Mitsui Sumitomo Insurance Group – Guidewire ClaimCenter

WC Conversion Strategy

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# Version History

| **Version #** | **Date Updated** | **Revision Author** | **Brief description of changes** |
| --- | --- | --- | --- |
| 1.0 | 5/20/2022 | Sri P/ Saswat C | * Draft Conversion Strategy – Created Initial Version |
| 1.0 | 5/20/2022 | Rashmi | * Mapping Section |
| 1.0 | 5/20/2022 | Naga K | * ETL Section |
| 1.1 | 6/11/2022 | Sri P | * Updated CSP link in References and in Development Strategy |
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# Approvals

| **Name** | **Title** | **Approval Required [Yes/No]** | **Date** |
| --- | --- | --- | --- |
| Jonathan Charters | Deputy Chief Information officer (MSIG) | Yes | 6/13/2024 |
| Michelle Henderson | Program Manager (MSIG) | No (Review only) | 6/11/2024 |
| Merk, Doug | Data Domain Owner (MSIG) |  |  |
| Heuerman, Robert | Digital Product Owner (MSIG) |  |  |
| Rocereta, Stephanie | Program Manager (MSIG) |  |  |
| Ravi Kotian | Engagement Manager & Guidewire Domain Owner (MSIG) | No (Review only) |  |
|  |  |  |  |
|  |  |  |  |

# Overview

The primary goal for data conversion is to migrate the WC claims data from the following MSIG legacy systems to Guidewire ClaimCenter on GW Cloud for Workers Comp Claims:

* WINS- Policy and coverage related entities
* iVos - WC Claims

This strategy document is intended to address only WC Claims data conversion. As such, some work that may be part of the overall Guidewire Cloud Upgrade project will be considered out of scope for this document, but that work may be included as part of configuration or integration work stream. This document takes a high-level look at the various data conversion strategies to migrate claims data from the source systems to Guidewire ClaimCenter on GW Cloud.

# Scope

The following sections describe items in scope for the Data Conversion Strategy of the Claims Transformation Project and those out of scope for the strategy. The scope of this document is to address:

1.        Claims Data migration from iVos System to Guidewire ClaimCenter on GW Cloud

2.        Development Strategy

3.        Deployment Strategy

Assumptions and Risks are documented in a separate section.

## In Scope

This section identifies the list of claims, their data subject areas, target systems, source systems, and the downstream impact which are moving from iVos and WINS system to Guidewire  ClaimCenter.

Total WC Claims ~300,000 will be converted from iVos to Guidewire ClaimCenter

* All WC claims in iVos
* All WC open Activities from iVos
* Related Policy and Coverage information from WINS

The following table lists the high-level migration requirements for each of the key areas in ClaimCenter:

|  |  |
| --- | --- |
| **Area** | **Migration requirements** |
| Basic Claim Details | * + The basic claim itself, including details regarding date of loss, type of loss, ClaimCenter identity type, legacy claim number, the user assigned to the claim, other assigned user(s) need to be migrated   + All extensions within V9 entities |
| Policy | * + Policy snapshot information relevant to claims migrated into ClaimCenter   + This is intended to capture relevant coverage information when the loss was incurred.   + Policy snapshot will include policy endorsements and cover extensions   + The policy snapshot will only include risk units attached to the claim being migrated (i.e. not all the risk units attached to the policy) |
| Exposures and Incidents | * + Create exposures and incidents based on the claims data and cost categories form the source system |
| Parties involved | * + Claim contacts and parties involved, i.e. the insured, claimant(s), payee(s) and vendor(s)   + In addition to the above all the Joint Policyholders on the policy will be migrated |
| Financials | * + All the financial transaction history (reserves, payments, recovery reserves, recoveries) including check numbers and masked bank account details from the source system will be migrated into ClaimCenter   + All in progress transactions will be completed in iVos before migration. |
| Users | * + Users are loaded as part of Configuration workstream as part of Admin Data. |
| Notes | * + All notes from iVos will be migrated |
| Documents | * + Only Document Metadata will be migrated. Actual Documents will migration to LaserFische is not part of Conversion process. |
| History | * + There is a decision that we will not migrate the full transactional claim history from the source system other than financials |
| Activity | * + Only Open Diaries are migrated to GW Cloud ClaimCenter |
| Coverage | * + Coverage related entities will be populated from WINS |
| Deductible Billing | * + Deductible Billing related data will be migrated from WINS in accordance with Configuration requirements. |
| Outbound Integration Feeds | The following are identified as potential outbound integration feeds that could require historical data:   * ISO Accelerator (Indemnity Data call/ISO reporting/Medical Data call/Unit Stat/FROI/SROI). * Risk Console Feed * CLARA * Power2Pay * Corvel * Genex |

