<Customer - Project Name>:
Reltio Professional Services
Feedback Document

Revision History

Revision	Modified By	Date	Description of Changes
0.1			
0.2			
0.3			
1.0			

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1. Objective

The purpose of this document is to capture the observation & findings from the Reltio Professional Services team review that was conducted for Requirements, Design, and Configuration for the <Project Name> Project. This document also lists any recommendations/changes that we would like to suggest for better results of various processes/jobs. Assessment results of various components are categorized into below 3 categories.

Reltio Professional Services will create this document at the beginning of an engagement. This document will be continually updated and shared with the Customer and Partner on a weekly basis through the end of the engagement.

Assessment Result	Description
GREEN	• Configuration / Customization is done as per the best practices recommended by Reltio • No major concerns observed/found
AMBER	• Configuration / Customization that can be tuned to resolve minor, major functionality, or performance-related issues that have a minor risk/impact to the business process • These issues, while they have a minor impact, are designed to ensure the long term stability and scalability of the application
RED	• These require immediate attention and typically have a major risk or impact to business operations • Configuration or customization that require changes to resolve high risk or impact data, performance and usability issues

2. Requirements Review

2.1. Approved Requirements

The final requirements document is available here <link to document on Customer site>

2.2. Requirements Feedback

Document Reviewed	Functional Requirements Document
Assessment Result	**AMBER**
Observations / Finding	• Use Cases are well documented, but Business Users from Source System X were not involved in Requirements Review and we could be missing requirements from those end users
Recommendation	• Review document with Business Users from Source System X prior to final Design Review
Additional Notes	• None (document what benefits they'll receive from our recommendations) OR • Lower the risk of rework in Testing Phase when users from Source System X are exposed to Reltio for the first time

3. Design Review

3.1. Solution Design Document

The final Solution Design Document(s) is available here <link to document on Customer site>

3.2. Fit / Gap Analysis

The Reltio Fit / Gap Analysis is available here <link to document on Customer site>

3.3. Design Feedback

Document Reviewed	Solution Design Document
Assessment Result	**AMBER**
Observations / Finding	• Current Data Model design requires the use of Reference Attributes and does not align with Reltio Best Practices
Recommendation	• Follow Best Practices and instead of using Reference Attributes, <insert specific recommendation and link to any supporting documentation on Reltio Docs Portal or Customer Sharepoint site>

Additional Notes	• None (document what benefits they'll receive from our recommendations) OR • Use of Reference Attributes is known to lead to Performance Degradation during both data loads and UI usage and will need to be accepted as a risk by <Customer>.

4. Configuration Review

4.1. Data Model Assessment

4.1.1. Source Systems

Object Name	Source Systems
Assessment Result	**GREEN**
Observations / Finding	• Source Systems are configured as per the best practices
Recommendation	• None
Additional Notes	• None (document what benefits they'll receive from our recommendations)

4.1.2. Entity Types

Object Name	Entity: Location
Assessment Result	**GREEN**
Observations / Finding	• Entity & its attributes are configured as per the Best Practices • Location entity is extended from "Location" entity from L2 model. • Surrogate key is already configured for location.
Recommendation	• None
Additional Notes	• None

Object Name	Entity: HCO
Assessment Result	**GREEN**

Observations / Finding	• Entity & its attributes are configured as per the Best Practices • HCO entity is currently extended from the Organization entity from L1 model • HCO is extended from Quintilesims L2 configuration.
Recommendation	• None
Additional Notes	• None

Object Name	Entity: HCP
Assessment Result	**GREEN**
Observations / Finding	• Entity & its attributes are configured as per the Best Practices • HCP entity is currently extended from Individual entity from L1 model •
Recommendation	• None
Additional Notes	• None

Object Name	Entity: Product
Assessment Result	**GREEN**
Observations / Finding	• Entity & its attributes are configured as per the Best Practices • Product entity is currently configured as L3 configuration.
Recommendation	• None
Additional Notes	• None

Object Name	Entity: Product Message Category
Assessment Result	**GREEN**
Observations / Finding	• Entity & its attributes are configured as per the Best Practices • Product Message Category entity is currently configured as L3 configuration.

