${solution\_name}

For

${client\_name}

Version: ${Version\_number}

Date: ${Month\_Day\_Year}

Author(s): ${name}

Document History

Document Location

This is a snapshot of an architecture model in the Cognitive Architect tool.

Version History

Changes to this document are summarized in the following table in reverse chronological order (latest version first).

|  |  |  |  |
| --- | --- | --- | --- |
| **Version Number** | **Revision Date** | **Summary of Changes** | **Changes marked** |
|  |  |  |  |
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|  |  |  |  |

Approvals

The following persons have approved this document:

|  |  |
| --- | --- |
| **Name** | **Title** |
|  |  |
|  |  |

${TOC}

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# Introduction

The purpose of this document is to describe the ${solution\_name} Architecture Model for ${client\_name}. It is a living document and the latest version of the model is in the Cognitive Architect tool.

The document consists of the following sections:

1. Overview
2. Scope

* Business Challenge
* System Context

1. Requirements

* Use Case Model
* Requirements
* Non-functional Requirements

1. Data Model

* Logical Data Model

1. Architecture

* Architecture Overview
* Architectural Decisions
* Component Model
* Operational Model

1. RAID (Risks, Assumptions, Issues, Dependencies)
2. Architectural Principles
3. Notes

# Overview

${add\_Overview}

# Scope

## Business Challenge

${add\_Business\_Challenge}

## System Context

${architecture\_system\_context\_diagram\_description}

### ${architecture\_system\_context\_diagram\_name}

${architecture\_system\_context\_diagram}

${architecture\_system\_context\_picture\_name}

### System Context Elements

|  |  |  |  |
| --- | --- | --- | --- |
| Element | Type | Name | Description |
|  |  |  |  |

${System\_Context\_Elements\_Table\_name}

### System Context Connector Relationships

|  |  |  |
| --- | --- | --- |
| Connector Name | From | To |
|  |  |  |

${System\_Context\_Connector\_Relationships\_Table\_name}

# Requirement

## Use Case Model

### Use Case Diagram

#### ${use\_case\_diagram\_name}

${use\_case\_diagram\_description}

##### ${use\_case\_diagram\_name} Diagram

${add\_use\_case\_diagram}

${use\_case\_diagram\_picture\_name}

##### ${use\_case\_diagram\_name} Elements

|  |  |  |
| --- | --- | --- |
| Element Type | Name | Description |
|  |  |  |

${use\_case\_diagram\_index0}: ${use\_case\_diagram\_name} Elements

##### ${use\_case\_diagram\_name} Association table

|  |  |  |  |
| --- | --- | --- | --- |
| From Actor Name | To Use Case Name | Name | Description |
|  |  |  |  |

${use\_case\_diagram\_index1}: ${use\_case\_diagram\_name} Association table

##### ${use\_case\_diagram\_name} Relationship table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| From Use Case Name | To Use Case Name | Type | Name | Description |
|  |  |  |  |  |

${use\_case\_diagram\_index2}: ${use\_case\_diagram\_name} Relationship table

### Use Cases

This is a summary of all the Use Cases in the architecture.

|  |  |  |
| --- | --- | --- |
| ID | Name | Package Name |
|  |  |  |

${Use\_Cases\_Summary\_Table\_name}

#### ${use\_case\_id} - ${use\_case\_name}

|  |  |
| --- | --- |
| ID |  |
| Name |  |
| Package Name |  |
| Description |  |
| List of Actors [Actor Name] |  |
| Pre-Conditions |  |
| Basic Flow |  |
| Alternate Flows |  |
| Successful Outcomes |  |
| Failure Outcomes |  |

${use\_case\_index}: ${use\_case\_id} - ${use\_case\_name}

## Functional Requirements

This is a summary of all the Functional Requirements in the architecture.

|  |  |
| --- | --- |
| ID | Name |
|  |  |

${Functional\_Requirements\_Summary\_Table\_name}

### ${functional\_requirement\_id} - ${functional\_requirement\_name}

|  |  |
| --- | --- |
| ID |  |
| Name |  |
| Description |  |
| Impact |  |
| Weight |  |
| Owner |  |
| List of LCs [LC Name] |  |
| Review Date |  |

${functional\_requirement\_index}: ${functional\_requirement\_id} - ${functional\_requirement\_name}

## Non-Functional Requirements (NFR)

This is a summary of all the NFRs in the architecture.

|  |  |  |
| --- | --- | --- |
| ID | Name | Theme |
|  |  |  |

${FNon-Functional\_Requirements\_Summary\_Table\_name}

### ${non-functional\_requirement\_id}- ${non-functional\_requirement\_name}

|  |  |
| --- | --- |
| ID |  |
| Name |  |
| Description |  |
| Theme |  |
| Context |  |
| Value |  |
| Growth Rate |  |
| Acceptance Criteria |  |
| Priority |  |
| Source |  |
| Reference |  |
| Test Method |  |
| Owner |  |
| Review Data |  |

