Document Attributes

| **Attribute** | **Value** |
| --- | --- |
| Application ID /  Application Name | MOTS ID: 14724  PRISM ID: 309623  Application Name: EDF |
| Owner | Yun Wan/Akarsh V |
| Owner Contact Information | Phone:  Attuid: yw3298/av568f |
| Contributors | * Joern Franz for general design * Jim Tung for data loading |
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| Scope | Database  SP processing |

|  |  |
| --- | --- |
| EDF internal inbound interface(s) | Database access to:   1. (new) |
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**Revision History**

The following table lists the revision history of this document:

| **Author** | **Date** | **Version #** | **Revision Description** |
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| Akarsh V/Yun Wan | 2019-05-08 | 0.01 | 309623: Initial version. |

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## Overview

The Golden Database (GDB) on EDF will be extended and linked to IDIS for “ASEoD” service-type data.

This will be a DBOR (DataBase Of Record) for data objects like Assets, Services, Sites, Organizations and Contacts and their associations among each other.

The database will contain read-only representations of data object anchor points using the GCP Enterprise Key Translation. EDF will maintain the representing anchor points across the maintaining DBORs.

This HLD is about everything that is needed in order to be able to load DOC Event data for “ASEoD” service-type items for the objects given above into GDB.

A high-level overview of this HLD’s contents is given below:

1. **Database items (DBA)**
   1. GDB: “service” data related additions
   2. GDB: change tracking related additions
2. **Data Loading items (SP)**
   1. Load customer/organization data into GDB
   2. Load location/address data into GDB
   3. Load asset (customer network (EVC)) data into GDB
   4. Load asset (network connection (LEG EVC)) data into GDB
   5. Load asset (access circuit) data into GDB
   6. Load port (here: ONLY logical) data into GDB
   7. Load service type data into GDB
   8. Associate location/address type data with  
       - organization(s)  
       - asset(s) (network connection (LEG EVC); access circuit)
   9. Associate service type data with  
       - asset(s) (customer network (EVC), network connection (LEG EVC); access circuit)
   10. Associate network connections (LEG EVC) with customer networks (EVC)
   11. Associate network connections (LEG EVC) with access circuits
   12. Associate logical ports with network connections (LEG EVC)
   13. Associate customer networks (EVC) with customer/organization
   14. Associate network connections (LEG EVC) with customer/organization
   15. Associate access circuits with customer/organization
   16. Associate asset (access circuit) to its “diversity” asset (access circuit)

## A Note on how to use this HLD

This HLD has initially been created for project 309623. It still contains all sections from that project.

Using this approach keeps all design logic that belongs together at one place.

The sections/pieces added for 309623 can easily be identified.

## Problem Statement

Business (Service Assurance/Operations) intends to get a centralized system for service assurance inventory, registration and contact management. This system (the Golden Database (GDB)) will be used to expose (read-only) management ability for all GDB object types and objects to the customer.

The project aims to provide an infrastructure in which any object (asset, service, site, customer, contact … ) is represented once per customer, and can be reused across services/products.

Access to the infrastructure is expected to be reusable for additional systems. Long-term use of this infrastructure might be extended to support object (asset, service, site, customer, contact … ) management beyond service assurance needs and might be linked to the service delivery processes and systems.

This project changes the data flow for the supported backend DBORs GPS, Instar, IDIS.

This project extends the supported backend DBORs by IDIS for “ASEoD” service-type objects.

This HLD is about everything that is needed in order to be able to load DOC Event data for “ASEoD” service-type items for the objects given above into GDB.

## Design Decisions

The processing rules (algorithms, SQL, etc.) in the design section are for design purposes only.

Reference content (e.g. status values, type values etc.) has to be checked for the actual database defined content values (e.g. spelling, case, etc.) during the detailed design.

Development has to use the best possible implementation for the derived SQL, database implementations and processing to ensure the implementation will be scalable, thread-safe, quickly extensible and resource efficiently executable.

Flow diagrams describe the implementation logically and do not imply a specific implementation unless explicitly stated as required. The sequence or number of steps will be optimized during development.

SQL processing shown in trigger bodies, procedures, functions, etc. is meant to provide solution suggestions and explicitly is not production ready code.

Contained schema names are describing schema names, not necessarily actual database instantiation schema names. For flip-flop enabled schemas, only the describing schema name of the flip-flop group is mentioned, while the instantiated ‘online’ and ‘offline’ synonym/view façade and backend content schema names are omitted. e.g. SCHEMA may act as a synonym for flip-flop schemas SCHEMA, SCHEMA1, SCHEMA2, SCHEMA\_LD. Development will apply data model and data content changes to the instantiated schema name(s) and will take flip-flop usage models into account.

### End to End Flow Diagram



1. An EGF process will be set up to capture the changes from canopi Replica Database, DOC Rules to process events for various GDB objects, for example, ORGANIZATION, ASSET, SITE, ASSOCIATION and etc.
2. An Event processing(c) module will process the DOC Events generated from DOC Rules, and load data (create/update/delete) into GDB.
3. Address, Organization, Asset will be sent to Kafka queue for post-processing (d), for example, address normalization, asset unification, organization unification, and etc.

### Database

#### HLD-309623-GCP-GDB-DBA-from-IDIS-001 [SERVICE\_TYPE Content and Mapping]

This requirement is an addition to the requirement “HLD-232213e-GCP-GDB-104 [SERVICE\_TYPE Content and Mapping]” of family HLD.

(NOTE: Keep in mind that some other HLDs for this project also add data to the tables listed below.)

Ensure that the following mapping exists in the SERVICE\_TYPE, SERVICE\_TYPE\_NOTATION and DBOR\_INDICATOR tables in the GDB schema:



*Here already existing entries (that must not be changed) are given in grey colour.*

*Entries to be added are given in dark black colour.*

Ensure that the following mapping exists in the SERVICE\_TYPE and SERVICE\_TYPE\_BLOCKED\_SYSTEM tables in the GDB schema:



*Here no changes/additions have to be applied compared to the original HLD.*

*For ID\_CHANGE\_TRACKING, reference a single record for the deployment, i.e. during deployment insert one record into CHANGE\_TRACKING/CHANGE\_SYSTEM/CHANGE\_USER using the deployment database instance time, change\_system.name ‘INITIAL\_LOAD’, change\_user.name ‘INITIAL\_LOAD’.*

#### HLD-309623-GCP-GDB-DBA-from-IDIS-002 [CHANGE\_SYSTEM & CHANGE\_USER Content]

Make sure the following data is added to the GCP GDB Data:

|  |  |
| --- | --- |
| **Data element** | **Value** |
| GDB.CHANGE\_SYSTEM.name | IDIS\_NRT\_TO\_GDB |
| GDB.CHANGE\_USER.name | IDIS\_NRT\_TO\_GDB |

#### HLD-309623-GCP-GDB-DBA-from-IDIS-003 [ROLE Content and Mapping]

Ensure that the following mapping is added to FUNCTION\_TYPE, FUNCTION\_ROLE, ROLE, ROLE\_NOTATION, ASSOCIATION\_TYPE in the GDB schema:



#### HLD-309623-GCP-GDB-DBA-from-IDIS-010 [SERV\_OPT\_TYPE Content and Mapping]

Ensure that the following mapping exists in the SERV\_OPT, SERV\_OPT\_TYPE and SERV\_OPT\_TYPE\_NOTATION GDB schema:  
(The items in grey should already exist, so only the item(s) in black should be added; but if in doubt, add what does not yet exist in GDB !)



In order to create EKT values for “GDB.SERV\_OPT.id” the mechanism that is used for “GDB.SERVICE.id” needs to be “copied” and then be applied to creating EKT values.

*For ID\_CHANGE\_TRACKING, reference a single record for the deployment, i.e. during deployment insert one record into CHANGE\_TRACKING/CHANGE\_SYSTEM/CHANGE\_USER using the deployment database instance time, change\_system.name ‘INITIAL\_LOAD’, change\_user.name ‘INITIAL\_LOAD’.*

#### HLD-309623-DBA-GCP-GDB-from-IDIS-020 [PRIMARY\_KEY]

Ensure for all processing that the primary key creation is based on the following logic:



#### HLD-309623-DBA-GCP-GDB-from-IDIS-030 [METADATA]

The following data must be ensured to be added to GCP Meta Data tables.



#### HLD-309623-DBA-GCP-GDB-from-IDIS-040 [Database Schema Update]

Table: Association\_Temp\_Cache (new table)

|  |  |  |
| --- | --- | --- |
| Column Name | Data Type | Constraint |
| ID | ~~String A/N 25~~ Number (11) | Not Null |
| Object\_1\_ID | String A/N 255 |  |
| Object\_1\_Type | String A/N 255 |  |
| Object\_2\_ID | String A/N 255 |  |
| Object\_2\_Type | String A/N 255 |  |
| Process\_indicator | String A/N 3 | Valid Values: Y, N |
| Time\_Stamp | Date |  |
| ~~ID\_Object\_Asset\_AC~~ | ~~String A/N 30~~ |  |
| ~~ID\_Object\_Asset\_NC~~ | ~~String A/N 30~~ |  |
| ~~ID\_Object\_Asset\_CN~~ | ~~String A/N 30~~ |  |
| ~~ID\_Object\_Asset\_Log\_Port~~ | ~~String A/N 30~~ |  |
| ~~ID\_Object\_Asset\_Physical\_Port~~ | ~~String A/N 30~~ |  |
| ~~ID\_Object\_Org\_Acct~~ | ~~String A/N 30~~ |  |
| ~~ID\_Object\_Contact~~ | ~~String A/N 30~~ |  |
| ~~ID\_Object\_Site~~ | ~~String A/N 30~~ |  |
| ~~ID\_Object\_Service~~ | ~~String A/N 30~~ |  |
| ~~Process\_Indicator~~ | ~~String A/N 3~~ | ~~Valid Values: Y, N~~ |
| ~~Account\_To\_Cust\_Org\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_To\_Org\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Site\_To\_Org\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_AC\_To\_Site\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_CN\_To\_Site\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_NC\_To\_Site\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_CN\_To\_Service\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_AC\_To\_Service\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_NC\_To\_Service\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_AC\_To\_NC\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_NC\_To\_CN\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_AC\_To\_SO\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_NC\_To\_SO\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_CN\_To\_SO\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Contact\_To\_Asset\_Ind~~ | ~~String, A/N 30~~ |  |
| ~~Asset\_To\_Port\_Ind~~ | ~~String, A/N 30~~ |  |

This is a temporary cache table which collects unprocessed associations coming out of events. Process\_Indicator should be marked as ‘N’ initially. Once, the association is identified and added in association table, the indicator should be changed to ‘Y’. At the end of the day, all records with process\_indicator = ‘Y’ should be deleted.

### Service Delivery Data Flow into Golden Database [IDIS Data Flow]

#### HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process]

For project 309623 customer/organization, location (site, address\_notation, location\_notation), service, asset (network, connection, circuit) and port data need to be loaded into the GCP GDB database in addition to other already existing source databases/systems.

Therefore, the following needs to be implemented:

A near-real-time (NRT) data loading process will be triggered by each DOC Event. Data in the DOC Event should be processed based on the value of assetEventData.header.metadata.chgInd (I, U, and D).

When chgInd = ‘D’, Data in the DOC Event should be deleted from GDB, otherwise (any other values in chgInd), Data in the DOC Event should be updated or inserted if not exists yet into GDB.

Use METADATA.SOURCE\_PROCESS.name=’IDIS\_NRT\_TO\_GDB’ for this process.

Every execution of this process requires the maintenance of a change tracking event into GDB.CHANGE\_TRACKING, CHANGE\_SYSTEM and CHANGE\_USER. The change tracking event for the service delivery data flow must use CHANGE\_SYSTEM.name = ’IDIS\_NRT\_TO\_GDB’ and CHANGE\_USER.name = ’IDIS\_NRT\_TO\_GDB’. It is sufficient to have one change tracking event for all affected records during a single execution of this process.

Process all inserted/updated/deleted records into the Data Index (ref. Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]).

Maintain GDB\_HIST Schema for each inserted/updated/deleted record by following the requirements in the family HLD described in the following sections:

HLD-232213e-GCP-GDB-200 [Change Tracking on Insert]

HLD-232213e-GCP-GDB-201 [Change Tracking on Update]

HLD-232213e-GCP-GDB-202 [Change Tracking on Delete]

The following HLD items specify the data mapping between DOC Events and the GDB per entity. In other words, these HLD items specify the data/records exactly expected in GDB for the source after the DOC Event processed successfully. They don’t specify the steps/details regarding how to create/update/delete records in GDB, and finally only have the specified records existing in GDB from the source after the DOC Event is fully processed successfully.

Example 1:

If a DOC Event has one organization with 2 organization identifiers from IDIS, after it is processed, GDB should have this organization and exactly 2 organization identifiers (no less, and no more) with IDIS\_NRT\_TO\_GDB change\_system/change\_user. However, the organization could have other organization identifiers from other sources (for example, icore).

Example 2:

If a DOC Event has one asset with 2 related assets from IDIS, after it is processed, GDB should have this asset, and exactly 2 related assets (no less and no more) with IDIS\_NRT\_TO\_GDB change\_system/change\_user. However, the asset could have other related assets from other sources.

Note: IDIS\_NRT\_TO\_GDB and IDIS\_TO\_GDB should be considered as the same source for above two examples.