Recommendation	• None
Additional Notes	• None

Object Name	Entity: MDM Process RunLog
Assessment Result	**AMBER**
Observations / Finding	• MDM Process RunLog entity is currently configured as L2 configuration.
Recommendation	• This may cause performance issue. • Best Practice is to store this outside or Reltio.
Additional Notes	• None

Object Name	Entity: Local Key Message
Assessment Result	**Green**
Observations / Finding	• Entity & its attributes are configured as per the Best Practices • Local Key Message entity is currently configured as L3 configuration.
Recommendation	• None
Additional Notes	• None

Object Name	Entity: MDM DataLoad Log
Assessment Result	**AMBER**
Observations / Finding	• MDM DataLoad Log entity is currently configured as L2 configuration.
Recommendation	• This may cause performance issue. • Best Practice is to store this outside or Reltio.
Additional Notes	• None

Object Name	Entity: MDM Workflow Log
Assessment Result	**AMBER**
Observations / Finding	• MDM Workflow Log entity is currently configured as L2 configuration.
Recommendation	• This may cause performance issue. • Best Practice is to store this outside or Reltio.
Additional Notes	• None

Object Name	Entity: MDM Process RunLog
Assessment Result	**AMBER**
Observations / Finding	• MDM Process RunLog entity is currently configured as L2 configuration.
Recommendation	• This may cause performance issue. • Best Practice is to store this outside or Reltio.
Additional Notes	• None

4.1.3. Relation Types

Object Name	**Relation Types** • There are close to 95 relationship types.
Assessment Result	**RED**
Observations / Finding	• Relation Type & its attributes are configured as per the Best Practices • It is observed that all the relation types listed above share the same set of attributes
Recommendation	• Since all the relation types are split based on the country code, there are same types but by adding the country code in the front makes it unique. • Best practice is to make the relationship type generic. • This could cause performance issue as well.
Additional Notes	• None

Object Name	**Relation Types** • HasAddress • Affiliation • affiliatedwith
Assessment Result	**GREEN**
Observations / Finding	• Relation Type & its attributes are configured as per the Best Practices • It is observed that all the relation types listed above exist in L1.
Recommendation	• None
Additional Notes	• None

4.1.4. Data Validation Functions

Object Name	**Data Validation Functions** • There are over 100 data validation functions.
Assessment Result	**RED**
Observations / Finding	• There are over 100 data validation functions. It is best practice to have under 100 data validation functions
Recommendation	• Reduce the number of data validation functions to avoid performance issues. • Hold a requirements review with the core team to confirm if all configured data validation functions are still required, and can some be combined to optimized performance. .
Additional Notes	• None

4.1.5. Match Rules

HCO Match Rules

Object Name	**Match Rule:** (Suspect) HCO by Name, Addr & Identifier
Assessment Result	**AMBER**

Observations / Finding	• Fuzzy match rule is defined without the match token class • Identifier match attribute is defined without any specific identifier Type. • ExactOrNull operator is used for matching zip4 and Zip5
Recommendation	• It is strongly recommended to configure match token class for fuzzy match rule • Consider using “OrganizationNameMatchToken” for the fuzzy match rule on the entities that are of Organization entity types such as HCO, IDN, GPO, etc • Consider using “AddressLineMatchToken” for the fuzzy match rule on the Address Line attributes such as AddressLine1, AddressLine2. • Use ExactOrAllNull instead of ExactOrNull operator to avoid matching records with one record having Zip4/Zip5 and the other missing/null Zip4/Zip5 attribute value • Configure Identifier Type value such as HMS, NPI to avoid records matching on the identifier which are not trustworthy. • Consider adding exact match on Type and Sub Type to avoid records matching across different types
Additional Notes	None

Object Name	**Match Rule:** (Automatic) HCO by Name, Addr & COT
Assessment Result	**AMBER**
Observations / Finding	• ExactOrNull operator is used for matching zip4 and Zip5 • Fuzzy matching is used in automatic match rule.

