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Draft/Final

SOLUTION ARCHITECTURE

[Project]

|  |  |
| --- | --- |
| Author | me@angelhernandez.com |
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| Creation Date | 01/01/2017 |
| Last Revision Date | 01/01/2017 |
| Related to |  |

Document Purpose:

A *Solution Architecture* Document enriches Business Requirements with other IT requirements and describes the solution design at a high level.

Version Release History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Issue Date** | **Author** | **Change Description** | **Sections Affected** |
|  |  |  |  |  |
|  |  |  |  |  |

Audience

The high-level sections of this document must be read and understood by the business owner, sponsor and SMEs, as well as the business and IT project managers.

The whole document must be read and understood by all technical parties involved in the delivery of the project outcomes or those likely to be affected by its outcomes, eg. Project Managers & Solution Delivery Manager, Technical Architects, Application Support Teams.

Key Stakeholders

|  |  |  |
| --- | --- | --- |
| **Name** | **Title or Role** | **Business unit** |
|  |  |  |
|  |  |  |

Approval Requirements

|  |  |  |  |
| --- | --- | --- | --- |
| **Title or Role** | **Name (please print)** | **Signature** | **Date** |
|  |  |  |  |
|  |  |  |  |

Distribution List

|  |  |
| --- | --- |
| **Name** | **Business Unit** |
|  |  |
|  |  |

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# Executive Summary

[Intended Audience: Project Owner, Project Sponsor, CIO]

One-page max summary of solution context (problem & solution itself), with any quick reference to assumptions, decisions and risks.

# Solution Description

## Background

### Enterprise Context

What do we have now at the Company in relation to this project?

### Business Problems

Why do we have this project / program of work?

### Business Drivers

What does the business want to gain by fixing the problem?

### Architecture Drivers

What can Architecture take as an opportunity to build / fix by designing the solution?

## Solution Scope

### As part of a Program of Work

If part of a larger Program of Work / BIP, detail the larger scope, what has been done before (current landscape) and where this ‘transition fits’

### Solution Principles

List Principles FOR THIS SOLUTION that will assist in making decisions. Do not state any existing Architecture principles.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Name** | **Statement** | **Rationale** | **Implications** |
|  |  |  |  |  |
|  |  |  |  |  |

### Assumptions

State assumptions that will impact the solution design

|  |  |
| --- | --- |
| **Assumption** | **Comments & Impacts** |
|  |  |
|  |  |

### Architecture Decisions

List Architecture Decisions based on the recommendations listed in the appendices OR referenced High Level Proposal document, including the Decision Log ID.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **AD** | **Log ID** | **Decision** | **Rationale** | **Implications** | **Contributors** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

### Scope Definition

State items that are or not in scope and the impact on the solution design

|  |  |
| --- | --- |
| **IN Scope** | **Comments & Impacts** |
|  |  |
|  |  |

|  |  |
| --- | --- |
| **OUT of Scope** | **Comments & Impacts** |
|  |  |
|  |  |

## Solution Assessment

List and details assessment items of different types.

NOTE: DO NOT include project risks (with PM)

Assessment Types: **R**: (Technical) Risk **L**: Limitation **G**: Business Objective Gap

**D**: (Project) Dependency **C**: (Non) Compliance

|  |  |  |  |
| --- | --- | --- | --- |
| **Assessment Item** | **Type** | **Implication** | **Recommended Mitigation** |
|  |  |  |  |
|  |  |  |  |

# Reference Architecture

## Logical Component Diagram

Include Logical Component Diagram here.

## Logical Component Diagram – Current Post Sign off with latest changes Updates

Include UPDATED Logical Component Diagram here

### Application Component Description

List and detail each component showing in the Logical Component Diagram. Indicate / propose interfaces to be used for integration.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Component** | **Description** | **Technology** | **Interfaces** | | |
| Data Entity / Process | Technology | Proposed I/F |
|  |  |  |  |  |  |
|  |  |  |

### Integration Description

List and detail each integration point showing in the Logical Component Diagram.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Data Flow / Process** | **Description** | **Component 1 (I/F)** | **Component 2 (I/F)** | **Volumetric** | **Frequency** | **Delivery Mechanism / Technology** | **Control & Instrumentation** |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

# Solution Impacts

NOTE: only indicate if pertinent and add valuable info

NOTE: An application component may be the accounts payable module of an ERP. Its technology view may be COTS / SaaS system.