The detail list CC entities that are identified to be in scope are documented in:

[CMT\_Table list use for Estimation\_Updated.xlsx](https://msighusa.sharepoint.com/:x:/s/GuideWireCore/Ed_XsnqBEnlLtqXiiu6WgmIBOGqrCqTtyBh3awa-fFiYdw?e=eEgnHc)

### 

## Out of Scope

* Conversion of GAI Claims, CMT
* Any non-WC or Ohio State Funded and West Virginia State Fund Claims from iVos
* Any data elements in the source systems that are not needed to implement ClaimCenter are out of scope.
* Any optional data element in ClaimCenter not found in source iVos System is not required for ClaimCenter conversion processing.
* Admin data will not be covered by the Conversion team, as this will be populated based on the integration and configuration processes. This includes User and Group information and other reference data
* Archiving requirements for converted claims will not be addressed as part of data conversion.
* Closed Diaries/Activities in iVos
* Documents/Forms stored as blobs in iVos

# Development Strategy

* The Technical Lead will develop and maintain a sprint release schedule as part of managing this initiative.
* Conversion will be tested in increasing volumes to test the code in sequential sprints until the code is tested against all data planned to be converted. This will set the stage for performance testing and deployment.
* SMART Mapper tool will used to generate template required for all CC entities and typelists
* Mapping will handle code conversions between source systems and ClaimCenter.
* Development sequence will be as per Conceptual Sprint Plan, listed below and can be found at

[CSP\_Revised LOB Work.xlsx](https://msighusa.sharepoint.com/:x:/s/GuideWireCore/EcEavQBAqAlKuJJ3K2Exrm8BxQzfvNs-pdEtOamUqm-hUQ?e=rIPolb)

## Roles and Responsibilities

The following are the individuals responsible for data conversion along with details of how they will be involved:

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Role** | **No. of resources** | **Responsibilities** |
| 1 | Technical Leads  (Onsite and Offshore) |  | **Responsibilities include:**   * Plan and lead Sprints * Conversion Scrum Master * Planning and estimation for acquiring the right and appropriate resources |
| 2 | MSIG Product Owner |  | Data Product Owner  **Responsibilities include:**   * Approve all development User Stories * Approve data reconciliation metrics |
| 3 | MSIG SME |  | MSMM SME for legacy systems  **Responsibilities include:**   * Assisting conversion BA in mapping requirements. * Evaluate conversion impacts on downstream systems. |
| 4 | Conversion BA |  | Accenture resource  **Responsibilities include:**   * Define the data conversion Strategy and ensure it is achieved * Subject area data mapping * Collect subject area data mapping sign-off * Create data subject area key structure. * Data conversion schedule * Conversion test scheduling * Monitor data conversion testing * Log test results * Report and track defects * Review all testing artifacts * Status reporting * Defining reconciliation reports * Management of the Mapping data |
| 5 | Conversion Developers |  | Implements and executes the tests (Manual)**Responsibilities include:**   * Data conversion System Architect * Requirement review * Use Case coding * Conversion schedule maintenance * Conversion test runs * Log test results * Report and track defects * Review all testing artifacts * Status reporting * Participates in walk-through of test strategy |
| 6 | MSIG Resource |  | Run Conversion Production processes and manage any problems that may arise. |