For each DOC event data loading, any GDB transactions should cause any duplicates for any object.

Source content that is larger than in the GDB column definition must be truncated on the right side according to the GDB column definition.

Insert new records into the GDB.

Update changed (updated) records into the GDB.

Delete removed (deleted) properties from GDB entity objects (ORGANIZATION, SITE, ASSET (plus associated “satellite/extension” tables, if applicable), PORT (plus associated “satellite/extension” tables, if applicable), SERVICE) but not the entity object directly.

*Delete example:*

*(1) A SUBSCIRBER record in the DOC Event gets deleted. Do not delete the Golden DB ORGANIZATION record immediately – the Golden DB ORGANIZATION table is an entity object and can have customer maintained contact data associated.*

*(2) An ASSET record (e.g. EVC) in DOC Event gets deleted. Do not delete the Golden DB ASSET record immediately – the Golden DB ASSET table is an entity object and can have customer maintained contact data associated. However, process that deletion directly into the corresponding Golden DB “satellite/extension” table (here: ASSET\_EXT\_CUSTOMER\_NETWORK) – the “satellite/extension” table associated with the Golden DB ASSET table is a property table.*

Identify new data entry combinations during processing for the following cases. Pass the following scenario information along with the ORGANIZATION.id and ORGANIZATION\_IDENTIFIER.value (IDIS subscriberid), SITE.id, ASSET.id and ASSET\_IDENTIFIER.value (value + type depending on asset type (access circuit, customer network, network connection etc.)), SERVICE.id (building the organization-site-asset-service inventory hierarchy via associations) per new ASSET.id:

1. Existing organization, existing site, existing asset (inventory content change)
2. Existing organization, existing site, new asset
3. Existing organization, new site, new asset
4. New organization, new site, new asset

#### HLD-309623-GCP-FLOW-IDIS-100 [IDIS Data Flow into Organization GCP\_SUBSCRIBER]

This requirement tries to load IDIS customer data into GDB where the identifiers are (1) the “GCP\_SUBSCRIBER.subscriberid” and (2) the GCP\_SUBSCRIBER.customernumber

Implement the following:

Process the following IDIS records into the GDB organization object and into the Data Index (ref. Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

By using the “chgInd”, we need to determine whether it is a Create, Update/Delete events

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB ORGANIZATION column** | **Processing comment** |
| **accountEventData.header**.metadata.objectType | id\_object\_type | Referencing OBJECT\_TYPE ‘ORGANIZATION’ |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | id\_organization\_type | Referencing ORGANIZATION\_TYPE ‘SERVICE\_SPECIFIC\_CUSTOMER\_REPRESENTATION’ |
| **accountEventData.header**.metadata.rootKey.subscriberId | id [via Enterprise Key Translation via gcp\_subscriber.subscriberid] | Use SOURCE\_KEY.id into GDB |
| **accountEventData**.data.accounts.name | Name |  |
| - | id\_address | NULL |
| - | is\_verification\_opted\_out | NULL |
| - | id\_organization\_unified | NULL, postprocess according to HLD-232213e-GCP-ORGANIZATION\_UNIFICATION-001 [Organization Unification Rules]. |

Customer Identifier: UB\_ACCOUNT\_ID

The following identifier will be added based on the conditions described after this table – if UB\_ACCOUNT\_ID gets populated based on those conditions – do not populate the ACNA/BAN as above (as mentioned above)

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB ORGANIZATION\_IDENTIFIER column** | **Processing comment** |
| - | id\_organization | ORGANIZATION.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘UB\_ACCOUNT\_ID’ |

|  |  |  |
| --- | --- | --- |
| **IDIS or INSTAR table.column** | **GDB ORGANIZATION\_IDENTIFIER\_VALUE column** | **Processing comment** |
| - | id\_organization\_identifier | ORGANIZATION\_IDENTIFIER.id |
| - | id\_change\_tracking | ORGANIZATION\_IDENTIFIER.id\_change\_tracking |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘UB\_ACCOUNT\_ID’ |
| **accountEventData.data.accounts.accountIdentifier.ubaccountid**  **If Value is not found,**  **IDIS.**GCP\_SUBSCRIBER.customernumber (for Layer 2)  -OR-  **INSTAR.**SERVICE\_ASSIGNMENT.Assigned\_Object\_Pos (for Layer 3) – see INSTAR query below. Use GCP\_SERVICE.NAME as the <evcName> in the INSTAR query | Value | Referencing to accountType of ‘UBACCOUNTID’  Note: For Layer 2 and Layer 3, all Database Constraints must be met as listed in ‘Database constraints for Layer 2 services’ and ‘Database constraints for Layer 3 services’ below. For Layer 3 – also make sure there is data available in INSTAR for populating UB\_ACCOUNT\_ID. Otherwise, populate <BD-Rollup-Issue> ~~ACNA/BAN~~ IDIS Subscriber ID </BD-Rollup-Issue> identifier and skip UB\_ACCOUNT\_ID identifier |

If the above query for Layer 3 search returns data for SERVIETYPE = ‘UNI SERVICE’ only, get ‘EVC SERVICE’ using below query and use that name in the INSTAR query; else if above returns for ‘EVC SERVICE’, use that name directly into INSTAR query:

SELECT

evcSvc.Name  as evcName

FROM

Gcp\_Service uniSvc,

Gcp\_Service legEvcSvc,

Gcp\_Service evcSvc,

Gcp\_ServiceObjects legEvcObj,

Gcp\_ServiceObjects evcObj

WHERE (1=1)

--// link Leg EVC Service to UNI Service

AND uniSvc.ServiceType = 'UNI SERVICE'

AND legEvcSvc.ServiceType = 'LEG EVC SERVICE'

AND legEvcObj.RelatedObjectType = 'SERVICE'

AND legEvcObj.ServiceID = legEvcSvc.serviceId

AND legEvcObj.RelatedObjectID = uniSvc.serviceId

--// link EVC Service to Leg EVC Service

AND evcSvc.ServiceType = 'EVC SERVICE'

AND evcObj.RelatedObjectType = 'SERVICE'

AND evcObj.ServiceID = evcSvc.serviceId

AND evcObj.RelatedObjectID = legEvcSvc.ServiceId

AND uniSvc.subscriberid = <GCP\_SERVICE.subscriberid for the UNI SERVICE from above>

**INSTAR Query to retrive UB\_ACCOUNT\_ID:**

Use GCP\_SERVICE.NAME as <evcName> below:

SELECT UNIQUE

svcAsgmt2.Assigned\_object\_pos AS UbSubAccountId

FROM

Prov\_vpn,

Service\_connection svcConn,

Service\_assignment svcAsgmt1,

Service\_assignment svcAsgmt2

WHERE

1=1

AND prov\_vpn.vpn\_name = <evcName>

AND prov\_vpn.icore\_vpn\_id = svcAsgmt1.assigned\_object\_id

AND svcConn.service\_conn\_id = svcAsgmt1.Service\_conn\_id

AND svcConn.service\_conn\_id = svcAsgmt2.Service\_conn\_id

AND svcAsgmt2.Assigned\_object\_type = ‘SubAccountId’

Note: Once a new account is created, trigger updateAccount API by passing this organization.id in the input by using the following process:

* 1. create the GDB.ASSOCIATION entry representing the following relationship – where the Customer ORGANIZATION represents the input ‘organizationReference.id’:
     1. ORGANIZATION (Account) 🡪 (ROLLS\_UP\_TO/(NULL)) 🡪 ORGANIZATION (Customer)

This should be done ‘asynchronously’ to not impact current API performance

* + 1. Find asset records using the association below:

ASSET -> (CONTRACTED\_BY/AGGREGATED) -> ORGANIZATION(Account)

ASSET -> (CONTRACTED\_BY/NULL) -> ORGANIZATION(Account)

Determine if the following associations exist and if not create them

ASSET -> (CONTRACTED\_BY/DERIVED) -> ORGANIZATION (Customer)

ASSET -> (CONTRACTED\_BY/DERIVED) -> ORGANIZATION (Parent Customer)

* + 1. After processing step (i) (ie, when a new account is created/added of identifier types UB\_ACCOUNT\_ID and is associated with the customer ORG) , the corresponding account ORG and customer ORG details should be added in the ORG\_ASSOC\_IDENTIFIER\_INFO table. For performance reason, we can do it through an asynchronous job.

All the above process (including other steps as part of this) will be BAU.

#### HLD-309623-GCP-FLOW-IDIS-110 [IDIS Data Flow into Site GCP\_Location]

Implement the following:

Process the following IDIS records into the GDB site object and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

By using the “chgInd”, we need to determine whether it is a Create, Update/Delete events

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB ADDRESS\_NOTATION column** | **Processing comment** |
| - | id\_object\_type | Referencing OBJECT\_TYPE ‘ADDRESS\_NOTATION’ |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | id\_address\_notation\_type | Referencing ADDRESS\_NOTATION\_TYPE ‘INVENTORY\_ADDRESS\_REPRESENTATION’ |
| ~~GCP\_LOCATION[base].locationid~~  locationEventData.header.rootkey.locationId | id [via Enterprise Key Translation via gcp\_location.locationid] | Use SOURCE\_KEY.id into GDB |
| ~~GCP\_LOCATION[cntry].name~~  locationEventData.boundedContext.addressNotation.countryCode | Country\_code | *Try to make sure the country data is converted to 3-character ISO country code data (mention table name)* |
| ~~GCP\_LOCATION[st].name~~  ~~<canopi-state-issue>~~  ~~nvl(base.province, nvl(base2.province, nvl(st.relativeName,st.name)))~~  locationEventData.boundedContext.addressNotation.state | Subdivision |  |
| ~~GCP\_LOCATION[city].name~~  ~~<Defect 47478>~~  ~~Or~~  ~~GCP\_LOCATION[base].towncity~~  ~~<canopi-state-issue>~~  ~~nvl(base.towncity, nvl(base2.towncity, city.name))~~  locationEventData.boundedContext.addressNotation.city | City | Use ‘towncity’ when the ‘CITY’ is not present in the hierarchy (see ‘Database Traversals (2) {4 levels}’ or ‘Database Traversals (3) {3 levels}’) |
| ~~GCP\_LOCATION[base].address~~  ~~(if no data in above, then use “GCP\_LOCATION[base].address1”)~~  ~~<canopi-state-issue>~~  ~~nvl(base.address, base2.address)~~  locationEventData.boundedContext.addressNotation.postaladdress.addressLine1 | Address\_line1 |  |
| ~~GCP\_LOCATION[base].address2~~  locationEventData.boundedContext.addressNotation.postaladdress.addressLine2 | Address\_line2 |  |
| ~~GCP\_LOCATION[base].address3~~  locationEventData.boundedContext.addressNotation.postaladdress.addressLine3 | Address\_line3 |  |
| ~~GCP\_LOCATION[base].zip~~  ~~<canopi-state-issue>~~  ~~nvl(base.zip, base2.zip)~~  locationEventData.boundedContext.addressNotation.postalCode | Postal\_code |  |
| ~~GCP\_LOCATION[base].name~~  locationEventData.data.location.postalLocation.clli | Clli |  |

Note : If a valid entry is not found in the look up table then do as per BAU.

We also need to see to update the look up table -the link for the where ISO3 valid codes can be obtained is as below

https://www.iso.org/obp/ui/#search. We will need to add entries for names in different format like RUSSIA = RUSSIAN FEDERATION

Currently 2 tables are used to do the look up for the ISO3 character codes viz. GEOADDR.COUNTRY and COUNTRY\_CODE\_TO\_ISO3. If we do not find the valid entry in the GEOADDR.COUNTRY table then we have to look up at the COUNTRY\_CODE\_TO\_ISO3 table - this needs to be implemented in all cases where the GEOADDR.COUNTRY is looked up.

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB SITE column** | **Processing comment** |
| - | id\_object\_type | Referencing OBJECT\_TYPE ‘SITE’ |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | id\_site\_type | Referencing SITE\_TYPE ‘INVENTORY\_SITE\_REPRESENTATION’ |
| ~~GCP\_LOCATION[base].locationid~~  locationEventData.Header.rootkey.locationId | id [via Enterprise Key Translation via gcp\_location.locationid] | Use SOURCE\_KEY.id into GDB |
| - | Id\_location\_notation | Set to NULL |
| ~~GCP\_LOCATION[base].locationid~~  locationEventData.Header.rootkey.locationId | Id\_address\_notation [via Enterprise Key Translation] | ADDRESS\_NOTATION.id |

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB SITE\_IDENTIFIER column** | **Processing comment** |
| - | id\_site | SITE.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘SIMPLE\_SITE\_IDENTIFIER’ |

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB SITE\_IDENTIFIER\_VALUE column** | **Processing comment** |
| - | id\_site\_identifier | SITE\_IDENTIFIER.id |
| - | id\_change\_tracking | SITE\_IDENTIFIER.id\_change\_tracking |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘SIMPLE\_SITE\_IDENTIFIER’ |
| ~~GCP\_LOCATION[base].locationid~~  locationEventData.Header.rootkey.locationId | Value |  |

On subsequent loads, a new record should be inserted if a new Site Id was added to GDB SITE. An existing record should be updated if any source data has changed.

.