## Business Architecture

### Business Target State

Show target Business landscape. You can include process flow diagrams with actors as required.

### Business Impact

List impacts between current and target states.

|  |  |  |  |
| --- | --- | --- | --- |
| **Process** | **Actors** | **Location / Organisation** | **Impact** |
|  |  |  |  |
|  |  |  |  |

## Information Architecture

### Information Target State

Show target Information / Data Architecture. You can include ERDs, sections of metadata repository, or any other IA/IM info as required.

### Information impact

List impacts between current and target states.

|  |  |  |  |
| --- | --- | --- | --- |
| **Entity** | **Attributes** | **System of Record** | **Impact** |
|  |  |  |  |
|  |  |  |  |

## Application Architecture

### Application Target State

Show target Application landscape. You can include detailed component diagrams, or component configuration / usage as required.

### Application impact

List impacts between current and target states.

|  |  |  |
| --- | --- | --- |
| **Application Component** | **Description** | **Impact** |
|  |  |  |
|  |  |  |

## Technology Architecture

### Technology Target State

Show target technology landscape, including hosting environments, servers, technology applications & Platforms. You can include detailed component diagrams, or component configuration / usage as required.

### Infrastructure & Environments Requirements

Provide overall platform diagram as necessary, with intranet, DMZ, internet/Cloud zones and infrastructure components (servers) and any variation between environments (dev/rc/uat/sit/prod)

|  |  |
| --- | --- |
| **Environment** | **Description** |
|  |  |
|  |  |
| Technology Component | Description |
|  |  |
|  |  |

Then list infrastructure components’ requirements for each environment.

|  |  |  |
| --- | --- | --- |
| **Technology Component** | **Software Requirements** | **Hardware Requirements** |
| **Environment 1** | | |
|  |  |  |
|  |  |  |
| **Environment 2** | | |
|  |  |  |
|  |  |  |

### Technology impact

List impacts between current and target states (software, OS, computer hardware (physical/virtual) and networks).

|  |  |  |
| --- | --- | --- |
| **Technology Component** | **Description** | **Impact** |
|  |  |  |
|  |  |  |

## Security Architecture

### IDAM

Provide any relevant info around Identity and Access Mgt (IDAM), including user roles & process permissions, ERDs, application component diagrams, etc.

NOTE: Any other security items are likely to be found in the NFRs – so do not include here.

### Security Impact

List what security items are going to be impacted and what the impact / gap is.

|  |  |  |
| --- | --- | --- |
| **Security Item** | **Description** | **Impact** |
|  |  |  |
|  |  |  |

# Change Log

## Changes after Sign off – pre deployment

### Change 1

|  |  |  |
| --- | --- | --- |
| **Context** | | |
|  | | |
| **ID** | **Decision** | |
|  |  | |
| **Justification** | | **Impacts** |
|  | |  |
|  | |  |

# Appendices

## References

|  |  |  |
| --- | --- | --- |
| **Title** | **Author** | **Document Location** |
|  |  |  |
|  |  |  |

## Glossary (Acronyms & Terminology)

|  |  |
| --- | --- |
| **Term** | **Description** |
|  |  |
|  |  |

## Non-Functional Requirements (NFR)

|  |  |
| --- | --- |
| **Requirement** | **Description** |
| **Service Level** | |
| Requirement XYZ | Description |
| Backend system availability  XYZ |  |
| Hours of Support  XYZ |  |
| System Owner  XYZ |  |

## Recommendations for Architecture Decisions

### ADXX – [Name}

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Problem Description | | Options | | | Evaluation Criteria | | | | |
|  | | ID | Description | | ID | Criteria | | Description | |
| 1 |  | | 1 |  | |  | |
| 2 |  | | 2 |  | |  | |
| **Option 1 – []** | | | | | | | | | |
| Assumptions | | Criteria | | | Evaluation Response | | | | |
|  | | 1 – [] | | |  | | | | |
| 2 – [] | | |  | | | | |
| **Option 2 – []** | | | | | | | | | |
| Assumptions | | Criteria | | | Evaluation Response | | | | |
|  | | 1 – [] | | |  | | | | |
| 2 – [] | | |  | | | | |
| **RECOMMENDATION** | | | | | | | | | |
| Recommendation | Justification | | | Project Implications | | | Enterprise Implications | | Decision ID |
|  |  | | |  | | |  | |  |