# Mapping Strategy

* SMART Mapper will be used to generate Mapping Sheet templates for all CC entities in scope for Conversion
* MSIG BAs and Accenture BA will work together in recurring working sessions to perform the following key activities involved in mapping
  + Identify Source Data Quality Rules
  + Identify Technical and Functional gaps
  + Perform Data Profiling and Analysis
  + Create Reference Typelist mapping
  + Create Transformation Rules
  + Identify Data Validation Rules
  + Define Reconciliation Metrics

The following RACI details the various activities and owners of the tasks involved:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task** | **R** | **A** | **C** | **I** |
| Identify Source tables | MSIG | MSIG | ACN | ACN |
| Identify Source columns | MSIG | MSIG | ACN | ACN |
| Create iVOS SQL queries (select clauses) | MSIG | MSIG | ACN | ACN |
| SQL query FROM & JOINs | MSIG | MSIG | ACN | ACN |
| Configure WHERE (filter) clauses | MSIG | MSIG | ACN | ACN |
| Column mappings/Transformations/Case  Configure SQL column functions (Concat, trim, substr, length, etc.) | MSIG | MSIG | ACN | ACN |
| Map iVOS typelists to GW | MSIG | MSIG | ACN | ACN |
| Identify Business Keys in Source tables | MSIG | MSIG | ACN | ACN |
| Map Foreign Keys in GW Target tables | MSIG | MSIG | ACN | ACN |
| Identify Primary Key columns in Source tables | MSIG | MSIG | ACN | ACN |
| Identify mandatory fields from Source tables | MSIG | MSIG | ACN | ACN |
| Identify default values and Hard-coded values for mandatory Target fields | MSIG | MSIG | ACN | ACN |
| Identify fields required by ClaimCenter UI and ClaimCenter DB | MSIG | MSIG | ACN | ACN |
| Provision base SmartMapper sheet for each CC entity | ACN | ACN | MSIG | MSIG |
| Mapping of PMT ID | ACN | ACN | MSIG | MSIG |
| Mapping of PMT Payload ID | ACN | ACN | MSIG | MSIG |
| Identify Primary Key columns in Target Table | ACN | ACN | MSIG | MSIG |
| Identify/explain Target entities | ACN | ACN | MSIG | MSIG |
| Identify/explain Target columns | ACN | ACN | MSIG | MSIG |
| Create/Modify entities in Target Model/Schema | ACN | ACN | MSIG | MSIG |
| Implement ClaimCenter Config Entity rules (Integrity rules) | ACN | ACN | MSIG | MSIG |
| Mapping Update/communication | MSIG | MSIG | ACN | ACN |
| Triage Mapping with Dev and QA | ACN | ACN | MSIG | MSIG |
| Support Defect fixes due to Mapping issues | ACN | ACN | MSIG | MSIG |
| Troubleshoot Load errors/issues with Dev and QA (e.g. data quality issues,wrong joins,wrong se  lection criteria, etc.) | ACN | ACN | MSIG | MSIG |