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB SITE\_EXT column** | **Processing comment** |
| ~~-~~ | ~~id\_object\_type~~ | ~~Referencing OBJECT\_TYPE ‘SITE’~~ |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| ~~-~~ | ~~id\_site\_type~~ | ~~Referencing SITE\_TYPE ‘INVENTORY\_SITE\_REPRESENTATION’~~ |
| ~~GCP\_LOCATION.LOCATIONID~~  ~~Asset.serviceInstance.details.sourceRootKey (same as~~ locationEventData…rootkey.locationid | id\_site [via Enterprise Key Translation] | Same as ‘id’ in GDB SITE [derived via Enterprise Key Translation on GCP\_LOCATION.LOCATIONID] |
| ~~GCP\_LOCATION.TELEPHONE~~  ~~Asset.serviceInstance.details.wtn~~  ~~l~~ocationEventData.location.postalLocation.wtn | WTN | Select GCP\_LOCATION.TELEPHONE from GCP\_LOCATION where GCP\_LOCATION.LOCATIONID = <input IDIS Location Id> |
| ~~GCP\_LOCATION.NAME~~  ~~Asset.serviceInstance.details.siteName~~  locationEventData.location.postalLocation.siteName | SITE\_NAME | Select GCP\_LOCATION.NAME from GCP\_LOCATION where GCP\_LOCATION.LOCATIONID = <input IDIS Location Id> |
| ~~GCP\_LOCATION.TYPE~~  ~~Asset.serviceInstance.details.siteType~~  locationEventData.location.postalLocation.siteType | SITE\_TYPE | Select GCP\_LOCATION.TYPE from GCP\_LOCATION where GCP\_LOCATION.LOCATIONID = <input IDIS Location Id> |
| ~~GCP\_LOCATION.NOTES~~  ~~Asset.serviceInstance.details.comments~~  locationEventData.location.postalLocation.comments | COMMENTS | Select GCP\_LOCATION.NOTES from GCP\_LOCATION where GCP\_LOCATION.LOCATIONID = <input IDIS Location Id> |
| ~~GCP\_LOCATION.PROVISIONSTATUS~~  ~~Asset.serviceInstance.details.status~~  locationEventData.location.postalLocation.status | STATUS | Select GCP\_LOCATION.PROVISIONSTATUS from GCP\_LOCATION where GCP\_LOCATION.LOCATIONID = <input IDIS Location Id> |
| ~~GCP\_LOCATION.LASTMODIFIEDDATE~~  ~~Asset.serviceInstance.details.statusDate~~  locationEventData.location.postalLocation.statusDate | STATUS\_DATE | Select GCP\_LOCATION.LASTMDOIFIEDDATE from GCP\_LOCATION where GCP\_LOCATION.LOCATIONID = <input IDIS Location Id> |
| ~~GCP\_LOCATION.RESPONSIBLE~~  ~~Asset.serviceInstance.details.responsibleCenter~~  locationEventData.location.postalLocation.responsibleCenter | RESPONSIBLE\_CENTER | Select GCP\_LOCATION.RESPONSIBLE from GCP\_LOCATION where GCP\_LOCATION.LOCATIONID = <input IDIS Location Id> |
| ~~Asset.serviceInstance.details.regionExists~~  locationEventData.location.postalLocation.regionFlag | REGION\_FLAG | Set this to ‘IR’, if the gcp\_service.producttype = ‘SDN-ETHERNET’ |

#### HLD-309623-GCP-FLOW-IDIS-111 [IDIS Data Flow into Site GCP\_SERVICE]

Implement the following:

Process the following IDIS records into the GDB site object and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

By using the “chgInd”, we need to determine whether it is a Create, Update/Delete events

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB ADDRESS\_NOTATION column** | **Processing comment** |
| locationEventData.header.objectType | id\_object\_type | Referencing OBJECT\_TYPE ‘ADDRESS\_NOTATION’ |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | id\_address\_notation\_type | Referencing ADDRESS\_NOTATION\_TYPE ‘INVENTORY\_ADDRESS\_REPRESENTATION’ |
| ~~locationEventData.RootKey.orderNumber.locationKey.custLocationId~~  ~~(Need to check with NG SE once)~~  locationEventData.rootKey.serviceId | id [via Enterprise Key Translation via gcp\_service.serviceid] | Use SOURCE\_KEY.id into GDB |
| locationEventData.boundedContext.addressNotation.countryCode  ~~Info.address.countryCodeISO3~~ | Country\_code | *Try to make sure the country data is converted to 3-character ISO country code data*  Default to ‘USA’ |
| locationEventData.Data.addressNotation.subdivision  or  ~~info.address.subdivision~~ | Subdivision |  |
| locationEventData.Data.addressNotation.CITY  or  info.address.city | City |  |
| locationEventData.Data.addressNotation.addressLine.ADDRESSLINE1  or  ~~info.address.postalAddress.addressLine.addressline1~~ | Address\_line1 |  |
| locationEventData.Data.addressNotation.addressLine.ADDRESSLINE2  or  ~~info.address.postalAddress.addressLine.addressline2~~ | Address\_line2 |  |
| locationEventData.Data.addressNotation.postalCode  or  ~~info.address.postalCode~~ | Postal\_code | ~~Identify the postal\_code based on the address1/address2~~ |
| locationEventData.header.data.location.postalLocation.globalLocationId  ~~Info.location.postalLocation.globalLocationId~~ | ID\_Global\_Location |  |

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB SITE column** | **Processing comment** |
| - | id\_object\_type | Referencing OBJECT\_TYPE ‘SITE’ |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | id\_site\_type | Referencing SITE\_TYPE ‘INVENTORY\_SITE\_REPRESENTATION’ |
| locationEventData.RootKey.~~siteId~~ serviceId  or  ~~info.objectUID~~ | id [via Enterprise Key Translation via gcp\_service.serviceid] | Use SOURCE\_KEY.id into GDB |
| - | Id\_location\_notation | Set to NULL |
| - | Id\_address\_notation [via Enterprise Key Translation] | ADDRESS\_NOTATION.id |

~~Note : If a valid entry is not found in the look up table then do as per BAU.~~

~~We also need to see to update the look up table -the link for the where ISO3 valid codes can be obtained is as below~~

~~https://www.iso.org/obp/ui/#search. We will need to add entries for names in different format like RUSSIA = RUSSIAN FEDERATION~~

~~Currently 2 tables are used to do the look up for the ISO3 character codes viz. GEOADDR.COUNTRY and COUNTRY\_CODE\_TO\_ISO3. If we do not find the valid entry in the GEOADDR.COUNTRY table then we have to look up at the COUNTRY\_CODE\_TO\_ISO3 table - this needs to be implemented in all cases where the GEOADDR.COUNTRY is looked up.~~

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB SITE\_IDENTIFIER column** | **Processing comment** |
| - | id\_site | SITE.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘SIMPLE\_SITE\_IDENTIFIER’ |

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB SITE\_IDENTIFIER\_VALUE column** | **Processing comment** |
| - | id\_site\_identifier | SITE\_IDENTIFIER.id |
| - | id\_change\_tracking | SITE\_IDENTIFIER.id\_change\_tracking |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘SIMPLE\_SITE\_IDENTIFIER’ |
| locationEventData.RootKey.siteId  or  ~~info.objectUID~~ | Value |  |

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB LOCATION\_NOTATION column** | **Processing comment** |
| - | id\_object\_type | Referencing OBJECT\_TYPE ‘LOCATION\_NOTATION’ |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| locationEventData.header.data.location.postalLocation.globalLocationId  ~~Info.location.postalLocation.globalLocationId~~ | id [via Enterprise Key Translation via gcp\_service.glid] | Use SOURCE\_KEY.id into GDB |
| locationEventData.header.data.location.postalLocation.floor  ~~Info.location.floor~~ | FLOOR | ~~select distinct sa.value from gcp\_omx.customer\_address\_information cai, gcp\_omx.service\_attribute sa where~~  ~~sa.order\_number = cai.order\_number~~  ~~and location\_id=<GLID>~~  ~~and sa.name='floor';~~ |
| locationEventData.header.data.location.postalLocation.additionalDescriptiveData  ~~Info.location.postalLocation.additionalDescriptiveData~~ | ADDITIONAL\_DESCRIPTIVE\_DATA | ~~select distinct sa.value from gcp\_omx.customer\_address\_information cai, gcp\_omx.service\_attribute sa where~~  ~~sa.order\_number = cai.order\_number~~  ~~and location\_id=<GLID>~~  ~~and sa.name='address2';~~ |
| locationEventData.header.data.location.postalLocation.globalLocationId  ~~Info.location.postalLocation.globalLocationId~~ | GLOBAL\_LOCATION\_ID |  |
|  | ID\_ADDRESS\_NOTATION | Derive Addess\_notation.id via below Association-  Asset(~~Gcp\_Service.Serviceid~~  GCP\_CIRCUIT.circuitid) -> (PART\_OF) -> Site.  Use the Site.id\_address\_notation to load location\_notation.id\_address\_notation |

#### HLD-309623-GCP-FLOW-IDIS-112 [IDIS Data Flow into Site Alias]

SITE ALIAS ASSOCIATION

Only create new ALIAS\_ASSOCIATION record when there is no existing alias association for the site.

Only create a new ALAIS\_VALUE record where there is no existing ALIAS\_VALUE record matching the alias description. Otherwise, use the existing ALIAS\_VALUE.id to build the alias association. If there are multiple records with the same alias description, randomly take one for the association.

By using the “chgInd”, we need to determine whether it is a Create, Update/Delete events

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB column ALIAS\_VALUE** | **Processing comment** |
| - | Id |  |
| ~~GCP\_LOCATION.alias1~~  Asset.serviceInstance.details.customerAlias.aliasValue | Value |  |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB column ALIAS\_ASSOCIATION** | **Processing comment** |
| - | Id |  |
| - | id\_object\_type | GDB OBJECT\_TYPE.id referencing ‘SITE’ |
| ~~GCP\_LOCATION.locationid~~  Asset.serviceInstance.details.sourceRootKey | id\_object  [via Enterprise Key Translation] | GDB SITE.id [derived via Enterprise Key Translation on GCP\_LOCATION.locationid] |
| - | id\_alias\_type | GDB ALIAS\_TYPE.id Referencing ALIAS\_TYPE ‘CUSTOMER\_DEFINED\_SITE\_ALIAS’ |
| - | id\_alias\_value | ALIAS\_VALUE.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |

#### HLD-309623-GCP-FLOW-IDIS-120 [IDIS Data Flow into Asset EVC (“Customer Network”)]

The following section is about “Customer Network” assets from DOC Events with assetEventData.header.metadata.objectType = ‘CUSTOMER\_NETWORK’. The following data should be processed into GDB only if assetEventData.boundedContext.service has a value ‘SDN-ETHERNET’. Otherwise, ignore/skip the DOC Event.

Implement the following:

Process the following records into the GDB asset object and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET column** | **Processing comment** |
| - | id\_object\_type | Referencing OBJECT\_TYPE ‘ASSET’ |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| assetEventData.header.metadata.rootKey | id [via Enterprise Key Translation via gcp\_service.serviceid] | Use SOURCE\_KEY.id into GDB |
| - | id\_asset\_type | Referencing ASSET\_TYPE = assetEventData.header.metadata.objectType  (case insensitive) |

Identifier (1): EVC ID

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_IDENTIFIER column** | **Processing comment** |
| - | id\_asset | ASSET.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘EVC\_ID\_IDENTIFIER’ |

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_IDENTIFIER\_VALUE column** | **Processing comment** |
| - | id\_asset\_identifier | ASSET\_IDENTIFIER.id |
| - | id\_change\_tracking | ASSET\_IDENTIFIER.id\_change\_tracking |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘EVC\_ID\_IDENTIFIER’ |
| assetEventData.asset.customerNetwork.details.evcId | Value |  |

Identifier (2): EVC Name

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_IDENTIFIER column** | **Processing comment** |
| - | id\_asset | ASSET.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘EVC\_NAME\_IDENTIFIER’ |

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB ASSET\_IDENTIFIER\_VALUE column** | **Processing comment** |
| - | id\_asset\_identifier | ASSET\_IDENTIFIER.id |
| - | id\_change\_tracking | ASSET\_IDENTIFIER.id\_change\_tracking |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘EVC\_NAME\_IDENTIFIER’ |
| assetEventData.asset.customerNetwork.details.evcName | Value |  |

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_EXT\_CUSTOMER\_NETWORK column** | **Processing comment** |
| - | id\_asset | ASSET.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| assetEventData.asset.customerNetwork.details.networkId | network\_id |  |
| assetEventData.asset.customerNetwork.details.networkName | network\_name |  |
| - | id\_network\_type | Referencing NETWORK\_TYPE with assetEventData.asset.customerNetwork.details.networkType |
| - | id\_network\_sub\_type | Referencing NETWORK\_TYPE with assetEventData.asset.customerNetwork.details.networkSubType |
| assetEventData.Data.CustomerNetwork.Details.evcCircuitId | EVC\_CIRCUIT\_ID |  |
| assetEventData.Data.CustomerNetwork.Details.evcTopology | EVC\_TOPOLOGY |  |
| assetEventData.asset.customerNetwork.details.regionFlag | REGION\_FLAG |  |

