Analytics Engagement Architecture

[Name]

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[Name] = Project Name

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# Introduction

This document is being used to describe and asses the overall Solution and Architecture of the [Name] engagement. The architecture is to describe the overall logical architecture, how all the pieces fit together, and why. This overall assessment is initially filled out as the current pre-engagement process, however this is a living document that may require minor changes when the engagement starts.

# Technical Design

How is the Technical Solution meeting the Business Specification?

# Technical Stakeholders

|  |  |  |
| --- | --- | --- |
| Name | Role | Description |
|  | Product Sponsor |  |
|  | Product Owner |  |
|  | BI Architect | Lead BI |
|  | BI Technical Lead | Lead project developer |
|  | Data Architect | Architect from the data team |
|  | Data Technical Lead | Lead developer of the data team (\*as needed) |
|  |  |  |

# Data Flow Diagram

Inserting a data flow diagram to show the overall flow of the data. This will be used to assess potential failure points, manual / automated processes, asynchronous time periods.

# System Development Life Cycle: Environment Architecture

Define which Application and Data Source environments will be utilized throughout the development lifecycle.

<example below>



# Non-Functional Requirements

Non-Functional Requirements can be either or both Business and Technical Requirements that do not directly relate to a function performed by the user. Below are listed a series of non-functional requirement questions that would need to be captured and documented in this space to help define how the architecture is set up.

## Availability

|  |  |
| --- | --- |
| Requirement | Technical Solution |
| <example>  Data needs to be refreshed on a weekly basis | Qlik applications will be set up with a refresh task that will be scheduled on Sunday’s at 6pm |
| <example>  Applications will require the current and previous Fiscal Year of data | Filter the data based off the encounter discharge date. |

## Data Integrity

|  |  |
| --- | --- |
| Technical Requirement | Technical Solution |
| <example>  98% transformation audit | Audit application that will audit the number of transformations to ensure data integrity |
| <example> | Filter the data based off the encounter discharge date. |

## Speed/Performance

|  |  |
| --- | --- |
| Requirement | Technical Solution |
| <example>  When the user opens the application Then the application will load under 10 seconds | <example> Stored <blank> info as a QVD and filtered on <blank> to meet data set and improve performace. |
| <example>  Informatica jobs will take no longer than 30 minutes | <example> Monitor load times for jobs that take longer than 15 minutes. |

## Maintainability

* Will the solution require periods of maintenance? Changes in infrastructure, business rules, calendar or fiscal years, etc.?

## Scalability

* Is the overall architecture set up to handle the data volume?
* Do we have enough licenses to sustain growth?

## Reusability

Can the information being pulled

# Reports

Specifications

# Security Requirements

## Access Security:

Helps to assess how we set up FIM and access, number of streams, etc…

* How many users are going to access this information? Dev, Test, Prod
* Do users need to have different rights? View Only, Developer?

## Data Security (HIPPA, PHI)

* Should there be any users or groups that need to be restricted of the information?
* Are the restrictions to the application itself, or to certain pieces?
  + ‘We want the application to be available, but only <Group> should be able to see this information’

# History

|  |  |  |
| --- | --- | --- |
| Version | Name | Changes |
| 1.0 | <Author> | Initial Document |
|  |  |  |
|  |  |  |
|  |  |  |