Exam Guide
SAP Certified Professional – Enterprise Architect

Enterprise architects play a crucial role in orchestrating the development of a holistic enterprise architecture model that supports established enterprise goals. To help companies to future-proof their technology environment, SAP is introducing a role-based certification program for enterprise architects aimed at aligning technology with an organization's business strategy, giving customers confidence in the skills of their professionals to realize the benefits of their SAP investments fully.

As organizations shift more of their workload to the cloud, we see that the role of the enterprise architect is becoming increasingly vital and highly in demand to drive digital transformation.

The reason for this is that enterprise architects play a crucial role in orchestrating the development of a holistic enterprise architecture model that supports established enterprise goals and bridge the gap between business and technology needs.

Typically, these roles are filled with well-seasoned and experienced professionals with a comprehensive understanding of solutions and technology, end-to-end business processes, and their value across various solutions, reference architectures, and strategic aspects of the enterprise architecture.

That is why SAP’s first role-based certification program targets SAP professionals on an advanced proficiency level. To get certified, learners must demonstrate expertise and profound architecture engagement experience. The exam questions will mainly be based on scenarios and a case study because the aim is not to check theoretical knowledge but applied knowledge.

The benefit for the individual is obvious: A certification for an in-demand role like the one of the enterprise architect can help set you apart on the job market, foster career growth, and success, and increase job security. At the same time, the certification allows organizations to maximize their SAP investment. They can have confidence in the skills of their employees, both internally and from an advisory/partner company point of view, knowing that they are equipped with the knowledge that brings value to their company and helps to drive significant business value on a large scale.

Purpose of this document

This exam guide aims to help you understand what to expect in the certification exam from a topic coverage point of view and will help you focus your studies and prepare for the exam.
# Exam guide change log

<table>
<thead>
<tr>
<th>Date</th>
<th>Applied Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023-05-15</td>
<td>Initial version created</td>
</tr>
</tbody>
</table>
| 2023-06-13 | - Skill areas consolidated (technology architecture added to application and data architecture cluster)  
- Skill area weightings updated  
- Recommended qualification criteria details added  
- List of measured skills updated  
- Sequence of recommended readings and resources updated  
- Case study added |
Target audience

The exam is intended for IT professionals who perform an enterprise architect role. It validates the candidates advanced knowledge to orchestrate the development of a holistic enterprise architecture model that is closely aligned with a company’s business strategy and operating model.

Enterprise architects are vital in establishing an organization’s IT infrastructure and maintaining and updating IT hardware, software, and services to support established enterprise goals.

Some of the recommended qualification criteria:

- Current business architecture and/or data and application architecture and/or technology architecture know-how incl. comprehensive knowledge about the SAP innovation strategy and latest SAP solution portfolio
- Valid and current SAP certification(s) for SAP Cloud ERP and SAP Cloud platform technology
- Profound Enterprise Architecture engagement experience, 5+ years of experience recommended
- Enterprise architecture methodology and framework know-how, preferably TOGAF Certified

Skill areas and weight

<table>
<thead>
<tr>
<th>Skill area</th>
<th>Exam weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP Enterprise Architecture Framework and Toolset</td>
<td>20 – 30%</td>
</tr>
<tr>
<td>Architecture Vision and Roadmap</td>
<td>20 – 30%</td>
</tr>
<tr>
<td>Business Architecture</td>
<td>20 – 30%</td>
</tr>
<tr>
<td>Data, Application, and Technology Architecture</td>
<td>20 – 30%</td>
</tr>
</tbody>
</table>

Table 2 – Skill areas and weight

Skills measured

**SAP Enterprise Architecture Framework and Toolset**

- Analyze, assess, and understand a company’s business strategies
- Apply SAP Reference Architecture content
- Interpret IT requirements
- Map business requirements and (SAP) solution space
- Derive and develop SAP Enterprise Architecture-related artifacts
- Design and apply the SAP Enterprise Architecture
- Recommend and use SAP Enterprise Architecture tools
Architecture Vision and Roadmap
- Develop the architecture vision and roadmap for a company
- Capture existing and future business models and capabilities
- Define a target business/solution architecture roadmap