Process the following records into the GDB asset to organization association and into the Data Index (ref. Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-254035a-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**ORGANIZATION**’, ROLE with FUNCTION\_TYPE ‘**CONTRACTED\_BY**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | id [via Enterprise Key Translation via gcp\_service.serviceid] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetEventData.boundedContext.account[].accountObject.identifier.accountBillingService.idisSubscriberId | Id\_object\_to [via Enterprise Key Translation for GCP\_SUBSCRIBER.subscriberid] | Use SOURCE\_KEY.id which populated the respective ORGANIZATION.id |
| assetEventData.header.metadata.rootKey | id [via Enterprise Key Translation via gcp\_service.serviceid] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following records into the GDB asset to service association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**SERVICE**’, ROLE with FUNCTION\_TYPE ‘**IMPLEMENTED\_BY**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | id [via Enterprise Key Translation via gcp\_service.serviceid] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetDocEvent.BoundedContext.service.serviceName | Id\_object\_to [via lookup in GDB SERVICE and SERVICE\_TYPE\_NOTATION] |  |
| assetDocEvent.Data.customerNetwork.Details.sourceRootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following IDIS records into the GDB asset to service option (SO\_JUMBO\_FRAMES) association:

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**SERVICE\_OPTION**’, ROLE with FUNCTION\_TYPE ‘**HAS\_SERVICE\_OPTION**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetEventData.asset.customerNetwork.details.serviceOption.serviceOptionName = ‘SO\_JUMBO\_FRAMES’ | Id\_object\_to [via lookup in GDB SERV\_OPT and SERV\_OPT\_TYPE] | Use SERV\_OPT.id which references SERV\_OPT\_TYPE having serv\_opt\_name = ‘**SO\_JUMBO\_FRAMES**’. |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

**~~Asset Unification :~~**

~~When asset unification is executed, the new optional “id\_location\_notation\_with\_glid” value needs to be taken into account as follows:~~

* ~~If a “master” record does not yet have a value for “id\_location\_notation\_with\_glid”, but a “slave” has, then that value from the “slave” shall be copied to the “master”.~~
* ~~If both the “master” and the “slave” have a value for “id\_location\_notation\_with\_glid”, then copy the “value from “slave” to “master”, if the “slave’s” Loc-Not record is “newer” than the “master’s” one (in respect to data loading “history”).~~

~~This section is loading the Site\_identiifer and Site\_identifier\_values with GLID value for the SITE of SITE\_TYPE Customer Location.~~

~~To derive the SITE of Type Customer Location that associates with the Location\_notation having GLID , Query GCP\_SERVICE Table having GLID Values (Which are used to load to Location\_Notation), Get the Serviceid to use in the below association,~~

~~Asset(Gcp\_Service.Serviceid GCP\_CIRCUIT.circuitid) -> (PART\_OF) -> Site(of Site\_type = Customer\_location)~~

~~Attach the Sites obtained with the following Identifier and Values.~~

|  |  |  |
| --- | --- | --- |
| **~~IDIS table.column~~** | **~~GDB SITE\_IDENTIFIER column~~** | **~~Processing comment~~** |
| ~~-~~ | ~~id\_Site~~ | ~~Site.id~~ |
| ~~-~~ | ~~id\_change\_tracking~~ | ~~See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process]~~ |
| ~~-~~ | ~~id\_identifier\_type~~ | ~~Referencing IDENTIFIER\_TYPE ‘GLID’~~ |

|  |  |  |
| --- | --- | --- |
| **~~IDIS table.column~~** | **~~GDB SITE\_IDENTIFIER\_VALUE column~~** | **~~Processing comment~~** |
| ~~-~~ | ~~id\_Site\_Identifier~~ | ~~Site\_Identifier.id~~ |
| ~~-~~ | ~~id\_change\_tracking~~ | ~~ASSET\_IDENTIFIER.id\_change\_tracking~~ |
| ~~-~~ | ~~id\_identifier\_type~~ | ~~Referencing IDENTIFIER\_TYPE ‘GLID’~~ |
| ~~GCP\_SERVICE\_LOC\_VW.GLID~~  ~~locationEventData.header.data.location.postalLocation.globalLocationId~~ | ~~Value~~ |  |

~~Use the SITE.SITE\_ID derived above I.e, traversing the association~~

~~Asset(Gcp\_Service.Serviceid GCP\_CIRCUIT.circuitid) -> (PART\_OF) -> Site(of Site\_type = Customer\_location)~~

~~In addition, use the below logic to load the correlated sites as well. Use the site retrieved from above association to derive the correlated site (site\_type=’CORRELATED\_SITE\_REPRESENTATION’)~~

~~Asset (Inventory) -> Site (Customer\_Location)~~

~~Site (Inventory) <- Asset (Inventory)~~

~~Site (Inventory) -> Site (Correlation)~~

~~Then Use the ASSET.ID\_LOCATION\_NOTATION\_WITH\_GLID and SITE.SITE\_ID of both CUSTOMER\_LOCATION and CORRELATED\_SITE\_REPRESENTATION to load the below table~~

|  |  |  |
| --- | --- | --- |
| **~~IDIS table.column~~** | **~~GDB SITE\_LOCATION\_ASSOC column~~** | **~~Processing comment~~** |
|  | ~~ID~~ | ~~SITE\_LOCATION\_ASSOC.ID (sequence generated)~~ |
| ~~-~~ | ~~id\_Site~~ | ~~Site\_Identifier.id~~ |
| ~~-~~ | ~~id\_Location\_notation~~ | ~~Location\_notation.id~~ |
| ~~-~~ | ~~Id\_change\_tracking~~ | ~~See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process]~~ |

~~When an asset gets deleted from GDB and has an associated Location Notation record, then it needs to be checked whether the asset to be deleted is the last one that creates the SITE to Location\_notation association. If that is the case, then that still existing SITE to Location\_notation association needs to be removed as well.~~

#### HLD-309623-GCP-FLOW-IDIS-130 [IDIS Data Flow into Asset LEG EVC (“Network Connection”)]

The following section is about “Network Connection” assets from DOC Events with assetEventData.header.metadata.objectType = ‘NETWORK\_CONNECTION’. The following data should be processed into GDB only if assetEventData.boundedContext.service has a value ‘SDN-ETHERNET’. Otherwise, ignore/skip the DOC Event.

Process the following records into the GDB asset object and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET column** | **Processing comment** |
| - | id\_object\_type | Referencing OBJECT\_TYPE ‘ASSET’ |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| assetEventData.header.metadata.rootKey | id [via Enterprise Key Translation via gcp\_service[leg\_evc].serviceid] | Use SOURCE\_KEY.id into GDB |
| - | id\_asset\_type | Referencing ASSET\_TYPE = assetEventData.header.metadata.objectType  (case insensitive) |

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_IDENTIFIER column** | **Processing comment** |
| - | id\_asset | ASSET.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘LEGEVC\_ID\_IDENTIFIER’ |

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_IDENTIFIER\_VALUE column** | **Processing comment** |
| - | id\_asset\_identifier | ASSET\_IDENTIFIER.id |
| - | id\_change\_tracking | ASSET\_IDENTIFIER.id\_change\_tracking |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘LEGEVC\_ID\_IDENTIFIER’ |
| assetEventData.asset.networkConnection.details.legEVCId | Value |  |

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_EXT\_NETWORK\_CONNECTION column** | **Processing comment** |
| - | id\_asset | ASSET.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| assetEventData.asset.networkConnection.details.networkConnectionId | network\_connection\_id | (to be converted to VARCHAR2) |
| assetEventData.asset.networkConnection.details.speed | Speed |  |
| - | id\_network\_sub\_type | Referencing NETWORK\_TYPE with assetEventData.asset.customerNetwork.details.networkSubType |
| AssetEventData.Data.networkConnection.details.evcId | EVC\_ID |  |
| ~~Asset.networkConnection.details.cosPackage~~ | ~~COS\_PACKAGE~~ |  |
| AssetEventData.Data.networkConnection.details.cvlanTag | CVLAN\_TAG |  |
| AssetEventData.Data.networkConnection.details.bumSpeed | BUM\_SPEED |  |
| AssetEventData.Data.networkConnection.details.portCircuitId | PORT\_CIRCUIT\_ID |  |
| AssetEventData.Data.networkConnection.details.portLinkType | PORT\_LINK\_TYPE |  |
| AssetEventData.Data.networkConnection.details.cirSpeed | CIR\_SPEED |  |
| AssetEventData.Data.networkConnection.details.enhancedMulticastInd | ENHANCED\_MULTICAST\_FLAG | Note: Convert true to ‘Y’ |
| AssetEventData.Data.networkConnection.details.macAddressLimit | MAC\_ADDRESS\_LIMIT |  |
| AssetEventData.Data.networkConnection.details.gosData | GOSDATA |  |
| AssetEventData.Data.networkConnection.details.regionFlag | REGION\_FLAG |  |

Process the following records into the GDB asset to organization association and into the Data Index (ref. Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-254035a-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**ORGANIZATION**’, ROLE with FUNCTION\_TYPE ‘**CONTRACTED\_BY**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | id [via Enterprise Key Translation via gcp\_service.serviceid] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetEventData.boundedContext.account[].accountObject.identifier.accountBillingService.idisSubscriberId | Id\_object\_to [via Enterprise Key Translation for GCP\_SUBSCRIBER.subscriberid] | Use SOURCE\_KEY.id which populated the respective ORGANIZATION.id |
| assetEventData.header.metadata.rootKey | id [via Enterprise Key Translation via gcp\_service.serviceid] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following records into the GDB asset to site association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**SITE**’, ROLE with FUNCTION\_TYPE ‘**PART\_OF**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetEventData.boundedContext.site.siteDetail.serviceId, if city and address1 are all populated, otherwise,  assetEventData.boundedContext.site.siteDetail.locationId | Id\_object\_to [via Enterprise Key Translation for GCP\_LOCATION.locationid or GCP\_SERVICE\_LOC\_VW2] | Use SOURCE\_KEY.id which populated the respective SITE.id |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

All site information loaded from GCP\_SERVICE table should be associated to ASEoD LEG EVCs. If there are any existing association for this, the current association to the current site address should be removed and the ASEoD LEG EVC should be associated with the new site address that has been loaded from GCP\_SERVICE.

Process the following records into the GDB asset to service association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**SERVICE**’, ROLE with FUNCTION\_TYPE ‘**IMPLEMENTED\_BY**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | id [via Enterprise Key Translation via gcp\_service.serviceid] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetDocEvent.BoundedContext.service.serviceName | Id\_object\_to [via lookup in GDB SERVICE and SERVICE\_TYPE\_NOTATION] |  |
| assetDocEvent.Data.customerNetwork.Details.sourceRootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following IDIS records into the GDB asset to service option (SO\_JUMBO\_FRAMES) association:

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**SERVICE\_OPTION**’, ROLE with FUNCTION\_TYPE ‘**HAS\_SERVICE\_OPTION**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetEventData.asset.customerNetwork.details.serviceOption.serviceOptionName = ‘SO\_JUMBO\_FRAMES’ | Id\_object\_to [via lookup in GDB SERV\_OPT and SERV\_OPT\_TYPE] | Use SERV\_OPT.id which references SERV\_OPT\_TYPE having serv\_opt\_name = ‘**SO\_JUMBO\_FRAMES**’. |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following records into the GDB asset to asset (customer network for network connections) association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**ASSET**’, ROLE with FUNCTION\_TYPE ‘**PART\_OF**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetDocEvent.BoundedContext.relatedAsset.Identifier.value | Id\_object\_to [via Enterprise Key Translation for GCP\_SERVICE.serviceid] | Use SOURCE\_KEY.id which populated the respective ASSET.id  Referencing to relatedAsset.assetType as ‘CUSTOMER\_NETWORK’ |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Note: Check for the functionType of ‘PART\_OF’ and functionType of ‘null’. This is applicable for ‘NETWORK\_CONNECTION’ and ‘CUSTOMER\_NETWORK’ only.

#### HLD-309623-GCP-FLOW-IDIS-140 [IDIS Data Flow into Asset GCP\_CIRCUIT (“Access Circuit”)]

The following section is about “Access Circuit” assets from DOC Events with assetEventData.header.metadata.objectType = ‘ACCESS\_CIRCUIT’. The following data should be processed into GDB only if assetEventData.boundedContext.service has a value ‘SDN-ETHERNET’ or ‘OEM-AC’. Otherwise, ignore/skip the DOC Event.

Process the following IDIS records into the GDB asset object and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET column** | **Processing comment** |
|  | id\_object\_type | Referencing OBJECT\_TYPE ‘ASSET’ |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| assetEventData.header.metadata.rootKey | id [via Enterprise Key Translation via gcp\_circuit.circuitid] | Use SOURCE\_KEY.id into GDB |
| - | id\_asset\_type | Referencing ASSET\_TYPE = assetEventData.header.metadata.objectType  (case insensitive) |
| AssetEventData.Data.accessCircuit.details.glid | ID\_LOCATION\_NOTATION\_WITH\_GLID  id [via Enterprise Key Translation GCP\_SERVICE\_LOC\_VW.GLID] |  |

**NOTE:**

For IDIS circuit id values it is quite probable that they are already in CLCI format. Therefore it is best to check whether a circuit id can be converted to the CLCI format, and if yes, then check whether the CLCI format value is identical to the “raw” value as retrieved directly from IDIS. If the latter is the case, then no “raw” format identifier data set shall be created !