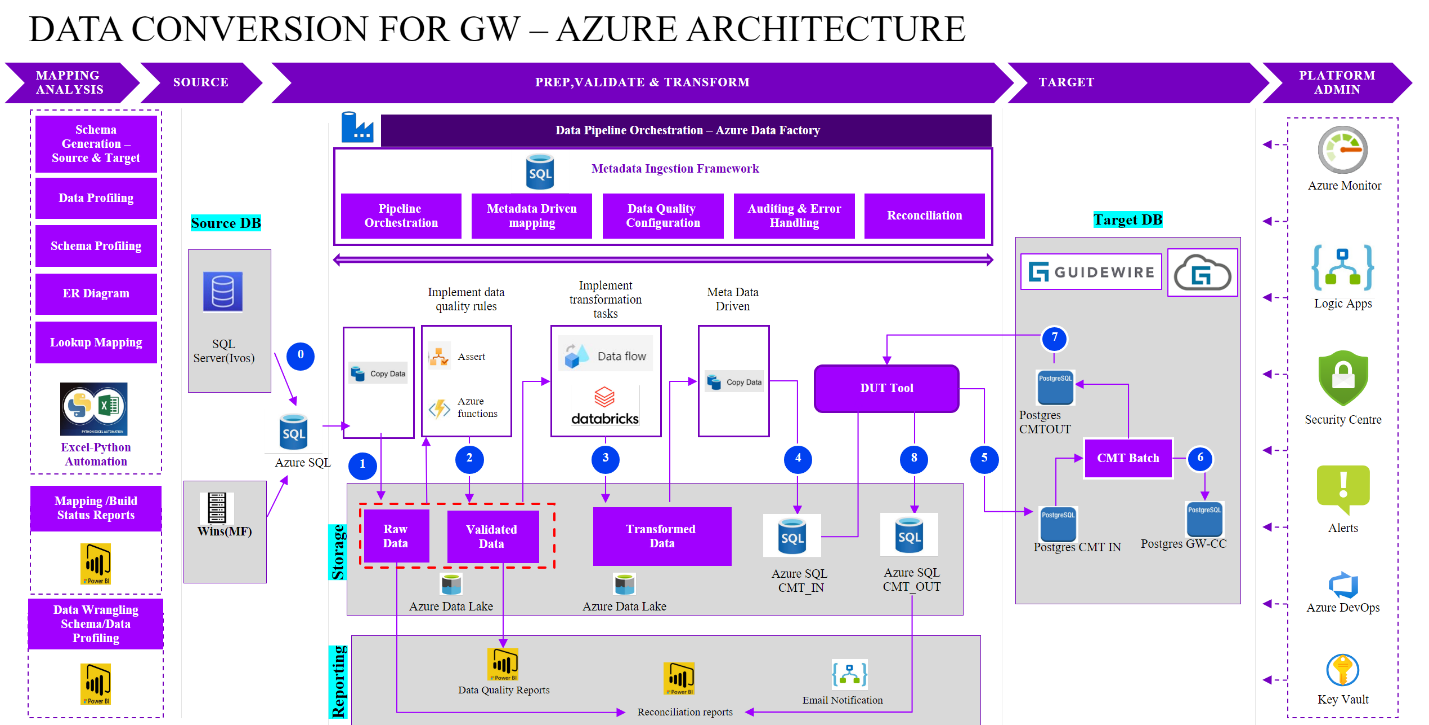
**R=Responsible**

**A= Accountable**

**C= Consulted**

**I=Informed**

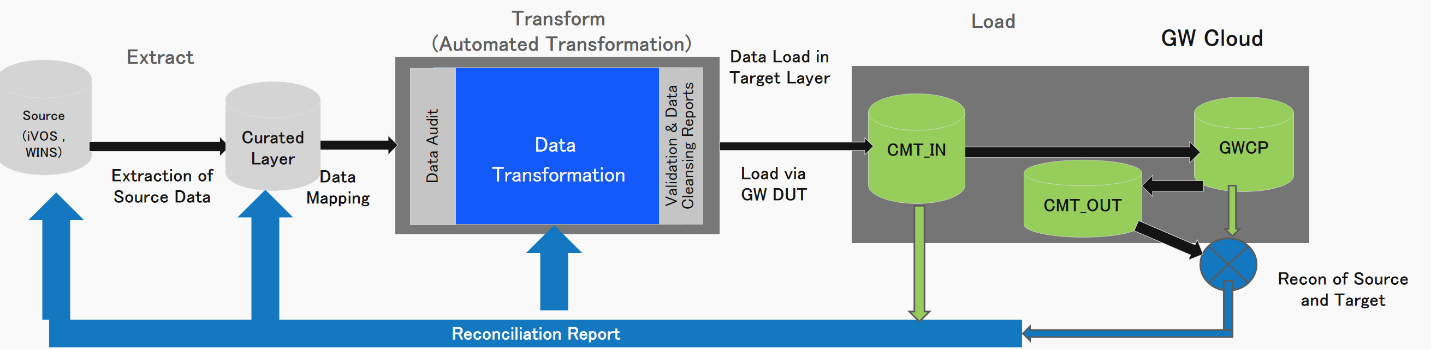
# ETL Strategy & Architecture



* **Step 1:** Extract the Ivos and Wins data to Azure SQL in MSMM tenant. Extract only required tables which are relevant for claims conversion process.
* **Step 2:**  Copy the data from Azure SQL using ADF and load into RAW layer which ADLS storage account in Azure data lake. It is one to one push from azure SQL to Azure DataLake
* **Step 3:**  Apply the technical data quality (DQ) rules defined by MSIG e.g.: Null, length, blank, date, string, number etc using Azure function. Valid records which passed thorough the DQ rules will be moved to validated layer in same Azure data lake zone. The non validated ones will be moved to error table. Power BI reports will create the report for these DQ failure records.
* **Step 4:** Validated records will undergo transformation layer using Azure Databricks (pyspark). The transformation logic will be read from mapping sheet which is provided by BA. All the column logic - select criteria, column mappings will be coded using pyspark code. The transformed data will reside in Azure data lake
* **Step 5:** The transformed the data will be moved to Azure SQL DB using copy activity. This will be one to one straight data move from azure data lake to Azure SQL DB
* **Step 6:** CMT\_IN and CMT\_OUT schema which are generated by CMT/DUT tool will be created in Azure SQL DB in MSIG Azure tenant. CMT\_IN and CMT\_OUT schema in MSIG azure tenant is exact replica for GW CMT\_IN and CMT\_OUT schema.
* **Step 7:** DUT tool will transfer the data from MSIG Azure SQL CMT\_IN DB to GW cloud CMT\_IN. CMT will pick each claim as one payload and loads to GW CC. Under the hood it validates the records using OOTB validation rules and if the records satisfy the rules will be loaded successfully to GW CC.
* **Step 8:** Any records that did not satisfy the CC rules will be rejected to CMT\_OUT in GW cloud as well in MSIG Azure SQL DB