Business Architecture
- Recommend a business capability mapping
- Model end-to-end processes

Data, Application, and Technology Architecture
- Describe/explain artifact content, usage, and stakeholders
- Use artifacts
- Apply best practices of SAP Reference Content
- Apply the SAP Integration Advisory Methodology
- Evaluate the impact of regulations
- Apply SAP Clean Core principles and strategy
- Evaluate the impact of using SAP S/4HANA Cloud, public edition and private edition
Recommended readings and resources

The following list of resources will help prepare for the exam. However, please note that this list is not complete nor sufficient but rather intended to complement the qualification criteria listed above.

- SAP Enterprise Architecture Training (IEA10)
- SAP Enterprise Architecture Methodology Overview
- SAP Enterprise Architecture Framework Overview
- SAP Reference Architecture Content Overview
- Access to SAP Reference Architecture content using SAP Signavio Process Explorer
- Access to SAP Reference Solution Architecture content using SAP Business Accelerator Hub
- SAP Integration Solution Advisory Methodology
- SAP "Keep the core clean"
- Point of View: Clean Core
- 5 golden rules for implementing SAP S/4HANA Cloud
- Guidance to adopt SAP Extension Options for SAP S/4HANA
- SAP Fiori
- SAP's community page for collaboration of professionals working in Enterprise Architecture
Case Study – Wanderlust

Introduction

Wanderlust GmbH, headquartered in Germany but with manufacturing facilities and sales globally, is a leading global manufacturer of conventional fuel driven cars. They are renowned for their best-in-class engineering, but not so much for aftermarket customer service. In recent years, Wanderlust has had limited success expanding into the market of electric vehicles.

Following is Wanderlust’s geographical manufacturing and supply spread:

Wanderlust offers one compact electric Sedan (model ELAN) and one compact electric SUV (model ELUV), each with three variants – basic (LX), mid-range (VX) and high-end (ZX). Customers can also choose from a range of five metallic colors, two drive trains and two battery ranges. Overall, 50 different combinations are offered for all segments and variants put together.

Extracts from CEO Interviews – Business Environment

Constraints/Issues

- Stiff water consumption regulations and enormous penalties for violation – Lithium extraction is a heavy water intensive process and mine locations are in very arid areas like the Australian outback and Atacama Desert
- Significant dependence on external suppliers of Lithium batteries due to limited number of manufacturing units, long lead times and high carbon footprint in all car manufacturing facilities except Brazil.
- Long delays in spare battery availability, leading to an avalanche of unresolved battery related customer complaints for vehicles under warranty
- Limited charging infrastructure, long charging cycles (as compared to refilling fuel) and slow resolution of battery related complaints.
- Dwindling in store footfall due to pandemic (for feature-based vehicle selection prior to test drive)
New business initiatives/Revenue models
- "Smart Battery", which will monitor battery health and will alert the user about any alarming parameter
- "Insta-Charge", which will allow instant battery swap in dedicated charge stations for a fee
- "Perpetual Warranty" which will provide warranty on each battery swap service and not on the battery

Strategic Priorities - Business
- Increase supply reliability of Lithium batteries
- Minimize water loss during Lithium extraction
- Minimize carbon footprint across enterprise
- Reduce under warranty battery complaints
- Increase booking despite reduced in store footfall
- Ensure business ownership of the transformation
- Improve business process visibility
- Ensure faster response to business disruptions

Extracts from CIO Interviews – IT Environment

Strategic Priorities - IT
- Ease of usage
- Ease of Maintenance
- Total Cost of Ownership Optimization
- Time to Value Acceleration

Transformation Status
- Only at a conceptual stage – no planning done yet
- Nascent architecture practice
- Unclear on supported processes, required capabilities, applications, and transition path
- Yet to identify, prioritize and sequence initiatives

As-Is Architecture
Wanderlust has a separate organization and setup for their Automobile and Aftermarket businesses. Wanderlust is reluctant to consider cloud for Core applications due to data privacy concerns, but are open for Collaboration applications.