Asset Identifier (1): “Raw” Circuit ID value

(Only to be created if the “raw” value and the “CLCI” value are different; see “NOTE” above)

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_IDENTIFIER column** | **Processing comment** |
| - | id\_asset | ASSET.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘CIRCUIT\_ID\_IDENTIFIER’ |

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_IDENTIFIER\_VALUE column** | **Processing comment** |
| - | id\_asset\_identifier | ASSET\_IDENTIFIER.id |
| - | id\_change\_tracking | ASSET\_IDENTIFIER.id\_change\_tracking |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘CIRCUIT\_ID\_IDENTIFIER’ |
| assetEventData.asset.accessCircuit.details.circuitIdIdentifier | Value |  |

Asset Identifier (2): “Standard US Domestic Circuit ID Format” Circuit ID value  
*(only to be created if a conversion is successful; see “Logic for converting a US Domestic circuit id value from ICORE into the standard US Domestic Circuit ID Format” from the “GCP-SA-HLD-for-GCP-GDB.254035a.For-ICORE-Load” HLD)*

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_IDENTIFIER column** | **Processing comment** |
| - | id\_asset | ASSET.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘STANDARD\_FORMAT\_CIRCUIT\_ID\_IDENTIFIER’ |

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_IDENTIFIER\_VALUE column** | **Processing comment** |
| - | id\_asset\_identifier | ASSET\_IDENTIFIER.id |
| - | id\_change\_tracking | ASSET\_IDENTIFIER.id\_change\_tracking |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘STANDARD\_FORMAT\_CIRCUIT\_ID\_IDENTIFIER’ |
| assetEventData.asset.accessCircuit.details.circuitIdIdentifier  converted to a “Standard US Domestic Circuit ID Format” Circuit ID value (see “Logic for converting a US Domestic circuit id value from ICORE into the standard US Domestic Circuit ID Format”) from the “GCP-SA-HLD-for-GCP-GDB.254035a.For-ICORE-Load” HLD | Value |  |

Identifier (3): GLID

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_IDENTIFIER column** | **Processing comment** |
| - | id\_asset | ASSET.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘GLID’ |

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_IDENTIFIER\_VALUE column** | **Processing comment** |
| - | id\_asset\_identifier | ASSET\_IDENTIFIER.id |
| - | id\_change\_tracking | ASSET\_IDENTIFIER.id\_change\_tracking |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘GLID’ |
| AssetEventData.Data.accessCircuit.details.glid | Value |  |

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_EXT\_ACCESS\_CIRCUIT column** | **Processing comment** |
| - | id\_asset | ASSET.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| assetEventData.asset.accessCircuit.details.circuitIdIdentifier  (1) Use value from above path if no CLCI-formatted value could be converted; (2) Use the CLCI-formatted value of “circuitIdValue” if a CLCI-formatted value could be converted; | circuit\_id\_value |  |
|  | id\_circuit\_id\_identifier\_type | (1) Referencing IDENTIFIER\_TYPE ‘CIRCUIT\_ID\_IDENTIFIER’ if no CLCI-formatted value could be converted; (2) Referencing IDENTIFIER\_TYPE ‘STANDARD\_FORMAT\_CIRCUIT\_ID\_IDENTIFIER’ if a CLCI-formatted value could be converted; |
| - | id\_circuit\_service\_codes  (used for “description” data) | <to be derived; see “Logic for deriving the access circuit “description” and “speed” values” from the “GCP-SA-HLD-for-GCP-GDB.254035a.For-ICORE-Load” HLD>;  NOTE:  Use “GDB.CIRCUIT\_SERVICE\_CODES.id” where “GDB.CIRCUIT\_SERVICE\_CODES.SERVICE\_CODE” matches the service code as derived from the currently processed circuit id value (in CLCI format; it does not work for “raw”-only circuit id values);  Use NULL if no match could be found |
| AssetEventData.Data.accessCircuit.details.speed | Speed |  |
| - | parent\_channel | Set to NULL |
| - | parent\_circuit\_id\_value | Set to NULL |
| AssetEventData.Data.accessCircuit.details.designConfiguration | DESIGN\_CONFIGURATION |  |
| AssetEventData.Data.accessCircuit.details.portInterface | PORT\_INTERFACE |  |
| AssetEventData.Data.accessCircuit.details.physicalPortSpeed | PHYSICAL\_PORT\_SPEED |  |
| AssetEventData.Data.accessCircuit.details.cirSpeed | CIR\_SPEED |  |
| AssetEventData.Data.accessCircuit.details.macAddressLimit | MAC\_ADDRESS\_LIMIT |  |
| AssetEventData.Data.accessCircuit.details.enhancedMulticastInd | ENHANCED\_MULTICAST\_FLAG |  |
| AssetEventData.Data.accessCircuit.details.deviceId | DEVICE\_ID |  |
| AssetEventData.Data.accessCircuit.details.servingWireCenter | SERVING\_WIRE\_CENTER |  |
| AssetEventData.Data.accessCircuit.details.equipmentClli | EQUIPMENT\_CLLI |  |
| ~~GCP\_PORT.EnhancedMulticast~~ | ~~ADDITIONAL\_MAC\_ALLOWED~~ |  |
| AssetEventData.Data.accessCircuit.details.uniCIRValue | UNI\_CIR\_VALUE |  |
| assetEventData.asset.accessCircuit.details.unitOfSpeed | UNI\_CIR\_UNITS | Default to “KBPS” |
| AssetEventData.Data.accessCircuit.details.availableUniCIRValue | AVAILABLE\_UNI\_CIR\_VALUE |  |
| assetEventData.asset.accessCircuit.details.unitOfSpeed | AVAILABLE\_UNI\_CIR\_UNITS | Default to “KBPS” |
| AssetEventData.Data.accessCircuit.details.insideWiringInd | INSIDE\_WIRING |  |
| AssetEventData.Data.accessCircuit.details.regulatoryJurisdiction | JURISDICTION |  |
| AssetEventData.Data.accessCircuit.details.regionExists | REGION\_FLAG |  |

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSET\_ACCESS\_CIRCUIT\_DETAILS column** | **Processing comment** |
| - | ASSET\_ID | Same as ID in GDB ASSET & ID\_ASSET in GDB ASSET\_EXT\_ACCESS\_CIRCUIT *[Asset Id derived via Enterprise Key Translation on GCP\_CIRCUIT.CIRCUITID]* |
| - | SOURCE\_SYSTEM | Set to “CANOPI” |
| - | SERVICE\_TYPE | Set to NULL |
| AssetEventData.Data.accessCircuit.details.LocationId | SITE\_ID [via Enterprise Key Translation via gcp\_location.locationid] |  |
| AssetEventData.Data.accessCircuit.details.equipmentClli | SITE\_NAME |  |
| AssetEventData.Data.accessCircuit.details.status | STATUS |  |
| AssetEventData.Data.accessCircuit.details.statusDate | STATUS\_DATE |  |
| AssetEventData.Data.accessCircuit.details.dateInstalled | DATE\_INSTALLED |  |
| - | DATE\_DEINSTALLED | Set to NULL |
| AssetEventData.Data.accessCircuit.details.notes | NOTES |  |
| - | CONNECTIVITY\_TYPE | Set to NULL |
| - | USED\_FOR | Set to NULL |
| - | LEC\_PTT | Set to NULL |
| - | MANAGED\_THIRD\_PARTY\_INDICATOR | Set to NULL |
| - | THIRD\_PARTY\_TYPE | Set to NULL |
| AssetEventData.Data.accessCircuit.details.mco | MAINTENANCE\_CONTROL\_OFFICE | Select GCP\_LOCATION.MCO from GCP\_LOCATION, GCP\_CIRCUIT where GCP\_LOCATION.LOCATIONID = GCP\_CIRCUIT.STARTLOCATION and GCP\_CIRCUIT.CIRCUITID = <input IDIS Circuit Id |
| - | ATT\_LEGAL\_ENTITY\_ID | Set to NULL |
| AssetEventData.Data.accessCircuit.details.connectedDevice | CONNECTED\_DEVICE | Select GCP\_NODE.name from GCP\_NODE, GCP\_CIRCUIT where  GCP\_NODE.nodeid = GCP\_CIRCUIT.startnode and GCP\_CIRCUIT.circuitid = <input IDIS Circuit Id |
| - | ID\_CHANGE\_TRACKING | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |

Process the following records into the GDB asset to organization association and into the Data Index (ref. Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**ORGANIZATION**’, ROLE with FUNCTION\_TYPE ‘**CONTRACTED\_BY**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetEventData.boundedContext.account[].accountObject.identifier.accountBillingService.idisSubscriberId | Id\_object\_to [via Enterprise Key Translation for GCP\_SUBSCRIBER.subscriberid] | Use SOURCE\_KEY.id which populated the respective ORGANIZATION.id |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following records into the GDB asset to site association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**SITE**’, ROLE with FUNCTION\_TYPE ‘**PART\_OF**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetEventData.boundedContext.site.siteDetail.serviceId, if city and address1 are all populated, otherwise,  assetEventData.boundedContext.site.siteDetail.locationId | Id\_object\_to [via Enterprise Key Translation for GCP\_LOCATION.locationid or GCP\_SERVICE\_LOC\_VW2] | Use SOURCE\_KEY.id which populated the respective SITE.id |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following records into the GDB asset to service association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**SERVICE**’, ROLE with FUNCTION\_TYPE ‘**IMPLEMENTED\_BY**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetDocEvent.BoundedContext.service.serviceName | Id\_object\_to [via lookup in GDB SERVICE and SERVICE\_TYPE\_NOTATION] |  |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following records into the GDB asset to service option (SO\_JUMBO\_FRAMES) association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**SERVICE\_OPTION**’, ROLE with FUNCTION\_TYPE ‘**HAS\_SERVICE\_OPTION**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetDocEvent.Data.accessCircuit.Details.serviceOptionInstnace.serviceOptionName = ‘SO\_JUMBO\_FREAMES’ | Id\_object\_to [via lookup in GDB SERV\_OPT and SERV\_OPT\_TYPE] | Use SERV\_OPT.id which references SERV\_OPT\_TYPE having serv\_opt\_name = ‘**SO\_JUMBO\_FRAMES**’. |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following records into the GDB asset to service option (SO\_ADDITIONAL\_MAC\_ADDRESSES) association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**SERVICE\_OPTION**’, ROLE with FUNCTION\_TYPE ‘**HAS\_SERVICE\_OPTION**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetDocEvent.Data.accessCircuit.Details.serviceOptionInstance.serviceOptionName = ‘SO\_ADDITIONAL\_MAC\_ADDRESS’ | Id\_object\_to [via lookup in GDB SERV\_OPT and SERV\_OPT\_TYPE] | Use SERV\_OPT.id which references SERV\_OPT\_TYPE having serv\_opt\_name = ‘**SO\_ADDITIONAL\_MAC\_ADDRESSES**’. |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following records into the GDB asset to service option (SO\_ORPHAN\_ASSET) association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**SERVICE\_OPTION**’, ROLE with FUNCTION\_TYPE ‘**HAS\_SERVICE\_OPTION**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| AssetEventData.Data.AccessCircuit.Details.serviceOptionInstance.serviceOptionName = ‘SO\_ORPHAN\_ASSET’ | Id\_object\_to [via lookup in GDB SERV\_OPT and SERV\_OPT\_TYPE] | Use SERV\_OPT.id which references SERV\_OPT\_TYPE having serv\_opt\_name = ‘**SO\_ORPHAN\_ASSET**’. |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following records into the GDB asset to asset (access circuit(s) for network connection) association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**ASSET**’, ROLE with FUNCTION\_TYPE ‘**USED\_BY**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetDocEvent.BoundedContext.relatedAsset.Identifier.value | Id\_object\_to [via Enterprise Key Translation for GCP\_SERVICE.serviceid | Use SOURCE\_KEY.id which populated the respective ASSET.id  Referencing to relatedAsset.assetType as ‘NETWORK\_CONNECTION’ |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following records into the GDB asset to asset (access circuit diversity circuit) association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**ASSET**’, OBJECT\_TYPE\_TO ‘**ASSET**’, ROLE with FUNCTION\_TYPE ‘**IS\_DIVERSITY\_CKT\_FOR**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| assetDocEvent.BoundedContext.relatedAsset.Identifier.value | Id\_object\_to [via Enterprise Key Translation for GCP\_CIRCUIT.circuitid] | Use SOURCE\_KEY.id which populated the respective ASSET.id  Referencing to functionType ‘IS\_DIVERSITY\_CKT\_FOR’ |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective ASSET.id |
| - | Gdb\_internal\_flags | NULL |

Process the following records into the GDB alias to asset association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB column ALIAS\_VALUE** | **Processing comment** |
| - | Id |  |
| AssetEventData.Data.accessCircuit.details.customerAlias.aliasValue | Value |  |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB column ALIAS\_ASSOCIATION** | **Processing comment** |
| - | Id |  |
| - | id\_object\_type | GDB.OBJECT\_TYPE.id referencing ‘ASSET’ |
| assetEventData.header.metadata.rootKey | id\_object  [via Enterprise Key Translation] | GDB ASSET.id [derived via Enterprise Key Translation on GCP\_CIRCUIT.circuitid] |
| - | id\_alias\_type | GDB.ALIAS\_TYPE.id Referencing ALIAS\_TYPE ‘CUSTOMER\_DEFINED\_ASSET\_TICKET\_ALIAS’ |
| - | id\_alias\_value | ALIAS\_VALUE.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |

#### HLD-309623-GCP-FLOW-IDIS-150 [IDIS Data Flow into Logical Port (“Log Port”)]

The following section is about “CUSTOMER LOGICAL PORT” assets from DOC Events with assetEventData.header.metadata.objectType = ‘CUSTOMER\_LOG\_PORT’. The following data should be processed into GDB only if assetEventData.boundedContext.relatedAsset is present in boundedContext section. Otherwise, ignore/skip the DOC Event.