* **Step 9:** Technical reconciliation will be carried out across each layer (Azure SQL vs Raw layer), Raw layer vs Validated Data layer, Validated Data layer vs Transformed Data layer, Transformed Data layer vs CMT\_IN, CMT\_IN vs CMT\_OUT
* **Step 10:** Functional reconciliation will be performed on functional KPIs given by business.
* **Step 11:**  Error/Exception handling is performed across all the layers.
* **Step 12:** The ETL orchestration is performed using ADF pipeline and framework tables are used for metadata ingestion framework, DQ, Audit/Recon, Pipeline Orchestration.

# **Rollout/Deployment Strategy:**

Legacy WC Claims can be converted either using “Big Bang” approach or in a “Phased” approach. The following diagram shows the data flow for both the approaches. Due to low volume of WC claims (~300k), it is assumed that "Big Bang" approach will be followed for legacy WC claims conversion.



1. Data is Extracted and curated into Transformed Layer
2. Data is loaded from Transformed Layer to Guidewire cloud CMT\_IN database using Data Upload Tool (DUT)
3. DUT is used to transfer "chunks of payloads
4. DUT reads payloads with status "NEW" and changes status to "SEND" if data is successfully delivered to Guidewire Cloud
5. DUT does not validate payloads
6. Validation is done in CMT tool
7. Reconciliation reports are generated across the data hops using PowerBI

## **Rollout Approach:**

The following are 2 options for converting claims during go live:

* **Big Bang**: Converting all ~300k claims at once. This is a cleaner and simpler way but also time consuming. The performance in lower environments will give the benchmarks necessary to make the decision.
* **Phased Approach**: Active Claims will be converted first, parallelly closed claims can go through Extract and Transformation Layer and staged before migrating them to GWC using DUT. This approach does not require ClaimCenter to be in maintenance mode in the Cloud. This requires careful orchestration and filtering of the data from the source and more comprehensive Reconciliation needs to be done to make sure there are no claims left behind.