Recommendation	• It is strongly recommended to configure exact match on additional identifier for automatic match rule to avoid over matching and incorrect merging • Consider using “OrganizationNameMatchToken” for the fuzzy match rule on the attributes that belong to Organization entity types such as HCO Name. • Use ExactOrAllNull instead of ExactOrNull operator to avoid matching records with one record having Zip4/Zip5 and the other missing/null Zip4/Zip5 attribute value • Consider adding exact match on Type and Sub Type to avoid records matching across different types
Additional Notes	None

Object Name	**Match Rule:** (Suspect) HCO by Name, Addr & DEA
Assessment Result	**AMBER**
Observations / Finding	• Fuzzy match rule is defined without the match token class • ExactOrNull operator is used for matching zip4 and Zip5
Recommendation	• It is strongly recommended to configure match token class for fuzzy match rule • Consider using “OrganizationNameMatchToken” for the fuzzy match rule on the attributes that are belongs to Organization entity types such as HCO Name. • Consider using “AddressLineMatchToken” for the fuzzy match rule on the Address Line attributes such as AddressLine1, AddressLine2. • Use ExactOrAllNull instead of ExactOrNull operator to avoid matching records with one record having Zip4/Zip5 and the other missing/null Zip4/Zip5 attribute value • Consider adding exact match on Type and Sub Type to avoid records matching across different types
Additional Notes	None

Object Name	**Match Rule:** (Suspect) HCO by Addr, DEA
Assessment Result	**AMBER**
Observations / Finding	• Fuzzy match rule is defined without the match token class • ExactOrNull operator is used for matching zip4 and Zip5 • Very loose match rule with only address and DEA number.
Recommendation	• It is strongly recommended to configure match token class for fuzzy match rule • It is recommended to configure exact match on additional identifier to avoid over matching • Consider using “AddressLineMatchToken” for the fuzzy match rule on the Address Line attributes such as AddressLine1, AddressLine2. • Use ExactOrAllNull instead of ExactOrNull operator to avoid matching records with one record having Zip4/Zip5 and the other missing/null Zip4/Zip5 attribute value • Consider adding exact match on Type and Sub Type to avoid records matching across different types
Additional Notes	None

Object Name	**Match Rule:** (Suspect) HCO by Name, Addr
Assessment Result	**AMBER**
Observations / Finding	• ExactOrNull operator is used for matching zip4 and Zip5 • Very loose match rule with only Name and address.
Recommendation	• It is recommended to configure exact match on additional identifier to avoid over matching • Use ExactOrAllNull instead of ExactOrNull operator to avoid matching records with one record having Zip4/Zip5 and the other missing/null Zip4/Zip5 attribute value • Consider adding exact match on Type and Sub Type to avoid records matching across different types
Additional Notes	None

Object Name	**Match Rule:** (Automatic) HCO by Name, Addr & DEA Exact
Assessment Result	**GREEN**
Observations / Finding	• ExactOrNull operator is used for matching zip4 and Zip5
Recommendation	• Use ExactOrAllNull instead of ExactOrNull operator to avoid matching records with one record having Zip4/Zip5 and the other missing/null Zip4/Zip5 attribute value • Consider adding exact match on Type and Sub Type to avoid records matching across different types
Additional Notes	None

Object Name	**Match Rule:** (Automatic) HCO by Name, Addr & COT Exact
Assessment Result	**RED**
Observations / Finding	• ExactOrNull operator is used for matching zip4 and Zip5 • Automatic match rule without any exact match criteria on any identifier
Recommendation	• Use ExactOrAllNull instead of ExactOrNull operator to avoid matching records with one record having Zip4/Zip5 and the other missing/null Zip4/Zip5 attribute value • Consider adding exact match on trusted identifier type and ID • Consider adding exact match on Type and Sub Type to avoid records matching across different types
Additional Notes	This is possibly the root cause of the below reported issue • Data is merging within trusted source that should not be merged

Object Name	**Match Rule:** (Suspect) HCO by Identifier HIN HCO by Identifier SIF HCO by Identifier NPI
Assessment Result	**GREEN**

Observations / Finding	• Separate rules configured for individual IDs
Recommendation	• Consider combining these 3 rules into one rule by using Equals on Identifier Type attribute • Consider adding exact match on Type and Sub Type to avoid records matching across different types
Additional Notes	None

HCP Match Rules

Object Name	**Match Rule:** (Automatic) HCP by Name, Addr & Identifier
Assessment Result	**RED**
Observations / Finding	• Fuzzy match rule is defined without the match token class • Identifier match attribute is defined without any specific identifier Type. • ExactOrNull operator is used for matching zip4 and Zip5
Recommendation	• It is strongly recommended to configure match token class for fuzzy match rule • Consider using “ComplexPhoneticNameToken” for the fuzzy match rule on the entities that are of Individual entity types such as HCP, Employee, etc • Consider using “AddressLineMatchToken” for the fuzzy match rule on the Address Line attributes such as AddressLine1, AddressLine2. • Use ExactOrAllNull instead of ExactOrNull operator to avoid matching records with one record having Zip4/Zip5 and the other missing/null Zip4/Zip5 attribute value • Configure Identifier Type value such as HMS, NPI to avoid records matching on the identifier which are not trust worthy.
Additional Notes	None