Process the following IDIS records into the GDB log\_port object:

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB LOG\_PORT column** | **Processing comment** |
| assetEventData.header.metadata.rootKey | id [via Enterprise Key Translation] | Use SOURCE\_KEY.id into GDB |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | id\_object\_type | Referencing OBJECT\_TYPE ‘LOG\_PORT’ |
| - | id\_port\_type | Referencing PORT\_TYPE ‘CE’ |
| - | is\_read\_only | ‘Y’ |
| - | instar\_site\_id\_value | Set to NULL |
| - | icore\_site\_id\_value | Set to NULL |
| - | icore\_ce\_port\_site\_id\_value | Set to NULL |
| assetEventData.boundedContext.site.locationId | id\_site\_inventory\_site\_rep  [via Enterprise Key Translation for “GCP\_LOCATION.locationid”] | Use SOURCE\_KEY.id into GDB |
| - | id\_asset\_equipment | Set to NULL |
| assetEventData.asset.customerPort.details.customerPortSummary.protocol | protocol |  |
| assetEventData.asset.customerPort.details.minimumBandwidthCommitment | speed |  |
| - | name | Set to NULL |
| - | mac\_address | Set to NULL |
| - | cos\_profile | Set to NULL |
| - | id\_phy\_port | Set to NULL |

**Port Identifier (1): VLAN:**   
 Only execute if a VLAN value exists !

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB LOG\_PORT\_IDENTIFIER column** | **Processing comment** |
| - | id\_log\_port | LOG\_PORT.id |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘VLAN\_PORT\_IDENTIFIER’ |

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB LOG\_PORT\_IDENTIFIER\_VALUE column** | **Processing comment** |
| - | id\_log\_port\_identifier | LOG\_PORT\_IDENTIFIER.id |
| - | id\_change\_tracking | LOG\_PORT\_IDENTIFIER.id\_change\_tracking |
| - | id\_identifier\_type | Referencing IDENTIFIER\_TYPE ‘VLAN\_PORT\_IDENTIFIER’ |
| assetEventData.asset.customerPort.details.cvlanTag | Value |  |

Process the following IDIS records into the GDB port to asset association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

|  |  |  |
| --- | --- | --- |
| **DOC Event** | **GDB ASSOCIATION column** | **Processing comment** |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| - | Id\_role\_notation | NULL |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**LOG\_PORT**’, OBJECT\_TYPE\_TO ‘**ASSET**’, ROLE with FUNCTION\_TYPE ‘**USED\_BY**’ and FUNCTION\_ROLE NULL |
| assetEventData.header.metadata.rootKey | Id\_object\_what [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective LOG\_PORT.id  (where LOG\_PORT.id\_port\_type references “**CE**”) |
| assetEventData.boundedContext.relatedAsset[&1].identifier[].value | Id\_object\_to [via Enterprise Key Translation for  GCP\_SERVICE.serviceid; ] | Use SOURCE\_KEY.id which populated the respective SITE.id |
| assetEventData.header.metadata.rootKey | Id\_source\_key [via Enterprise Key Translation] | Use SOURCE\_KEY.id which populated the respective LOG\_PORT.id |
| - | Gdb\_internal\_flags | NULL |

#### HLD-2309623-GCP-FLOW-IDIS-160 [IDIS Data Flow into Service]

Implement the following:

Process the following IDIS records into the GDB service object and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

By using the “chgInd”, we need to determine whether it is a Create, Update/Delete events

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB SERVICE\_TYPE\_NOTATION column** | **Processing comment** |
| - | Id | Create a new unique “id” value using the "SERVICE\_TYPE\_NOTATION\_ID" sequence |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
| ~~GCP\_SERVICE.producttype~~  Asset.serviceInstance.boundedContext.service.sericeName | Service\_name | ~~<309623> Special handling for SDN-ETHERNET:~~  ~~If producttype == ‘SDN-ETHERNET’ and originatingServiceId <> ‘SDN-ETHERNET-INTERNET’, set service\_name = ‘SDN-ETHERNET’;~~ |
| - | Id\_service\_type | NULL if not already pre-populated (ref. HLD-309623-GCP-GDB-from-IDIS-001 [SERVICE\_TYPE Content and Mapping]) |

Make sure no duplicate “service\_name” entries are created in “GDB.SERVICE\_TYPE\_NOTATION”.

|  |  |  |
| --- | --- | --- |
| **IDIS table.column** | **GDB SERVICE column** | **Processing comment** |
| - | id\_object\_type | Referencing OBJECT\_TYPE ‘SERVICE’ |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | is\_read\_only | ‘Y’ |
|  | Id [via Enterprise Key Translation] | New primary key from Enterprise Key Translation.  Use SOURCE\_KEY.id into GDB  {More details found below} |
| - | Id\_service\_type\_notation | SERVICE\_TYPE\_NOTATION.id |
| - | Id\_service\_type | SERVICE\_TYPE\_NOTATION.id\_service\_type  (presents reference to SERVICE\_TYPE.id referencing ‘SDN-ETHERNET’ (if existing), or NULL) |

For the above MS-WORD table, for each row inserted into “GDB.SERVICE\_TYPE\_NOTATION” (and for cases where the corresponding data already exists in GDB.SERVICE\_TYPE\_NOTATION, because it has been prepopulated !) a corresponding row in “GDB.SERVICE” needs to be created, unless it already exists. The latter (it already exists) is the case, if a row exists in GDB.SERVICE   
where (Id\_service\_type\_notation = SERVICE\_TYPE\_NOTATION.id)  
and (<current source system service name> = SERVICE\_TYPE\_NOTATION.service\_name)  
and ((Id\_service\_type = SERVICE\_TYPE\_NOTATION.id\_service\_type)  
 or (Id\_service\_type = NULL))

For setting “GDB.SERVICE.id” there is a special setup in the EKT system (METADATA schema) for creating EKT values for “GDB.SERVICE.id”. It works as follows:

So use

* meta\_system.name = ‘GDB’
* meta\_table.name = ‘SERVICE’
* source\_key.num\_source\_key\_values = 0

Use that as the input into the EKT system to get a new Enterprise Key Value

(here: as a new primary key value for “GDB.SERVICE.id”).

**Hint**: For the above the same process already exists for INSTAR (“HLD-232213e-GCP-FLOW-INSTAR-103 [Instar Data Flow into Service]”, implemented by the GRDB ETL team); that already existing process can be used for all needed details.

Note: Check if service.serviceName referencing to ‘SDN-ETHERNET’ is already loaded or not. If present, do not load duplicate records.

#### HLD-309623-GCP-FLOW-IDIS-170 [IDIS Data Flow into Site to Organization]

Implement the following:

Process the following IDIS records into the GDB site to organization association and into the Data Index (ref.

Process HLD-232213e-GCP-DATA-INDEX-001 [Data Index Processing Rules]):

By using the “chgInd”, we need to determine whether it is a Create, Update/Delete events

#### HLD-309623-GCP-FLOW-OMX-R-010 [Load OMX\_R Contact Data into Golden Database Process]

Whenever a new GDB asset is newly created in the following sections, ensure the contacts loaded from OMX-R were linked to the newly created asset as below. This section is not applicable for updated assets in these sections.

*HLD-309623-GCP-FLOW-IDIS-1***30** *[IDIS Data Flow into Asset LEG EVC (“Network Connection”)]*

*HLD-309623-GCP-FLOW-IDIS-1***40** *[IDIS Data Flow into Asset GCP\_CIRCUIT (“Access Circuit”)]*

***Special Note:*** *Contacts loaded from OMX-R will have priority as the PRIMARY contact. So, if a contact is already loaded from OMX-R as PRIMARY – the CANOPI loaded contact should be made ALTERNATE. However, for CONTACT\_INFORMATION.contact\_type = ‘ALT’, this does not apply*

Process the following OMX-R records into the GDB contact to asset (ACCESS\_CIRCUIT) association:

|  |  |  |
| --- | --- | --- |
| **OMX-R and IDIS column** | **GDB column ASSOCIATION** | **Processing comment** |
| - | Id | New primary key from sequence ASSOCIATION\_ID |
| - | id\_change\_tracking | See HLD-254035a-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | Is\_read\_only | ‘N’ |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**CONTACT**’, OBJECT\_TYPE\_TO ‘**ASSET**’. For determining ROLE, see below table based on OMX-R.CONTACT\_INFORMATION.contact\_type |
| CONTACT\_INFORMATION.last\_name + GCP\_SUBSCRIBER.subscriberid + CONTACT\_INFORMATION.work\_phone + CONTACT\_INFORMATION.work\_cell + CONTACT\_INFORMATION.email | Id\_object\_what [via Enterprise Key Translation for  CONTACT\_INFORMATION.last\_name + GCP\_SUBSCRIBER.subscriberid + CONTACT\_INFORMATION.work\_phone + CONTACT\_INFORMATION.work\_cell + CONTACT\_INFORMATION.email] | Unification master should be used if available |
| IDIS.GCP\_CIRCUIT.circuitid (same as assetEventData.header.metadata.rootKey ) | Id\_object\_to [via Enterprise Key Translation for GCP\_CIRCUIT.circuitid] | Use SOURCE\_KEY.id as ASSET.id, if ASSET.id == SOURCE\_KEY.id exists.  Otherwise ignore this ASSOCIATION record. |
|  | Id\_role\_notation | Foreign Key to ROLE\_NOTATION.ID  Referencing ROLE\_NOTATION.Name for Contact\_type, Object\_type\_what: ‘CONTACT’,  Object\_type\_to: ‘ASSET’ and ROLE\_NOTATION.NAME = xxx (check table below based on OMX-R.CONTACT\_INFORMATION.contact\_type)  Add a new ROLE\_NOTATION record if the described ROLE\_NOTATION record is not already existing. |
| CONTACT\_INFORMATION.last\_name + GCP\_SUBSCRIBER.subscriberid + CONTACT\_INFORMATION.work\_phone + CONTACT\_INFORMATION.work\_cell + CONTACT\_INFORMATION.email | Id\_source\_key | Use SOURCE\_KEY.id into GDB |
| - | Gdb\_internal\_flags | NULL |

Process the following OMX-R records into the GDB contact to asset (NETWORK\_CONNECTION) association:

|  |  |  |
| --- | --- | --- |
| **OMX-R and IDIS column** | **GDB column ASSOCIATION** | **Processing comment** |
| - | Id | New primary key from sequence ASSOCIATION\_ID |
| - | id\_change\_tracking | See HLD-254035a-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | Is\_read\_only | ‘N’ |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**CONTACT**’, OBJECT\_TYPE\_TO ‘**ASSET**’. For determining ROLE, see below table based on OMX-R.CONTACT\_INFORMATION.contact\_type |
| CONTACT\_INFORMATION.last\_name + GCP\_SUBSCRIBER.subscriberid + CONTACT\_INFORMATION.work\_phone + CONTACT\_INFORMATION.work\_cell + CONTACT\_INFORMATION.email | Id\_object\_what [via Enterprise Key Translation for ~~OMX-R.CONTACT\_INFORMATION.id~~  CONTACT\_INFORMATION.last\_name + GCP\_SUBSCRIBER.subscriberid + CONTACT\_INFORMATION.work\_phone + CONTACT\_INFORMATION.work\_cell + CONTACT\_INFORMATION.email] | Unification master should be used if available |
| IDIS.GCP\_SERVICE[leg\_evc].serviceid | Id\_object\_to [via Enterprise Key Translation for GCP\_SERVICE.serviceid] | Use SOURCE\_KEY.id as ASSET.id, if ASSET.id == SOURCE\_KEY.id exists.  Otherwise ignore this ASSOCIATION record. |
|  | Id\_role\_notation | Foreign Key to ROLE\_NOTATION.ID  Referencing ROLE\_NOTATION.Name for Contact\_type, Object\_type\_what: ‘CONTACT’,  Object\_type\_to: ‘ASSET’ and ROLE\_NOTATION.NAME = xxx (check table below based on OMX-R.CONTACT\_INFORMATION.contact\_type)  Add a new ROLE\_NOTATION record if the described ROLE\_NOTATION record is not already existing. |
| CONTACT\_INFORMATION.last\_name + GCP\_SUBSCRIBER.subscriberid + CONTACT\_INFORMATION.work\_phone + CONTACT\_INFORMATION.work\_cell + CONTACT\_INFORMATION.email | Id\_source\_key | Use SOURCE\_KEY.id into GDB |
| - | Gdb\_internal\_flags | NULL |

**FUNCTION\_TYPE/FUNCTION\_ROLE determination:**

|  |  |  |  |
| --- | --- | --- | --- |
| **OMX-R.CONTACT\_INFORMATION. contact\_type** | **FUNCTION\_TYPE** | **FUNCTION\_ROLE** | **ROLE\_NOTATION.name** |
| LCL | LOCAL\_SITE | PRIMARY | ‘Site Contact’ |
| CUS | SERVICE\_ASSURANCE | PRIMARY | ‘Primary Contact’ |
| ALT | SERVICE\_ASSURANCE | ALTERNATE | ‘Primary Contact’ |
| BUS | BUILDING\_MANAGER | PRIMARY | ‘BUILDING\_MANAGER’ |
| SWIP | SWIP | PRIMARY | ‘SWIP’ |