${non-functional\_requirement\_index}: ${non-functional\_requirement\_id} - ${non-functional\_requirement\_name}

# Data Model

## Logical Data Model

### ${logical\_ERD\_diagram\_name}

${logical\_ERD\_diagram\_description}

#### ${logical\_ERD\_diagram\_name} Diagram

${add\_logical\_ERD\_diagram}

${logical\_ERD\_picture\_name}

#### ${logical\_ERD\_diagram\_name} Entity table

|  |  |
| --- | --- |
| Name | Description |
|  |  |

${logical\_ERD\_index0}: ${logical\_ERD\_diagram\_name} Entity table

#### ${logical\_ERD\_diagram\_name} Entity Attribute table

|  |  |  |  |
| --- | --- | --- | --- |
| Entity Name | Attribute Name | Attribute Type | Attribute Description |
|  |  |  |  |

${logical\_ERD\_index1}: ${logical\_ERD\_diagram\_name} Entity Attribute table

#### ${logical\_ERD\_diagram\_name} Relationship table

|  |  |  |  |
| --- | --- | --- | --- |
| Relationship Name | Relationship Description | Entity Name | Entity Multiplicity |
|  |  |  |  |

${logical\_ERD\_index2}: ${logical\_ERD\_diagram\_name} Relationship table

#### ${logical\_ERD\_diagram\_name} Relationship Attribute table

|  |  |  |  |
| --- | --- | --- | --- |
| Relationship Name | Attribute Name | Attribute Type | Attribute Description |
|  |  |  |  |

${logical\_ERD\_index3}: ${logical\_ERD\_diagram\_name} Relationship Attribute table

# Architecture

## Architecture-Wide Elements

### Logical Components

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Description | List of Implementations | List of Associated NFRs | List of Associated Ads |
|  |  |  |  |  |
|  |  |  |  |  |

${Logical\_Components\_Table\_name}

### Physical Components (Implementations)

|  |  |  |
| --- | --- | --- |
| Name | Description | URL |
|  |  |  |
|  |  |  |

${Physical\_Components\_Table\_name}

### Logical Nodes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Description | Cardinality | List of DUs | List of Associated NFRs | List of Associated ADs |
|  |  |  |  |  |  |

${Logical\_Nodes\_Table\_name}

## Diagram Instance Summary

|  |  |  |
| --- | --- | --- |
| Diagram type | Diagram Instance Name | Diagram Instance Description |
|  |  |  |

${Diagram\_Instance\_Summary\_Table\_name}

## Architecture Overview

### Services View

${services\_view\_diagram\_description}

#### ${services\_view\_diagram\_name}

##### ${services\_view\_diagram\_name} Diagram

${add\_services\_view\_diagram}

${services\_view\_picture\_name}

##### ${services\_view\_diagram\_name} Elements

|  |  |  |
| --- | --- | --- |
| Element Type | Name | Description |
|  |  |  |

${services\_view\_index0}: ${services\_view\_diagram\_name} Elements

##### ${services\_view\_diagram\_name} Subsystem Containment

|  |  |  |
| --- | --- | --- |
| Parent Subsystem Name | Contained Element Name | Contained Element Type |
|  |  |  |

${services\_view\_index1}: ${services\_view\_diagram\_name} Subsystem Containment

##### ${services\_view\_diagram\_name} Logical Connectors

|  |  |  |  |
| --- | --- | --- | --- |
| Logical Connector Name | Logical Connector Description | From Element Name | To Element Name |
|  |  |  |  |

${services\_view\_index2}: ${services\_view\_diagram\_name} Logical Connectors

### Enterprise View

#### ${enterprise\_view\_diagram\_name}

${enterprise\_view\_diagram\_description}

##### ${enterprise\_view\_diagram\_name} Diagram

${add\_enterprise\_view\_diagram}

${enterprise\_view\_picture\_name}

##### ${enterprise\_view\_diagram\_name} Elements

|  |  |  |
| --- | --- | --- |
| Element Type | Name | Description |
|  |  |  |

${enterprise\_view\_index0}: ${enterprise\_view\_diagram\_name} Elements

##### ${enterprise\_view\_diagram\_name} Subsystem Containment

|  |  |  |
| --- | --- | --- |
| Parent Subsystem Name | Contained Element Name | Contained Element Type |
|  |  |  |

${enterprise\_view\_index1}: ${enterprise\_view\_diagram\_name} Subsystem Containment

##### ${enterprise\_view\_diagram\_name} Logical Connectors

|  |  |  |  |
| --- | --- | --- | --- |
| Logical Connector Name | Logical Connector Description | From Element Name | To Element Name |
|  |  |  |  |