MSIG’s preference and Accenture’s recommendation is to go with Big Bang approach. Performance Benchmark needs to be set in later stages of the Delivery timeline (Sprint 15-16) or during Stabilization phase Sprint 18 -19.

# Testing Strategy:

A diagram of a conversation

Description automatically generated

More details about testing strategy can be found at:

[​docx icon](https://msighusa.sharepoint.com/:w:/s/GuideWireCore/Ed9DfBrd0ylLjwxSQY2AhacBwNGq1P2jPCT3eGECIgsaKQ?e=mpYV2B)

[MSIG-Guidewire Insurance Suite - QA Strategy-V1.9.docx](https://msighusa.sharepoint.com/:w:/s/GuideWireCore/Ed9DfBrd0ylLjwxSQY2AhacBwNGq1P2jPCT3eGECIgsaKQ?e=mpYV2B)

[​pptx icon](https://msighusa.sharepoint.com/:p:/s/GuideWireCore/Ed5JLNJ3YohCpZPykO9BFAABmd4zuXyrCXag1ssO8j0PWg?e=g9y7oj)

[MSMM R1 QA Strategy Update\_0509\_V1.2.pptx](https://msighusa.sharepoint.com/:p:/s/GuideWireCore/Ed5JLNJ3YohCpZPykO9BFAABmd4zuXyrCXag1ssO8j0PWg?e=g9y7oj)

Deployment Plan:

Pre Migration Activity:

Env setup/Readiness:

1.**DB setup**

Refer to Dev env DB configuration and replicate same in production env.Ensure the DBO schema is provisioned .

Below DBs to be created:

* Framework
* CMT\_IN
* CMT\_OUT
* Stage

Ensure read/execute/write access is given to user ()

2.**Azure services /Infra setup**

Please refer attach documentation



3.**Azure Devops(CI/CD pipeline) set up**

Please refer attach documentation



4.**CMT/DUT set up**

Please refer attach documentation



5.**Claimcenter** :

Ensure cc is up and running with cluster environment. Ensure Claim admin data load is completed (ICD,User,group,Catastrophe data are loaded )

Rollout plan:

Basically we have multiple options for roll out

1.Big bang

Convert all claims (exact claim volume to be added) at one go over a weekend. Ensure entire process (Stg table load,Raw layer,Pre\_CMTIN,CMT\_IN and GW CC ) is completed within the given SLA approved by business

2.Phased wise

Data can be split into multiple subsets in order to facilitate the production delivery strategy and/or time frames. The data would need to be migrated laterally (by unit of work e.g. a Claim or Account) rather than vertically (by table or entity) in order to be successful. Data can be segmented in multiple ways:

• Functional business partition

This type of segmentation strategy typically follows the configuration rollout strategy, but this is not necessarily a requirement.

o Claim Status (Open/closed)

o Geography

 Region

 Office

• Time‐based criteria

o Date range

o Financial criteria(Claims with open reserves/Payment ):maximum financial reserve /payment amount

* User/Group
* Incident only claims

**Rollback/Back up/Restore** :

Take back up of CC DB before migration starts.in case of any migration failure happened we can restore the DB back up. Back up and restore procedure will be followed as per GW guidelines and documentation . Need to attach CC DB back up and restore documentation

**Production go live day data load steps**:

Steps to be executed for conversion to load in GW CC :

1.STG table data load

2.Framework DB insert scripts execution

3.Azure ADF pipeline execution

4.CMT/DUT execution

**Batch Metrics**:

Each Data load phase Metrics. Naga to add the excel

After the migration is successful please ensure the Financial KPIs are as expected.

**Key financial KPIs to be verified:**

* Total payment amount per claim
* Total reserve amount per claim
* Total recovery amount per claim
* Total claim cost amount per claim
* Total claim expense amount per claim

**Post migration activity**:

CC Integration/Config batch: which all batches required for migrated data

**DBCC batch**:

Run the database consistency checks This is to document any inconsistencies which may currently exist in the database. The results of this execution will be compared to those of one executed after the data migration to ensure that the imported data did not cause any inconsistencies.

