

**<Name of the Architectural Decision>**  
**Date: <please do not use automatic fields>**

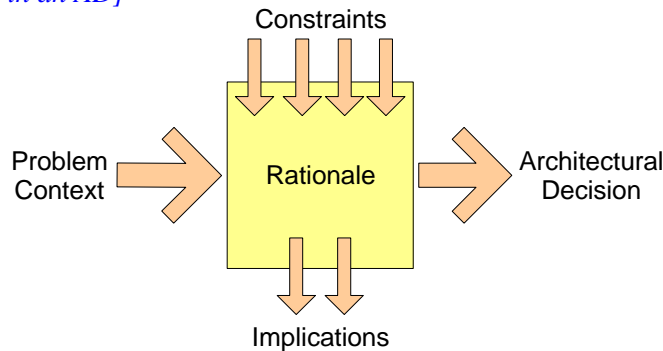
*[Note: The following template is provided for use with the Unified Architecture Method. Text enclosed in square brackets and displayed in blue italics (style=InfoBlue) is included to provide guidance to the author and should be deleted before publishing the document. A paragraph entered following this style will automatically be set to normal (style=Body Text).]*

***[Architectural Decision Objectives]***

*[The Architectural Decisions are documented in order to provide a single place (e.g. Requisite Pro) to find important architectural decisions and to avoid unnecessary reconsideration of the same issues. An AD has the following aspects, as shown in figure 1:*

- *A detailed description of the problem including its context*
- *A detailed description of any constraints, including technical and business*
- *Make explicit the rationale and justification of architectural decisions.*
  - *Alternatives are documented, including reasons why they were dismissed*
  - *Evaluation criteria are defined, with comparison charts showing how each option stacks up.*
- *Implications of the decision are described; everything from organizational, technical process and any additional constraints the decision imposes are documented.*
- *The architectural decision (solution) is described in detail (and provided at the beginning of the document in this template).*

*Any decision involving IM/IT hardware and software is documented in an AD. The scope is important; however, only ADs affecting the complete enterprise or a business line within the enterprise are documented. At the discretion of the enterprise or business line architects, other architectural decisions may also be documented in an AD]*



*[Figure 1 – Architectural Decision Description]*

## Decision

*[Describe the Architectural Decision. It is important to state the scope of the Architectural Decision. Use figures or diagrams to clarify. After reading this section in the document the IT architect or designer should understand the decision and its scope. Note that all the contextual and supporting details are provided in the next sections “Problem & Constraints” and “Solutions Analysis”, therefore the scope statement provided here is simple and provided for convenience.*

*This section of the AD template should be defined in such a way as to permit the creation of AD Summary Reports.]*

## Impacts & Implications

*[Document any implications of the decision, such as technology choice, cost, and support implications:*

- *What the decision will impose on other architectural decisions / projects*
- *What dependencies does the solution have / impose?*
- *The implications of the rationale have to be explored as well. Things such as:*
  - *Estimated timeline and high-level plan – including resource estimates (TCO see above)*
  - *Issues analysis: problems left to be solved*
  - *Risk analysis: Areas where problems may occur and percentage risk.*
  - *Mitigation: How these issues and risks are to be addressed.*
- *How will this Architectural Decision be applied over time?*
- *How will this Architectural Decision be applied in multiple systems?*
- *What are the skills requirements to support this Architectural Decision?*
- *Have all stakeholders been involved in that Architectural Decision?*

*Also document cross-references and / or implications on other ADs, past or present.*

*This section of the AD template should be defined in such a way as to permit the creation of AD Summary Reports.]*

## Problem & Constraints

### Description

#### Background

*[A brief history of the problem]*

#### Goal

*[What is the ultimate goal of the decision?]*

#### Objectives

*[What set of requirements are being addressed?]*

#### Short-Term Benefits

*[What is the immediate gain for the business?]*

#### Long-Term Benefits

*[What are the long-term gains for the business?]*

### Context

*[Describe, in as much detail as possible, the problem context that this architectural decision will help solve. Define the scope of the problem and the stakeholders. ]*

## **Scope**

*[Define the scope of the problem and the stakeholders]*

## **Constraints**

*[Describe, in as much detail as possible, the constraints that this architectural decision needs to address. State any constraints that will limit the options available in solving the problem, under the following headings:*

### **Business**

*[Enterprise information strategy, business scenarios, concepts of operations, functional or non-functional requirements.]*

### **Architecture**

*[Guiding principles  
Architectural directions  
Enterprise information technology strategy  
Previous ADs]*

### **Technology**

*[Existing technology givens (existing ADs, etc.)  
Existing data formats, interfaces, systems and processes that are involved]*

## **Assumptions**

*[State any assumptions that will either help in defining the scope of the AD and/or help in defining and assessing options, things such as:*

- *Project objectives: what set of requirements are being addressed*
- *A brief technical description of the “how” of the proposed system will meet requirements*
- *High-level system diagram: Picture of the above point.*
- *Impact and interconnection with existing systems (diagram). This is a very high-level logical diagram showing implicated databases and components within the CSE architecture.*
- *Existing technology givens*
- *Existing data formats, interfaces, systems and processes that are involved*
- *Service Level Agreements*
- *Existing Skills*
- *Etc.]*

## **Solutions Analysis**

### **Solution Architecture**

*[A brief description of ‘how’ the proposed system will meet requirements.  
High-level system diagram: a picture of the above point.*

*Impact and interconnection with existing systems (diagram). This is a high-level logical diagram showing implicated databases and components in the current architecture, etc.*

*List possible scenarios (if any) considered before suggesting the chosen solution.]*

## **Solutions Comparative Analysis**

### **Business Requirement**

*[A comparison of possible solution options against architecturally significant business requirements.]*

### **Technology**

*[A comparison of possible solution options against technology requirements/constraints. Create a comparison chart, using important and relevant criteria, of possible technological solutions:*

- *Conformity with technical strategy – new versus existing, process changes, re-use*
- *Sizing impact, scaling the solution*
- *Standards compliance*
- *Other project specific factors (e.g. security comparisons, technology comparisons, risk.)]*

### **Cost**

*[A comparison of possible solution options regarding their cost. Create a comparison chart, using important and relevant criteria, of possible technological solutions:*

- *State budgetary constraints if any*
- *Total cost of ownership comparison (if significantly varied – costs relate to complexity)*
- *Implementation costs*
- *Fixed infrastructure impact*
- *Recurring annual maintenance effort (person-days) and licensing costs*
- *Training required]*

### **Skills**

*[A comparison of possible solution options against the skill set requirements of the solution. Create a comparison chart, using important and relevant criteria, of possible technological solutions:*

- *Service level agreements*
- *Existing skills or new skills needed*
- *Implementation effort estimate, internal and external (person-days).*

## **Rationale**

*[Explain the rationale behind this Architectural Decision. We often see references to the constraints section in the justification. If several options were considered, give a brief explanation for the options and list the pros and cons for each of them — that is provide enough information to support the option chosen and the elimination of the alternatives. If only one option has been evaluated, then the reason why other alternatives were not considered needs to be detailed.*

*Explain how the constraints were considered for this specific Architectural Decision. A well-founded rationale always helps with the implementation of an Architectural Decision.*

*Possibly a summary grid of factors: what factors lead to the choice of the recommended option? ]*

<Subject>

**Table 1 – AD Change History**

<b>Version</b>	<b>Comments</b>	<b>Date</b>
1.0	New architectural decision	2013-11-11