#### HLD-309623-GCP-FLOW-IDIS-200 [Load Contact Data into Golden Database Process]

Load the following location contact data as Primary contact into GDB. Do not load the contact if the id\_organization cannot be found via the joins and EKT translation.

|  |  |  |
| --- | --- | --- |
| **Canopi GCP\_LOCATION\_CONTACT\_PRI\_VW** | **GDB.CONTACT** | **Comments** |
| - | Id\_object\_type | Referencing OBJECT\_TYPE ‘CONTACT’ |
| - | Id\_change\_tracking | NOT NULL |
| contactEventData.header.metadata.rootKey.sourceContId | Id [via Enterprise Key Translation for gcp\_location\_contact\_pri\_vw.locationid] if contactType = ‘PRIMARY’  Or [via Enterprise Key Translation for gcp\_location\_contact\_sec\_vw.locationid] if contactType = ‘ALTERNATE’ | New primary key from Enterprise Key Translation. |
| contactEventData.data.contact.firstName (first portion of name parsed) | First\_name | NULL |
| contactEventData.data.contact.firstName (last portion of name parsed) | Last\_name | NOT NULL |
| contactEventData.data.boundedContext.account. SERVICE\_SPECIFIC\_CUSTOMER\_REPRESENTATION. SUBSCRIBERID.[]. idisSubscriberId | Id\_organization [via Enterprise Key Translation for GCP\_SUBSCRIBER.subscriberid] |  |
| - | Id\_location\_notation | NULL |
| contactEventData.header.metadata.rootKey.sourceContId | Id\_address\_notation [via Enterprise Key Translation for GCP\_LOCATION.locationid equivalent to the gcp\_location.address1] | ADDRESS\_NOTATION.id |
| contactEventData.data.contact.firstName (middle portion of name, if any) | Middle\_name | NULL |
| - | Preferred\_language | NULL |
| - | Salutation | NULL |
| - | Job\_title | NULL |
| - | Time\_zone | NULL |
| - | Last\_validation\_date | NULL |
| - | Is\_verification\_opted \_out | NULL |
| - | Is\_read\_only | ‘N’ |
| - | Id\_contact\_unified | NULL |

|  |  |  |  |
| --- | --- | --- | --- |
| **Canopi GCP\_LOCATION\_CONTACT\_PRI\_VW** | **GDB.PHONE** | **Datatype** | **Comments** |
| - | Id\_object\_type | Number(10) | Referencing OBJECT\_TYPE ‘CONTACT’ |
| - | Id\_change\_tracking | Number(20) | NOT NULL |
| - | Id | Number(10) | New primary key from sequence Phone\_id |
| - | Id\_object | Number(20) | Contact\_id EKT |
| contactEventData.data.contact.workPhone | Phone\_number | VarChar2(100) | NOT NULL |
| - | Prompts | VarChar2(100) | NULL |
| - | Extension | VarChar2(50) | NULL |
| - | Provider | VarChar2(100) | NULL |
| - | Type | ‘Work Phone’ | NOT NULL |
| - | Is\_preferred | Char(1) | ‘Y’ <294395 US##> |
| - | Capability | VarChar2(100) | NULL |

|  |  |  |  |
| --- | --- | --- | --- |
| **Canopi GCP\_LOCATION\_CONTACT\_PRI\_VW** | **GDB.PHONE** | **Datatype** | **Comments** |
| - | Id\_object\_type | Number(10) | Referencing OBJECT\_TYPE ‘CONTACT’ |
| - | Id\_change\_tracking | Number(20) | NOT NULL |
| - | Id | Number(10) | New primary key from sequence Phone\_id |
| - | Id\_object | Number(20) | Contact\_id EKT |
| contactEventData.data.contact.workCell | Phone\_number | VarChar2(100) | NOT NULL |
| - | Prompts | VarChar2(100) | NULL |
| - | Extension | VarChar2(50) | NULL |
| - | Provider | VarChar2(100) | NULL |
| - | Type | ‘Work Cell’ | NOT NULL |
| - | Is\_preferred | Char(1) | ‘Y’ if we do not have a ‘Work Phone’ else ‘N’ <294395 US##> |
| - | Capability | VarChar2(100) | NULL |

|  |  |  |  |
| --- | --- | --- | --- |
| **Canopi GCP\_LOCATION\_CONTACT\_PRI\_VW** | **GDB.EMAIL** | **Datatype** | **Comments** |
| - | Id\_object\_type | Number(10) | Referencing OBJECT\_TYPE ‘CONTACT’ |
| - | Id\_change\_tracking | Number(20) | NOT NULL |
| - | Id | Number(10) | New primary key from sequence Email\_id |
| - | Id\_object | Number(20) | Contact\_id EKT |
| contactEventData.data.contact.emailAddress | Email\_address | VarChar2(100) | NOT NULL |
| - | Type | ‘Work Email’ |  |
| - | Is\_preferred | Char(1) | ‘Y’ <294395 US##> |
| - | Capability | VarChar2(100) | NULL |

|  |  |  |
| --- | --- | --- |
| **GDB column** | **GDB column ASSOCIATION** | **Processing comment** |
| - | Id | New primary key from sequence ASSOCIATION\_ID |
| - | id\_change\_tracking | See HLD-309623-GCP-FLOW-IDIS-001 [IDIS Data Flow into Golden Database Process] |
| - | Is\_read\_only | ‘N’ |
| - | Id\_association\_type | Referencing ASSOCIATION\_TYPE.id which represents:  OBJECT\_TYPE\_WHAT ‘**CONTACT**’, OBJECT\_TYPE\_TO ‘**ASSET**’, ROLE with FUNCTION\_TYPE ‘LOCAL\_SITE’ and FUNCTION\_ROLE ‘PRIMARY’ (or ‘ALTERNATE’ if there is an existing ‘PRIMARY’ contact for the same Asset) |
| contactEventData.header.metadata.rootKey.sourceContId | Id [via Enterprise Key Translation for gcp\_location\_contact\_pri\_vw.locationid] if contactType = ‘PRIMARY’  Or [via Enterprise Key Translation for gcp\_location\_contact\_sec\_vw.locationid] if contactType = ‘ALTERNATE’ | Unification master should be used if available |
| contactEventData.data.boundedContext.asset[&1]. identifier[0].value | Id\_object\_to [via Enterprise Key Translation for GCP\_SERVICE.serviceid] | Use SOURCE\_KEY.id as ASSET.id, if ASSET.id == SOURCE\_KEY.id exists.  Otherwise ignore this ASSOCIATION record. |
|  | Id\_role\_notation | Foreign Key to ROLE\_NOTATION.ID  Referencing ROLE\_NOTATION.Name for Contact\_type, Object\_type\_what: ‘CONTACT’,  Object\_type\_to: ‘ASSET’ and ROLE\_NOTATION.name = ‘Primary Contact’  Add a new ROLE\_NOTATION record if the described ROLE\_NOTATION record is not already existing. |
| contactEventData.header.metadata.rootKey.sourceContId | Id [via Enterprise Key Translation for gcp\_location\_contact\_pri\_vw.locationid] if contactType = ‘PRIMARY’  Or [via Enterprise Key Translation for gcp\_location\_contact\_sec\_vw.locationid] if contactType = ‘ALTERNATE’ | Use SOURCE\_KEY.id into GDB |
| - | Gdb\_internal\_flags | NULL |

#### HLD-309623-GCP-FLOW-IDIS-300 [ASSOCIATION\_TEMP\_CACHE Process]

For each Doc Event received, we need to load the data into the ASSOCIATION\_TEMP\_CACHE table based on the mappings provided below. And for each corresponding event coming in for object load, we need to check this table if there are any values present (in Object\_2\_ID column). If identified, then we need to update the record in the temporary table from process\_indicator = ‘N’ to ‘Y’. And update corresponding associations in the association table. The association between two objects will be same as what we are doing today or as per the associations mentioned in the above sections (related to loading into ‘ASSOCIATION’ table).

When we process the data coming from our events, if one event comes first and we do not have associations, we should hold the ID for that object in this table and mark the process\_indicator as ‘N’ so that once we process the record later meaning once the associated object is identified and ready to be processes, then we should change the process\_indicator = ‘Y’.

We should have a process to load all the records with process\_indicator = ‘Y’ into the association table at regular intervals. Dev team can come up with a plan for process such records at the earliest.

For each object identified through individual event, we should check whether all the associations are done or not. Once all the required associations are done, then we can process that record as complete.

|  |  |  |
| --- | --- | --- |
| **Object Events** | **GDB column ASSOCIATION\_TEMP\_CACHE** | **Processing comment** |
| - | ID | Sequential value |
| assetEventData.header.metadata.rootKey  or  Spec.IDIS\_CUSTOMER\_LOG\_PORT\_SOR\_EVENT.Data.GCP\_SERVICE.ServiceID  Or  **accountEventData.header**.metadata.rootKey.subscriberId  or  ContactEventData.header.metadata.rootkey.sourceContId  Or  locationEventData.header.rootkey.locationId/serviceId | Object\_1\_ID |  |
| assetEventData.header.metadata.objectType  or  Spec.IDIS\_CUSTOMER\_LOG\_PORT\_SOR\_EVENT.Metadata.objectType  Or  **accountEventData.header**.metadata.objectType  or  ContactEventData.header.metadata.objectType  Or  locationEventData.header.metadata.objectType | Object\_1\_Type |  |
|  | Object\_2\_ID | Check in boundedContext of each AssetDocEvent for the following:   * In case of Site – site.identifier.sourceValue * In case of Service – service.serviceName * In case of account – account.accountObject.Identifiers * In case of relatedAsset – relatedAsset.Identifier.Value * assetDocEvent.Data.serviceOptionInstance.serviceOptionName   Check in the boundedContext of each IDIS\_CUSTOMER\_LOG\_PORT\_SOR\_EVENT for the following:   * Account.accountDetail|accountDetails.\*.ubAccountId/idisSubscriberId * Asset.assetDetail|RelatedAsset.\*.\*.identifierValue * Location.locationDetail.structureValue * Service.serviceDetail   Check in the boundedContext of each AccountDocEvent for the following:   * Contracts.contractNumber * Services.serviceName   Check in the boundedContext of each ContactDocEvent for the following:   * Asset.identifier.value * Account.service\_specific\_customer\_representation\_ubaccountid.ubaccountid * Location.locationId.locationId/serviced |
|  | Object\_2\_Type | Corresponding ObjectType can be set as follows:   * In case of Site – LOCATION * In case of Service – SERVICE * In case of Account – ACCOUNT * In case of Contact – CONTACT * In case of Asset – ASSET * In case of Customer Log Port – PHY\_PORT/LOG\_PORT (based on the objectType identified) * In case of ServiceOptionInstance – SERVICE\_OPTION |
|  | Process\_Indicator | Set the value to ‘N’ when loaded initially.  Once the eventData identifies the record, change it to ‘Y’ for cleanup. |
|  | Time\_Stamp | System timestamp to be set when added/updated. |
| ~~assetEventData.header.metadata.rootKey~~ | ~~ID\_Object\_Asset\_AC~~ | ~~Referencing to assetType of ‘ACCESS\_CIRCUIT’~~ |
| ~~assetEventData.header.metadata.rootKey~~ | ~~ID\_Object\_Asset\_NC~~ | ~~Referencing to assetType of ‘NETWORK\_CONNECTION’~~ |
| ~~assetEventData.header.metadata.rootKey~~ | ~~ID\_Object\_Asset\_CN~~ | ~~Referencing to assetType of ‘CUSTOMER\_NETWORK’~~ |
| ~~Spec.IDIS\_CUSTOMER\_LOG\_PORT\_SOR\_EVENT.Data.GCP\_SERVICE.ServiceID~~ | ~~ID\_Object\_Asset\_Log\_Port~~ |  |
|  | ~~ID\_Object\_Asset\_Physical\_Port~~ |  |
| **~~accountEventData.header~~**~~.metadata.rootKey.subscriberId~~ | ~~ID\_Object\_Org~~ |  |
| ~~ContactEventData.header.metadata.rootkey.sourceContId~~ | ~~ID\_Object\_Contact~~ |  |
| ~~locationEventData.header.rootkey.locationId~~ | ~~ID\_Object\_Site~~ |  |
| ~~Asset.serviceInstance.boundedContext.service.sericeName~~ | ~~ID\_Object\_Service~~ |  |
|  | ~~Process\_Indicator~~ | ~~‘Y’ or ‘N’~~ |
| ~~assetDocEvent.BoundedContext.account.accountObject.identifiers~~ | ~~Asset\_To\_Org\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~Asset.serviceInstance.BoundedContext.account.accountObject.identifiers.subscriberId~~ | ~~Site\_To\_Org\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~assetDocEvent.BoundedContext.Site.Identifier.sourceValue~~ | ~~Asset\_AC\_To\_Site\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~assetDocEvent.BoundedContext.Site.Identifier.sourceValue~~ | ~~Asset\_CN\_To\_Site\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~assetDocEvent.BoundedContext.Site.Identifier.sourceValue~~ | ~~Asset\_NC\_To\_Site\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~assetDocEvent.BoundedContext.service.serviceName~~ | ~~Asset\_CN\_To\_Service\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~assetDocEvent.BoundedContext.service.serviceName~~ | ~~Asset\_AC\_To\_Service\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~assetDocEvent.BoundedContext.service.serviceName~~ | ~~Asset\_NC\_To\_Service\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~assetDocEvent.BoundedContext.relatedAsset.Identifier.value~~ | ~~Asset\_AC\_To\_NC\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~assetDocEvent.BoundedContext.relatedAsset.Identifier.value~~ | ~~Asset\_NC\_To\_CN\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~assetEventData.Data.accessCircuit.Details.serviceOptionInstance.serviceOptionName~~ | ~~Asset\_AC\_To\_SO\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~assetEventData.Data.NetworkConnection.Details.serviceOptionInstance.serviceOptionName~~ | ~~Asset\_NC\_To\_SO\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~assetEventData.Data.customerNetwork.Details.serviceOptionInstance.serviceOptionName~~ | ~~Asset\_CN\_To\_SO\_Ind~~ | ~~‘Y’ or ‘N’~~ |
| ~~ContactEventData.BoundedContext.asset.identifier.value~~ | ~~Contact\_To\_Asset\_Ind~~ | ~~‘Y’ or ‘N’~~ |
|  | ~~Asset\_To\_Port\_Ind~~ | ~~‘Y’ or ‘N’~~ |

**DMaaP Event Data Handling:**

From EGF, we get 5 events specific to Account, Asset, Location, ServiceInstance, Contact based on the Doc Rules that we have created to handle the way data should be pulled from source.

