**CDA Algorithm Process:**

|  |  |
| --- | --- |
| URL | http:// id04-msb-vo.mvwc.com:443/api/proc/clubdues-admin-products/v1/CDAAlgorithamTest  Scheduler Event : |
| Method | POST |
| Request | 1. Configure a Schedular process to trigger every 4 seconds. 2. The data will come in the below format from System API.   {      "transactionId": "329159",      "primaryOwnerId": "10684702",      "primaryOwnerSrcSys": "UV",      "invId": "A4\*X471\*36\*B",      "invSrc": "UV",      "invPrimaryCustId": "10684702",      "invPrimaryCustName": "KEITH E ARNDT",      "invMemberShip": "",      "transactionType": "Enrollment",      "createdBy": "UV",      "createdOn": "2022-11-04 11:24:04.05",      "reqStatus": "INPROGRESS",      "statusDescription": "The Request is successful",      "hostName": "DCMCO3DVD1158.ad.mvwcorp.com",      "billingSysId": "",      "mpmId": "1279362369"  } |
| Response | {  Status: “Success / Failure”,  Message:” Have received Inventory Details for ” + contractInventory.  } |
| Functionality | 1. This is a Scheduler based flow triggered in MuleSoft proc API to process the Algorithm. 2. This process will retrieve a record with oldest date and REQ\_STATUS as NEW from CDA\_REQ\_LOGFILE table and will update REQ\_STATUS column to INPROGRESS. 3. Configure object store key as MPMId to avoid processing same primaryOwnerId records at same time within nodes. 4. Set isPropertyWithInline variable to false and set the Initial\_VSN\_load from properties file. 5. This sub flow calls other mule sub flows (InventoryGroupHierachy and evaluateInlineBillProcess). 6. Each sub flow may call other sub flows to complete the evaluation process. 7. For the incoming request has VSNID, verify any club dues assignment group available, by combing the CDA\_FILE and CDA\_INVENTORY\_FILE tables. The VSNID is saved in MEMBERSHIP\_NUM column of CDA\_INVENTORY\_FILE table. 8. If the VSNID has CDA\_ACCOUNT\_ID and Initial\_VSN\_load is true, then call an internal process sub flow called InventoryGroupHierachy 9. Else    1. make MPM API call to get Primary owner details.   (<https://id04-msb-vo.mvwc.com/api/sys/crm/v1/masterOwnerInfo?ownerNumber=126645001234> )   * 1. make call to CRM SAPI to get CDA details by passing MPM ID.   <https://id04-msb-vo.mvwc.com/api/sys/crm/v1/a0U7i00000ACejPEAT/clubDueAssignments>   * 1. If the primary owner does not have CDA\_ACCOUNT\_ID and has linked owner ID, then call CRM SAPI to get the CDA details for Linked Owner ID      1. Set LINKED\_CDA\_ACCOUNT\_ID from above CRM SAPI call.   2. If the primary owner or linked owner has club dues assignment group, then call an **internal** club dues process API (inventoryGroupHierarchy) is called   3. Else      1. Call the evaluateInlineBillProcess internal process API |
| Sample Data |  |

Graphical user interface, application

Description automatically generated

## Process API subFlow – evaluateInlineBillProcess:

|  |  |
| --- | --- |
| URL |  |
| Resource | subflow |
| Functionality | 1. Check if primary owner on the requested inventory has inline club dues billing by calling subflow (Find Owner Inventory Type)    1. Get the inventory from legacy source system.    2. Iterate through the inventory    3. Use SYS API getInventoryProductDetails for the current iterated inventory and check does the inventory product has club dues group ID as MT, if so then owner has in-line billing. 2. If the primary owner does not have inline Clube dues billing and has linked ownerID.    1. Iterate through the inventory for the Linked OwnerID    2. Get the product details for the current iterated inventory and check does the inventory product has club dues group ID as MT, if prodGrpIdType = 'MT' and currentProductPriority greater than ownerProductPriority, than set ownerProductPriority to currentProductPriority and cdaAccountId to currentIteratingInventoryId.    3. Else create a new CDA group and Inventory. |
| Sample Data |  |