Object Name	**Match Rule: (Automatic)** **HCP by Na**me & Identifier
Assessment Result	**AMBER**

Observations / Finding	• Fuzzy match rule is defined without the match token class • Identifier match attribute is defined without any specific identifier Type. • ExactOrNull operator is used for matching zip4 and Zip5
Recommendation	• It is strongly recommended to configure match token class for fuzzy match rule • Consider using “ComplexPhoneticNameToken” for the fuzzy match rule on the entities that are of Individual entity types such as HCP, Employee, etc • Use ExactOrAllNull instead of ExactOrNull operator to avoid matching records with one record having Zip4/Zip5 and the other missing/null Zip4/Zip5 attribute value • Configure Identifier Type value such as HMS, NPI to avoid records matching on the identifier which are not trust worthy.
Additional Notes	None

Object Name	**Match Rule:** <<Additional Rule>>
Assessment Result	**RED**
Observations / Finding	• Negative match rule is not configured for HCP entity
Recommendation	• Consider adding negative match rule to avoid matching records with different HMS IDs • Also it is strongly recommended to configure stricter automatic match rule to merge the obvious match pairs to avoid generating a lot of potential matches
Additional Notes	None

Payer Match Rules

No match rules configured

PBM Match Rules

No match rules configured

4.1.5 Survivorship Rules

Location Entity

Object Name	**Location Survivorship**
Assessment Result	**AMBER**
Observations / Finding	• Custom survivorship rules are configured for Location attributes such as AddressLine1, City, State, Country, etc.
Recommendation	• It is recommended to user “Reltio Cleanser or Nothing” rule for Location attributes which are inherited from L2.
Additional Notes	None

HCO Entity

Object Name	**HCO Survivorship**
Assessment Result	**GREEN**
Observations / Finding	• Survivorship rules configured as per the Best practices • Aggregation strategy is used for Identifier attribute
Recommendation	• It is recommended to configure survivorship rule for Individual Identifier Type. Consider using complex survivorship rule for identifier that should always have only one record such as HMS ID.
Additional Notes	None

HCP Entity

Object Name	**HCP Survivorship**
Assessment Result	**GREEN**
Observations / Finding	• Survivorship rules configured as per the Best practices • Aggregation strategy is used for Identifier attribute

Recommendation	• It is recommended to configure survivorship rule for Individual Identifier Type. Consider using complex survivorship rule for identifier that should always have only one record such as HMS ID.
Additional Notes	None

Payer Entity

Object Name	**Payer Survivorship**
Assessment Result	**GREEN**
Observations / Finding	• Survivorship rules configured as per the Best practices • Aggregation strategy is used for Identifier attribute
Recommendation	• It is recommended to configure survivorship rule for Individual Identifier Type. Consider using complex survivorship rule for identifier that should always have only one record such as HMS ID.
Additional Notes	None

PBM Entity

Object Name	**PBM Survivorship**
Assessment Result	**GREEN**
Observations / Finding	• Survivorship rules configured as per the Best practices • Aggregation strategy is used for Identifier attribute
Recommendation	• It is recommended to configure survivorship rule for Individual Identifier Type. Consider using complex survivorship rule for identifier that should always have only one record such as HMS ID.
Additional Notes	None

4.1.6 Hierarchies & Graphs

Object Name	**HCO Hierarchy**

Assessment Result	**GREEN**
Observations / Finding	• Generic ParentChild relation type from L2 model is used in the Hierarchy configuration
Recommendation	• Consider changing the generic ParentChild relation type to the specific relation types configured in L3 such as HCO to IDN, HCO to GPO, etc
Additional Notes	None

4.1.7 Life Cycle Actions

Object Name	•
Assessment Result	**GREEN**
Observations / Finding	•
Recommendation	•
Additional Notes	•