The events can be for both new or change/update.

Based on the mappings provided under each field, we should load the data accordingly and associate in GDB.

Here are the sample doc events coming from EGF today.

     

### Service Delivery Data Flow into Golden Database [GDB Post Processes]

This section describes the requirements for all the GDB Post Processes after processing a DOC Event into GDB as described in *Service Delivery Data Flow into Golden Database [IDIS Data Flow]*.

An internal Kafka queue is recommended to separate GDB data loading and GDB post-processes. This will also increase the overall parallel data processing from end to end. All the Kafka events described below for one DOC Event should only be issued after the data for that DOC event is fully processed into GDB.

All the processes described below are asynchronous, for maximum parallel data processing.

#### HLD-309623-GCP-GDB-Post-Process-010 [Organization Unification]

Whenever an organization identifier and organization identifier value were created or updated in *HLD-309623-GCP-FLOW-IDIS-100 [IDIS Data Flow into Organization GCP\_SUBSCRIBER]*, an event with the following suggested payload should be sent.

|  |  |  |  |
| --- | --- | --- | --- |
| **Field/Tag Name** | **Data Type** | **R/O/C** | **Comment** |
| action | String (50) | R | Organization Unification |
| idOrganization | Integer | C | GDB.organization\_identifier.id\_organization |

For each event, follow GDB organization unification to unify the idOrganization (as the record (X)) from above. More details regarding GDB’s organization unification could be found in the section *Organization unification/de-duplication [CR77955]* in the Family HLD.

For slave idOrganization (record(X)), and master idOrganization (record(Y)), ensure any any reference in GDB to the slave idOrganization will be updated to refer to the master idOrganization. The identified references to idOrganization are listed below:

1. CONTACT.id\_organization

#### HLD-309623-GCP-GDB-Post-Process-020 [Asset Unification]

Whenever an asset identifier and asset identifier value were created or updated in the following sections, an event with the following suggested payload should be sent.

*HLD-309623-GCP-FLOW-IDIS-1***20** *[IDIS Data Flow into Asset EVC (“Customer Network”)]*

*HLD-309623-GCP-FLOW-IDIS-1***30** *[IDIS Data Flow into Asset LEG EVC (“Network Connection”)]*

*HLD-309623-GCP-FLOW-IDIS-1***40** *[IDIS Data Flow into Asset GCP\_CIRCUIT (“Access Circuit”)]*

|  |  |  |  |
| --- | --- | --- | --- |
| **Field/Tag Name** | **Data Type** | **R/O/C** | **Comment** |
| action | String (50) | R | Asset Unification |
| idAsset | Integer | C | GDB.asset\_identifier.id\_asset |

For each event, follow GDB existing organization unification for the idAsset (as the Record (X) ) as described in the Family HLD and UIS Load HLD (GCP-SA-HLD-for-GCP-GDB.xxxxxx.For-UIS-et-al-Load.docx). In addition, follow GDB’s asset unification requirements specified in CANOPI Load HLD, and quoted below:

**Asset Unification :**

When asset unification is executed, the new optional “id\_location\_notation\_with\_glid” value needs to be taken into account as follows:

* If a “master” record does not yet have a value for “id\_location\_notation\_with\_glid”, but a “slave” has, then that value from the “slave” shall be copied to the “master”.
* If both the “master” and the “slave” have a value for “id\_location\_notation\_with\_glid”, then copy the “value from “slave” to “master”, if the “slave’s” Loc-Not record is “newer” than the “master’s” one (in respect to data loading “history”).

#### HLD-309623-GCP-GDB-Post-Process-030 [Address Normalization]

Whenever an GDB.ADDRESS\_NOTATION record is created or updated in HLD-309623-GCP-FLOW-IDIS-100 [IDIS Data Flow into Site GCP\_SERVICE], an event with the following suggested payload should be sent.

|  |  |  |  |
| --- | --- | --- | --- |
| **Field/Tag Name** | **Data Type** | **R/O/C** | **Comment** |
| action | String (50) | R | Address Normalization |
| idAddressNotation | Integer | C | GDB.ADDRESS\_NOTATION.id |

For each event, follow section Delta Daily Address Load (HLD-295674-EDF-Delta-Address-010 [ Process ], HLD-295674-EDF-Delta-Domestic-Address-020 [ PLA Request ], HLD-295674-EDF-Delta-Domestic-Address-030 [ PLA Response ]) in OVALS Geocoding HLD to normalize the corresponding address.

#### HLD-309623-GCP-GDB-Post-Process-040 [Correlated Site]

Whenever an GDB association record is created or updated between a site and an account organization as in *HLD-309623-GCP-FLOW-IDIS-***17***0 [IDIS Data Flow into Site to Organization]*, an event with the following suggested payload should be sent.

|  |  |  |  |
| --- | --- | --- | --- |
| **Field/Tag Name** | **Data Type** | **R/O/C** | **Comment** |
| action | String (50) | R | Correlated Site |
| idSite | Integer | C | GDB.ASSOCIATION.id\_object\_what |
| idOrganization | Integer | C | GDB.ASSOCIATION.id\_object\_to |

For each event, follow the section SITE correlation ***HLD8*** within immediate ORGANIZATION and BD Customer ORGANIZATION to ensure a correlated site is existing in GDB for the SITE/address and the customer organizations for the account organization as described in Family HLD.

Note: Correlated Site process has dependency on Address Normalization process, hence it should be executed after the Address Normalization.

#### HLD-309623-GCP-GDB-Post-Process-050 [Customer Site]

Whenever an GDB association record is created or updated between an asset and site as in the following sections, an event with the following suggested payload should be sent.

*HLD-309623-GCP-FLOW-IDIS-1***20** *[IDIS Data Flow into Asset EVC (“Customer Network”)]*

*HLD-309623-GCP-FLOW-IDIS-1***30** *[IDIS Data Flow into Asset LEG EVC (“Network Connection”)]*

*HLD-309623-GCP-FLOW-IDIS-1***40** *[IDIS Data Flow into Asset GCP\_CIRCUIT (“Access Circuit”)]*

|  |  |  |  |
| --- | --- | --- | --- |
| **Field/Tag Name** | **Data Type** | **R/O/C** | **Comment** |
| action | String (50) | R | Correlated Site |
| idAsset | Integer | C | GDB.ASSOCIATION.id\_object\_what |
| idOrganization | Integer | C | GDB.ASSOCIATION.id\_object\_to |

For each event, follow the sections in Family HLD *SITE correlation within customer ORGANIZATION* and *SubGroup and <Account CustLoc> SITE correlation within account ORGANIZATION* to ensure a customer site is existing in GDB for the asset, SITES/addresses for the account organization, and the customer organizations for the account organization.

#### HLD-309623-GCP-GDB-Post-Process-060 [Asset to Customer Organization]

Whenever a GDB association record is created or updated between an asset and organization as in the following sections, an event with the following suggested payload should be sent.

*HLD-309623-GCP-FLOW-IDIS-1***20** *[IDIS Data Flow into Asset EVC (“Customer Network”)]*

*HLD-309623-GCP-FLOW-IDIS-1***30** *[IDIS Data Flow into Asset LEG EVC (“Network Connection”)]*

*HLD-309623-GCP-FLOW-IDIS-1***40** *[IDIS Data Flow into Asset GCP\_CIRCUIT (“Access Circuit”)]*

|  |  |  |  |
| --- | --- | --- | --- |
| **Field/Tag Name** | **Data Type** | **R/O/C** | **Comment** |
| action | String (50) | R | Asset2Customer |
| idAsset | Integer | C | GDB.ASSOCIATION.id\_object\_what |
| idOrganization | Integer | C | GDB.ASSOCIATION.id\_object\_to |

For each event, follow the IECAL Performance Improvement HLD to build asset (idAsset) to Customer Organization relationship for the idOrganization (account).

#### HLD-309623-GCP-GDB-Post-Process-100 [GDB Deletion]

Whenever a GDB object deletion is needed, an event with the following suggested payload should be sent.

|  |  |  |  |
| --- | --- | --- | --- |
| **Field/Tag Name** | **Data Type** | **R/O/C** | **Comment** |
| action | String (50) | R | Delete Object |
| idObject | Integer | C | GDB Object id to be deleted |
| objectType | Integer | C | ORGANIZATION, ASSET, PORT, and etc. |

For each event, follow existing GDB deletion process to delete the object in GDB, as described in, for example, Family HLD, or Canopi Load HLD, and etc.

**Appendix: References to other HLDs**

This appendix section contains copies of references to other HLDs.

Family HLD:

<https://tspace.web.att.com/files/app/file/2966d4ab-7b9d-4ba7-ad2a-edd7f5e808bd>

UIS Load HLD:

<https://tspace.web.att.com/files/app/file/5351e2a8-3507-417c-8c95-35f6e64b8b48>

Canopi Load HLD:

<https://tspace.web.att.com/files/app/file/92ed9a9f-3b8a-40f3-8b53-9bfc1b77c021>

ICORE Load HLD:

<https://tspace.web.att.com/files/app/file/fe939e89-c29e-485c-8e8e-4009b8891f1a>

IECAL Performance Improvement HLD:

<https://tspace.web.att.com/files/app/file/111757e5-3f93-421b-878e-dfa124e229a7>

OVAL Geocoding HLD:

<https://tspace.web.att.com/files/app/file/a44330f5-407e-4c89-a9a7-8504eb56ec68>

**Alternative Designs**

No alternative designs are being considered at this time.

**Assumptions/Risks**

**Assumptions:**

1. Production support team (EMAS, PSO, DBA) will apply the necessary system and database setup for mission crititical systems.
2. Due to changes in identified systems between the Solution Approach, the System Requirements and the HLD it is acceptable to switch from near real-time processing to batch processing for the service delivery to Golden Database flow.
3. Near real-time delete and immediate delete in batch processing potentially removes necessary data in error, if the upstream system executes any type of delete&insert for the same record.  
   It is assumed that GCP shall implement a safety net and delay deletes identified in upstream (service delivery) systems before they are applied to the Golden Database inventory.
4. The Golden DB is supposed to represent the inventory hierarchy as enabled via Service Delivery processes into the databases in scope.
5. The baselined System Requirements document is the only source for requirements, i.e. discussion points from meetings and email chains that are not represented in the SR document are obsolete.

**Risks:**

1. The engagement of CSI for exclusively providing web service access to data contained in the GDB may significantly delay this project.

**Traceability Matrix**

***{@TBD}***

|  |  |
| --- | --- |
| Requirement ID | Design Element Identifier |
| FR-1.1 | HLD - 1 |

## Pre-Production Disaster Recovery Planning

All relevant pre-production disaster recovery policies, standards and documentation have been reviewed and no changes are needed. A copy of the current GCP disaster recovery plan (GCP ARM (Application Recovery Manual)) is available at the following P8 link:

[Manual](https://cps.web.att.com/CPSWorkplace/getContent?id=current&vsId=%7BBF905B1E-9C53-4F48-BC36-64193179A0F7%7D&objectStoreName=IT-Enterprise.__.Systems.__.and.__.Software.__.Eng&objectType=document&guestID=servicesguest)

## Other Plans and References

1. **Tutorial/IDIS – IPAG/287954\_GCP-AOTS TM\_HLD\_INOD-DeviceDetails\_API-mode-null.docx**
2. **US458020 – 272078g**

|  |
| --- |
|  |

## Acceptance & Approvals

Overview

The Approvers of this work product agree that this document is acceptable and complete to the best of their knowledge and will be used by the project team as an official deliverable for the project. It is further agreed that this document can now be baselined and any changes to these sections from this point forward must follow the Managing Change in the IT UP.

Embed evidence of approval in the review table below, or use the PRISM Approval Functionality in the Project Workflow Module Workflow Template View.

Approvers

|  |  |  |  |
| --- | --- | --- | --- |
| **ATTUID and Name** | **Role** | **Group/Application** | **Version Approved, Approval Date and Approval Evidence** |
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