Diagram

Description automatically generated

## **Process API subFlow – Find Owner Inventory BillType:**

|  |  |
| --- | --- |
| URL |  |
| Resource | subflow |
| Functionality | 1.For a given owner Number (primary or linked ownerID) get list of inventories from external system.   1. get inventory for Primary owner Number / linked owner Number. Use below endpoint for different source system to get inventory details.    * 1. TSW : <https://id04-api.mvwc.com//api/proc/contract/v1/contracts?sourceSystem=TSW&ownerNumber=8285>      2. UV: <https://iibid04.ad.mvwcorp.com/mvwc/services/MVWCClientNSAV1> 2. Filter the inventories whose contract status is not closed. 3. Set the ownerProductPriority =0; inventoryListToAdd=[] 4. Iterate through the inventory list    1. if Primary owner on CURRENT INVENTORY is incoming primary owner ID then  * TSW: In the response check   (contractRoles filter(IsPrimary == true ))[0].ownerNumber == primary or Linked ownerNumber.   * If the primary owner on current iterated inventory is the incoming primary owner   + Identify the propertycode of inventory, the String value first \* in the contractNumber / inventoryCode (GW\*123\*sd\*23) – here GW is propertyCode   + Then get product and property details for given propertyCode   + Set currentProductPriority and add the current iterated inventory to inventoryListToAdd   + if the product Club Dues GroupID is MT then the inventory and owner has in-line billing.     - Set isPropertyWithInline =true     - If the ownerProductPriority less than currentProductPriority then       * set the CDA\_ACCOUNT\_NUMBER and **CDA\_ACCOUNT\_ID** or **LINKED\_CDA\_ACCOUNT\_NUMBER** and **LINKED\_CDA\_ACCOUNT\_ID** of that current iterated inventory based primary or linked owner.       * Set the ownerProductPriority as the currentProductPriority. |
| Sample Data |  |

Graphical user interface

Description automatically generated with low confidence

**Initial\_VSNId\_load:**

|  |  |
| --- | --- |
| URL |  |
| Method | get |
| Functionality | 1. Get product, property CDA FILE details for the VSNID 2. Set VSNIDPriority 3. If VSNIDPriority is less than requestedInventory product priority    1. If BILL\_TYPE = Inline and incoming inventory product club dues = “ME”       1. Get next club dues accountID       2. Set CDA\_ACCOUNT\_ID as next club dues accountID       3. Set BILL\_TYPE as Separate    2. incoming inventory product club dues != “ME”       1. set CDA\_ACCOUNT\_ID = incoming inventory ID       2. Set BILL\_TYPE as Inline    3. Get CDA\_FILE using CDA\_ACCOUNT\_NUMBER    4. Update the above CDA\_FILE with       1. new CDA\_ACCOUNT\_ID       2. new BILL\_TYPE       3. BillToOwner as incoming Primary Owner ID       4. BillToSourceSystem incoming owner Source System       5. BillToOwnerName as incoming Primary Owner Name    5. PUT the CDA\_FILE    6. Call sub flow update-OldInventoryToLatestCDAaccountId-Sub\_Flow to update new CDA\_Account\_Id for all existing inventories.    7. Make update call to Sys API to sort Inventories by passing uriparams AccountNumber and inventorySorting ==0.   /transaction/cdafiles/{accountNumber}/inventory-sort/{inventorySort}   1. Add the newly requested inventory into CDA\_INVENTORY\_FILE table. |
| Sample Data |  |

Timeline

Description automatically generated

**evaluateCDAInventorySub\_Flow:**

|  |  |
| --- | --- |
| URL |  |
| Method | SubFlow |
| Functionality | 1. Get list of inventories for CDA\_ACCOUNT\_NUMBER. 2. Set Owner Product Priority = 0 3. Iterate through inventory list and get the product or property details for inventory    1. If the current iterated inventory product priority is greater than owner product Priority,       1. then update owner product Priority with current iterated inventory Priority. 4. If the owner product Priority is less than incoming inventory product priority and (BILL\_TYPE = Inline or BILL\_TYPE = Separate)    1. If BILL\_TYPE = Inline and incoming inventory product club dues = “ME”       1. Get next club dues accountID       2. Set CDA\_ACCOUNT\_ID as next club dues accountID       3. Set BILL\_TYPE as Separate    2. incoming inventory product club dues != “ME”       1. set CDA\_ACCOUNT\_ID = incoming inventory ID       2. Set BILL\_TYPE as Inline    3. Get CDA\_FILE using CDA\_ACCOUNT\_NUMBER    4. Update the above CDA\_FILE with       1. new CDA\_ACCOUNT\_ID       2. new BILL\_TYPE       3. BillToOwner as incoming Primary Owner ID       4. BillToSourceSystem incoming owner Source System       5. BillToOwnerName as incoming Primary Owner Name    5. PUT the CDA\_FILE    6. Call sub flow update-OldInventoryToLatestCDAaccountId-Sub\_Flow to update new CDA\_Account\_Id for all existing inventories.    7. Make update call to Sys API to sort Inventories by passing uriparams AccountNumber and inventorySorting ==0.   /transaction/cdafiles/{accountNumber}/inventory-sort/{inventorySort}.   1. Add the incoming inventory to existing CDA\_ACCOUNT\_ID AND CDA\_ACCOUNT\_NUMBER |
| Sample Data |  |

A picture containing graphical user interface

Description automatically generated

**update-OldInventoryToLatestCDAaccountId-Sub\_Flow:**

|  |  |
| --- | --- |
| URL | Sub-Flow |
| Method | GET and Patch |
| Functionality | 1.Call SAPI to get matching inventory from CDA\_inventory file associated with cdaAccountNumber.  2. loop through the inventory in try/catch and update latest cdaAccountId in CDA\_Inventory File.  3. log the error in on error continue in error block. |
| Sample Data |  |

Diagram

Description automatically generated