4.1.8 Workflow Management

Workflow feature is not used in this application

4.1.9 Data Tenant Subscription Assessment

4.1.9.1 Subscription Configuration

Object Name	**HMS DT Subscription**
Assessment Result	**AMBER**
Observations / Finding	• configuration/entityTypes/IDN/matchGroups/ExactHMS match rule configure for GPO entity
Recommendation	• Correct the match rule URI for the GPO entity from HMS DT tenant
Additional Notes	None

4.1.10 UI application Assessment

4.1.10.1Entity Profile management screens

Object Name	**HCO Entity View**
Assessment Result	**RED**
Observations / Finding	• Below listed Reference attributes configured for HCO entity might cause performance issue in UI application and other background processes due to large number of relation records that are displayed as reference attribute values o HCO to HCO o HCO to IDN o HCO to GPO o HCO to HCP • Relation facets are not configured in the HCO profile view
Recommendation	• It is strongly recommended to remove below listed attribute from the HCO profile view • Configure relationship facets for various relation types that exist for the HCO entity
Additional Notes	None

4.1.10.2 Search & Filtering capabilities

Object Name	**Search & Filters for Entities**
Assessment Result	**GREEN**
Observations / Finding	• Configured as per Reltio's Guideline
Recommendation	• Consider configuring default faceted attribute for better usability
Additional Notes	None

4.1.10.3 Graphs & Charts

Object Name	**Legal Entity Hierarchy Configured**
Assessment Result	**GREEN**
Observations / Finding	• Configured as per Reltio's Guideline
Recommendation	None
Additional Notes	None

4.1.11 Security configuration Assessment

4.1.11.1 User roles configured in the system

Object Name	**User Role:** ROLE_MNK_DS READ_ONLY
Assessment Result	**GREEN**
Observations / Finding	• Generic user role "READ_ONLY" is used in the application
Recommendation	• It is recommended to create a separate Read Only user role specific to Mallinckrodt application. The user role name could be "ROLE_MNK_READ_ONLY"

Additional Notes	None

4.11.2.1 Meta-data security & Endpoint security

Object Name	**Meta-data security**
Assessment Result	**GREEN**
Observations / Finding	• Meta-data security is configured correctly by following the best practice
Recommendation	• Consider changing the grant on all relation types to specific one to avoid DS role getting access to any new relations that might be added in the future
Additional Notes	None

5. Overall Architecture Assessment

5.1 Integration touchpoints

5.1.1 Source Data Extraction Layer

Object Name	**ETL - Inbound**
Assessment Result	**GREEN**
Observations / Finding	• Configured as per Reltio's Guideline
Recommendation	None
Additional Notes	None

5.1.2. Data Loading Layer

Object Name	**Data Load**
Assessment Result	**GREEN**
Observations / Finding	• Designed as per Reltio's Guideline
Recommendation	None
Additional Notes	None

5.1.3. Reltio Data Publish / Extract Layer

Object Name	**Publish Logic**
Assessment Result	**RED**
Observations / Finding	• Downstream publish layer is currently not handling the merge scenario correctly which is causing the mismatch in the count between Reltio and the publish layer database
Recommendation	• Modify publish code to handle merge scenarios. When records are merged in Reltio then publish layer should remove the loser MNK ID from the publish layer database
Additional Notes	This is possibly the root cause of the below reported issue • Counts between Reltio and Publish layer not matching

6. Executive Summary

Below are the highlights of the Reltio Reviews of Requirements, Design, and Configuration

- Data model is configured as per the best practices recommended by Reltio. Few minor changes are recommended in the Data Model section to set the application for future upgrades
- Data Inbound & Outbound Layer is aligned with the standard integration layer followed by many other customers.
- Reltio's Standard life sciences UI configuration is used for the application. It is recommended to configure additional UI facets based on my understanding of the requirement.
- One critical issue was identified in the publish module which might be causing the data issues that was reported. This issue should be assessed further and resolved as soon as possible to avoid reporting on inaccurate data.
- Considering the nature of the data, tuning of some of the match rule is recommended for the performance improvement and to avoid over/under merging.
- Add high level description of the finding on the under matches HMS records with HMS DT data – HMS Quarterly data v/s DT data

7. Recommendation Trackers

Issue #	Issue Description	Planned Fix Date	Status	Notes
	Downstream publish layer is currently not handling the merge scenario correctly which is causing the mismatch in the count between Reltio and the publish layer data base			
	Multiple HMS records having different HMS IDs are merging together causing incorrect entity views			