first cut definition of functions and services, mapping these functions and services to organisational owners, and maps these services to delivery components (Application components and Technology components as defined in the SAP EAF metamodel)

APPROACH

The approach for this phase follows the TOGAF 8.1 approach with particular emphasis placed on ensuring clear identification of business functions and owners, and on ensuring the delineation between functions and services as defined in the SAP EAF metamodel. The SAP EAF approach assumes that some functionality will be delivered through a packaged or service oriented solution, the approach therefore is to look at the business functions required and assume delivery can take place through a services approach. SAP EAF works on the assumption that the Business Architecture is analysed from an As-Is perspective and a To-Be perspective. The gap analysis between these two architectures then enables the organisation to define a roadmap to achieve the desired To-Be endpoint. General information regarding the approach to completing an As-Is and To-Be architecture and how to carry-out an effective Gap Analysis is covered in reference xxxxx and not within this document.

This narrative instead identifies the key steps that would be carried out in both these analysis phases and identifies the outputs of the phases and the rationale for carrying out these activities.

In general SAP EAF assumes that architecture definition is an iterative activity and that all answers cannot be completed in a single cycle. Business Architecture definition follows this assumption, and will execute at least two iterations, the first cycle focussing on As-Is with some discussion on To-Be, and the second iteration focussing on To-Be with reference back to the As-Is phase. It is likely however, particularly in complex environments, that further iterations will be carried out until a clear definition of the To-Be architecture and the consequent roadmap is effectively defined. For this reason it is important to note that not all steps identified below may be completed in each iteration, additionally.

| Accelerators | Roles | Subject Areas | References | Predecessors |
|----------------------------|---------------------------------|----------------|--------------------------|--------------|
| Title | File | Document Type | SAP | |
| Guide to Service Contracts | C:\Documents and Settings\10... | Best Practices | <input type="checkbox"/> | |

SAP EAF Phase Narrative added

Specific Phase Accelerators added

New Education and Certification programs

- New role-based education program
- 3-tier certification

| Business Process Expert | Enterprise Architect | Technology Professional | Enterprise Service Developer |
|--|--|---|---|
| Master | | | |
| SAP Certified Business Process Expert Master | SAP Certified Enterprise Architecture Master | SAP Certified Technology Master (NW Admin)
SAP Certified Technology Master (NW Security) | SAP Certified ES Developer Master (NW ABAP)
SAP Certified ES Developer Master (Java) |
| Professional | | | |
| SAP Certified Business Process Expert Professional | SAP Certified Enterprise Architecture Professional | SAP Certified Technology Professional (NW Portal)
SAP Certified Technology Professional (NW Security)
... | SAP Certified ES Developer Professional (ABAP UI, SI)
SAP Certified ES Developer Professional (Java UI, Java SI) |
| Associate | | | |
| SAP Certified Business Process Expert Associate | SAP Certified Enterprise Architecture Associate | SAP Certified Technology Associate (System Admin)
SAP Certified Associate Managed Service Engineer (BPI, TQM, ...) | SAP Certified ES Developer Associate (ABAP)
SAP Certified ES Developer Associate (Java) |

NEW SKILLS & RESOURCES

NEW METHODOLOGY

NEW TOOLS & PRODUCTS

NEW PROCESSES

NEW SERVICES

NEW TRAINING



SAP Tiered Certification: New Program Framework

Master Level:

Expert knowledge in Enterprise Architecture

Professional Level:

Advanced knowledge in Enterprise Architecture

Associate Level:

Foundation level knowledge in Enterprise Architecture. Skills to contribute to EA projects.

Master

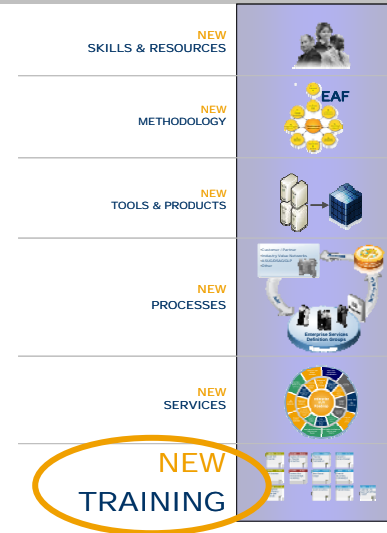
- 7+ years of experience in Enterprise Architecture
- In- and externally recognized as an expert in his/her Enterprise Architecture field
- Deep practical EA experience, integration, optimization and architectural knowledge
- Ability to provide strategic vision and realization
- Ability to articulate EA at CxO level
- Leading teams and projects