Automobile business started off in Europe and grew through acquisitions in Asia and Americas. Automobile business runs on three continental SAP ECC instances with inherited, disparate processes, which need to move to S/4HANA. Automobile business is also looking to harmonize their processes across the continents, adopt a seamless, transparent global supply chain for batteries and consolidate the continental instances into a global single instance, data regulations permitting. Automotive business uses a highly complex custom developed dealer management solution on ECC, which needs to be replaced. Automotive business uses SAP APO, which is nearing end of lifecycle and needs to be replaced by IBP (DP & SNP) & S/4HANA (PP-DS). Automotive business uses several bespoke non-SAP applications, which are considered irreplaceable, except for the Marketing and Sourcing applications, which are expensive to maintain, seldom used and hence need to be replaced.

Aftermarket business processes are largely uniform and handled through a single ECC instance which also should move to S/4HANA. Aftermarket business uses SAP SCM which is nearing end of lifecycle and needs to be replaced by S/4HANA AATP (gATP) and eSPP (SPP).

Extracts from Interview with Enterprise Architect

Enterprise Architecture Dimensions & Maturity

Wanderlust’s Key EA Dimensions, their overall purpose and current maturity level

<table>
<thead>
<tr>
<th>Sl No</th>
<th>EA Dimension</th>
<th>Purpose</th>
<th>Current Status &amp; Maturity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Business-IT Alignment</td>
<td>Traceability between Business Drivers &amp; IT Services</td>
<td>Only strategic objectives defined ●</td>
</tr>
<tr>
<td>2</td>
<td>Stakeholder Involvement</td>
<td>Stakeholders Identification, Awareness &amp; Engagement in EA</td>
<td>Only a few stakeholders identified ●</td>
</tr>
<tr>
<td>3</td>
<td>Action &amp; Impact</td>
<td>Usage of EA in Sourcing &amp; Investment Decisions &amp; Business Strategy</td>
<td>EA involved in RFP decisions ●</td>
</tr>
<tr>
<td>4</td>
<td>Architecture Development</td>
<td>Development Methodology with Standards, &amp; Reference Models</td>
<td>Nothing developed, methodology in place ●</td>
</tr>
<tr>
<td>5</td>
<td>Architecture Process</td>
<td>EA Creation, Maintenance, &amp; Approval Processes</td>
<td>Ad hoc ●</td>
</tr>
<tr>
<td>6</td>
<td>Organization &amp; Governance</td>
<td>Governance Organization Structure Approved by Senior Management</td>
<td>Governing body formed, team not yet ●</td>
</tr>
<tr>
<td>7</td>
<td>Communication</td>
<td>Documentation &amp; Communication of EA Practice Decisions</td>
<td>Artifacts available but unknown ●</td>
</tr>
<tr>
<td>8</td>
<td>People Enablement</td>
<td>Roles, Skills and RACI Definition of People Involved in EA</td>
<td>Role &amp; skill set defined ●</td>
</tr>
</tbody>
</table>

Top three priorities given the current maturity level, are as follows

- Stakeholder Involvement is the topmost priority, to create a Stakeholder Map that’ll identify all key EA stakeholders within Wanderlust.
- Business-IT Alignment is also a top priority, to anchor every IT initiative to a Business Strategy Map, consisting of clearly defined strategic business objectives, tangible goals and measurable value drivers.
- Architecture Development is the next priority, beginning with development of business architectures, followed by application architectures and finally opportunities & solutions planning.
Enterprise Architecture Practice Structure (Current)

Enterprise Architecture Principles

- Wanderlust’s Enterprise Architecture Principles are a collection of crisp and precise one liners pertaining to business, application, information, integration, technology and security aspects of transformation.
- Some of the EA Principles in the repository are:
  - Ensure Integrated Business Applications
  - Ensure Information is Secured
  - Ensure Applications are Connected
  - Ensure Applications are Scalable
  - Manage End-to-End User Interface
  - Manage Application Usability & Accountability

- These EA Principles serve as high level directional statements and long term guard rails to the above six aspects of transformation programs & projects.
- They should ideally correlate (many to many) with the Strategic Objectives, defined in the Business-IT alignment EA Dimension – this is yet to be done though.
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