${enterprise\_view\_index2}: ${enterprise\_view\_diagram\_name} Logical Connectors

### IT System View

#### ${it\_system\_view\_diagram\_name}

${it\_system\_view\_diagram\_description}

##### ${it\_system\_view\_diagram\_name} Diagram

${add\_it\_system\_view\_diagram}

${it\_system\_view\_picture\_name}

##### ${it\_system\_view\_diagram\_name} Elements

|  |  |  |
| --- | --- | --- |
| Element Type | Name | Description |
|  |  |  |

${it\_system\_view\_index0}: ${it\_system\_view\_diagram\_name} Elements

##### ${it\_system\_view\_diagram\_name} Subsystem Containment

|  |  |  |
| --- | --- | --- |
| Parent Subsystem Name | Contained Element Name | Contained Element Type |
|  |  |  |

${it\_system\_view\_index1}: ${it\_system\_view\_diagram\_name} Subsystem Containment

##### ${it\_system\_view\_diagram\_name} Location Containment

|  |  |  |
| --- | --- | --- |
| Parent Location Name | Contained Element Name | Contained Element Type |
|  |  |  |

${it\_system\_view\_index2}: ${it\_system\_view\_diagram\_name} Location Containment

##### ${it\_system\_view\_diagram\_name} Logical Connections

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Logical Connection Name | Logical Connection Description | Logical Connection Type | From Element Name | To Element Name |
|  |  |  |  |  |

${it\_system\_view\_index3}: ${it\_system\_view\_diagram\_name} Logical Connections

### Usage Scenario

#### ${usage\_scenario\_diagram\_name}

${usage\_scenario\_diagram\_description}

##### ${usage\_scenario\_diagram\_name} Diagram

${add\_usage\_scenario\_diagram}

${usage\_scenario\_picture\_name}

##### ${usage\_scenario\_diagram\_name} Scenario Steps

|  |  |
| --- | --- |
| Step Label | Step Description |
|  |  |

${usage\_scenario\_index}: ${usage\_scenario\_diagram\_name} Scenario Steps

## Architectural Decisions

|  |  |  |
| --- | --- | --- |
| ID | Name | Subject Area |
|  |  |  |

${Architectural\_Decisions\_Summary\_index}: Architectural Decisions Summary Table

### ${arch\_decision}

|  |  |
| --- | --- |
| ID |  |
| Name |  |
| Status |  |
| Last Update |  |
| Subject Area |  |
| Topic |  |
| Issue or Problem Statement |  |
| Assumptions |  |
| Motivation |  |
| Alternatives |  |
| Decision |  |
| Justification |  |
| Implications |  |
| Derived Requirements |  |
| Related Decisions |  |

${arch\_decision\_index}: ${arch\_decision} Architectural Decision

## Component Model

### Static Views

#### ${static\_component\_diagram\_name}

${static\_component\_diagram\_description}

##### ${static\_component\_diagram\_name} Diagram

${add\_static\_component\_diagram}

${static\_component\_picture\_name}

##### ${static\_component\_diagram\_name} Elements

|  |  |  |
| --- | --- | --- |
| Element Type | Name | Description |
|  |  |  |

${static\_component\_index0}: ${static\_component\_diagram\_name} Elements

##### ${static\_component\_diagram\_name} Subsystem Containment

|  |  |  |
| --- | --- | --- |
| Parent Subsystem Name | Contained Element Name | Contained Element Type |
|  |  |  |

${static\_component\_index1}: ${static\_component\_diagram\_name} Subsystem Containment

##### ${static\_component\_diagram\_name} Logical Connectors

|  |  |  |  |
| --- | --- | --- | --- |
| Logical Connector Name | Logical Connector Description | From Element Name | To Element Name |
|  |  |  |  |

${static\_component\_index2}: ${static\_component\_diagram\_name} Logical Connectors

### Dynamic Views

#### ${dynamic\_component\_diagram\_name}

${dynamic\_component\_diagram\_description}

##### ${dynamic\_component\_diagram\_name} Diagram

${add\_dynamic\_component\_diagram}

${dynamic\_component\_picture\_name}

##### ${dynamic\_component\_diagram\_name} Timeline Elements

|  |  |  |
| --- | --- | --- |
| Element Type | Name | Description |
|  |  |  |

${dynamic\_component\_index0}: ${dynamic\_component\_diagram\_name} Timeline Elements

##### ${dynamic\_component\_diagram\_name} Component Messages

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| From Name | To Name | Message Type | Message Name | Message Description |
|  |  |  |  |  |

${dynamic\_component\_index1}: ${dynamic\_component\_diagram\_name} Component Messages