Professional

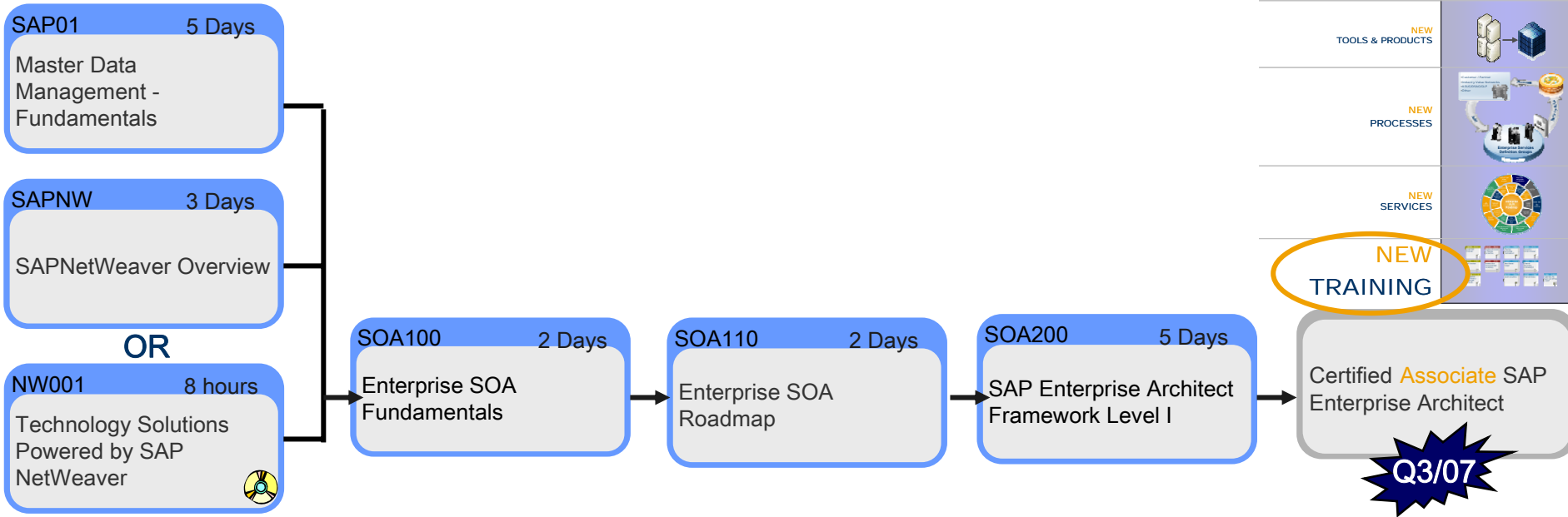
- 3-7 years of experience in Enterprise Architecture
- Professional ERP experience, advanced solution and process knowledge, industry expertise
- Deep knowledge of at least 1-2 domains in Enterprise Architecture
- T-shaped: broad view across several dimensions, plus deep capability to understand a specific area
- Works independently within teams to realize EA projects, capability of mentoring others

Associate

- 1-3 years of experience in Enterprise Architecture
- Hands-on skills to successfully implement ERP solutions
- Foundation knowledge of at least one domain in Enterprise Architecture
- Works in a mentored position within an experienced team

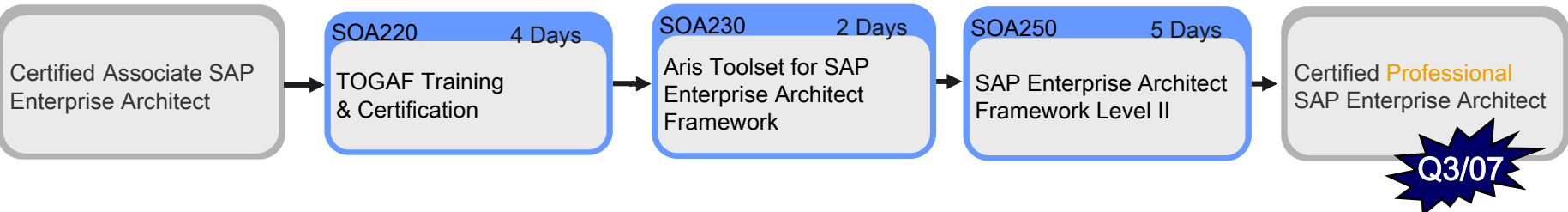


Certified Associate SAP Enterprise Architect Curriculum



| | |
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| NEW PROCESSES | |
| NEW SERVICES | |
| NEW TRAINING | |

Certified Professional SAP Enterprise Architect Curriculum



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- **The New SAP Enterprise Architecture Framework is based on open standards and may be used free of charge by our customers and partners**
- **It is specifically designed to support the effective adoption of packaged solutions in an Enterprise SOA environment**
- **The New SAP Enterprise Architecture Framework is holistic, practical and agile**
- **Education materials, certification and service offerings are available**
- **Join the vibrant ASUG Enterprise Architecture Community!**
- **Come and learn more at the EA Pre Tech-Ed Bootcamp in Vegas!**



Q&A

THANK YOU FOR YOUR
ATTENTION!

Contacts: franck.lopez@sap.com