**QA** :

Do some sanity checks for few claims in CMT\_IN DB and CC UI

* **CC UI Verification will be on the converted claims** :  
  Verify the summary section of the claim  
  Verify the Workplan contents  
  Verify the Loss details  
  Verify the exposures  
  Verify the Parties involved section (Contacts & user)  
  Verify the Policy information  
  Verify the Financials section (Summary, transactions, financial recoveries, Checks)  
  Verify Plan of Action Section  
  Verify Notes  
  Verify Litigation
* Verify History
* Verify the concurrent employment and claim workcomp
* Verify Injury incident, subrogation screen
* **Claim handling features on the converted  claims**:   
  Creation of Notes  
  Creation of Matter/Litigation  
  Creation of Services  
  Create/edit Reserves  
  Creation of Checks, Recoveries, Recovery reserves  
  Creation of Activities  
  Creation of Exposure  
  Allow claim Reassignment  
  Print claim  
  Close claim  
  Reopening the closed claim  
  Changes to loss details screen

**Ensure the Claim is not getting modified ivos screen after successful migration**

# Sign off criteria:

* Financial KPis should match between Ivos and CC .
* Claim can be in editable after migration
* CC batch should be able to execute successfully for migrated claims
* No mandatory DBCC issues
* Downstream application(DWH,GL,Regulatory team) can consume data without any issues

# Assumptions

* GA Claims conversion is out of scope
* CM conversion is out of scope
* Only Open Diaries are converted to ClaimCenter Activities
* Document/FORM conversion is out of scope
* MSIG is responsible for provisioning the required Azure services for Claims Conversion

# Risks

* Delay in Azure Services provisioning
* Merging the extensions frequently from ongoing Configuration/Integration Activities will need to be managed with attention, so all conversion related extensions are accounted for.
* Availability of iVos and CMT product SME & BAs

# References

* Claims Inventory List:

[CMT\_Table list use for Estimation\_Updated.xlsx](https://msighusa.sharepoint.com/:x:/s/GuideWireCore/Ed_XsnqBEnlLtqXiiu6WgmIBOGqrCqTtyBh3awa-fFiYdw?e=eEgnHc)

* Conceptual Sprint Plan:

[CSP\_Revised LOB Work.xlsx](https://msighusa.sharepoint.com/:x:/s/GuideWireCore/EcEavQBAqAlKuJJ3K2Exrm8BxQzfvNs-pdEtOamUqm-hUQ?e=rIPolb)

* Scope List:

[CMT\_Table list use for Estimation\_Updated.xlsx](https://msighusa.sharepoint.com/:x:/s/GuideWireCore/Ed_XsnqBEnlLtqXiiu6WgmIBOGqrCqTtyBh3awa-fFiYdw?e=C05xer)

* Mapping RACI:

[MigrationMappingRACI.xlsx](https://msighusa.sharepoint.com/:x:/s/GuideWireCore/ERN9pVOIuBJEu1Aj6KW7G6gBV9m3aCTMaOdHgA7WhRyRww?e=wZtftv)

* Azure Resource List with expected Need by Date:

[MSMM -Azure Resource List.xlsx](https://msighusa.sharepoint.com/:x:/s/GuideWireCore/EfeSyhpgymxAiiNAG5O-Cg4BRR-yPDfEjR9boU-JH9mjJA?e=uOgE5R)

* QA Strategy Links:

[MSIG-Guidewire Insurance Suite - QA Strategy-V1.9.docx](https://msighusa.sharepoint.com/:w:/s/GuideWireCore/Ed9DfBrd0ylLjwxSQY2AhacBwNGq1P2jPCT3eGECIgsaKQ?e=mpYV2B)

[MSMM R1 QA Strategy Update\_0509\_V1.2.pptx](https://msighusa.sharepoint.com/:p:/s/GuideWireCore/Ed5JLNJ3YohCpZPykO9BFAABmd4zuXyrCXag1ssO8j0PWg?e=g9y7oj)