## Operational Model

### Logical Operational Model

#### ${lom\_diagram\_name}

${lom\_diagram\_description}

##### ${lom\_diagram\_name} Diagram

${add\_lom\_diagram}

${lom\_picture\_name}

##### ${lom\_diagram\_name} Elements

|  |  |  |
| --- | --- | --- |
| Element Type | Name | Description |
|  |  |  |

${lom\_diagram\_index0}: ${lom\_diagram\_name} Elements

##### ${lom\_diagram\_name} OMLocation Containment

|  |  |  |
| --- | --- | --- |
| Parent OMLocation Name | Contained Element Name | Contained Element Type |
|  |  |  |

${lom\_diagram\_index1}: ${lom\_diagram\_name} OMLocation Containment

##### ${lom\_diagram\_name} Logical Connections

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Description | Type | From Element Name | To Element Name |
|  |  |  |  |  |

${lom\_diagram\_index2}: ${lom\_diagram\_name} Logical Connections

### Physical Operational Model

#### ${pom\_diagram\_name}

${pom\_diagram\_description}

##### ${pom\_diagram\_name} Diagram

${add\_pom\_diagram}

${pom\_picture\_name}

##### ${pom\_diagram\_name} Elements

|  |  |  |
| --- | --- | --- |
| Element Type | Name | Description |
|  |  |  |

${pom\_diagram\_index0}: ${pom\_diagram\_name} Elements

##### ${pom\_diagram\_name} OMLocation Containment

|  |  |  |
| --- | --- | --- |
| Parent OMLocation Name | Contained Element Name | Contained Element Type |
|  |  |  |

${pom\_diagram\_index1}: ${pom\_diagram\_name} OMLocation Containment

##### ${pom\_diagram\_name} Physical Node Hosting

|  |  |  |
| --- | --- | --- |
| Parent Physical Name | Contained Element Name | Contained Element Type |
|  |  |  |

${pom\_diagram\_index2}: ${pom\_diagram\_name} Physical Node Hosting

##### ${pom\_diagram\_name} Physical Node Details

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Physical Node Name | Type | Description | Cardi-nality | CPU/Cores | Memory | OS/Hyper-visor | Deploy Offering | Deploy Provisioning |
|  |  |  |  |  |  |  |  |  |

${pom\_diagram\_index3}: ${pom\_diagram\_name} Physical Node Detail Attributes

##### ${pom\_diagram\_name} Physical Connections

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Description | Type | From Element Name | To Element Name |
|  |  |  |  |  |

${pom\_diagram\_index4}: ${pom\_diagram\_name} Physical Connections

### Deployment Units

This is a summary of all the Deployment Units in the architecture.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Deployment Unit (DU) Name | DU Description | DU Type | Is TDU? | List of Logical Components (LC Names) | List of Associated NFRs (NFR ID, NFR Name) | List of Associated Ads (AD ID, AD Name) |
|  |  |  |  |  |  |  |

${Deployment\_Unit\_index}: Deployment Unit Elements

### OM Locations

This is a summary of all the Locations in the Operational Model.

|  |  |  |  |
| --- | --- | --- | --- |
| OMLocation Name | OMLocation Description | Cardinality | List of Associated NFRs (NFR ID, NFR Name) |
|  |  |  |  |

${OM\_Locations\_index}: OM Locations

# RAID

## Risks

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Name | Description | Probability | Effort/Cost | Impact | Contingency / Mitigation recommendation | Person Responsible | Review Date |
|  |  |  |  |  |  |  |  |

${risk\_index}:Risks

## Assumptions

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Description | Confidence Level | Impact | Identifier (who) | Review Date | Close Date |
|  |  |  |  |  |  |  |

${assumptions\_index}: Assumptions

## Issues

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Name | Description | Priority | Raised by | Person Responsible | Review Date | Action | Is this key issue? |
|  |  |  |  |  |  |  |  |

${issues\_index}: Issues

## Dependencies

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Name | Description | Effect on Plan | Required by Date | Owner | Associated Risk ID | Close Date | Is this key Dependency? |
|  |  |  |  |  |  |  |  |

${dependencies\_index}: Dependencies

# Architectural Principles

This is a summary of all the Architectural Principles in the architecture.

|  |  |
| --- | --- |
| Name | Ranked Priority |
|  |  |

${principles\_index}: Architectural Principles Summary Table

## ${arch\_principle\_name}

|  |  |
| --- | --- |
| Name |  |
| Ranked Priority |  |
| Description |  |
| Rationale |  |
| Implications |  |
| Metrics |  |

${arch\_principle\_index}: ${arch\_principle\_name}

# Notes

## ${note\_name}

|  |  |
| --- | --- |
| Name |  |
| Content |  |
| Labels |  |

${note\_index}: ${note\_name}