

iConnect - Upload Data Alterations

1. High Level Requirement

- Updating the /uploadInsured api in macquaire service
 - Adding new flag as api request to indicate the upcoming file is PCCW policy or not
- Setting up new route for unmarshalling and processing the PCCW member alteration file
 - Creating new class to handle PCCW member alteration file
 - Implement the logic to determine the plan of each product by the new added field
- All data in excel will translate to list of EbChangeRecord and return to iConnect

2. Expected Result

- All data in excel should translate to list of EbChangeRecord
- Validation and error handling should be done
 - error message should be clearly state that data is violating which validation and attached in API response
 - Check API request parameter: excel file and new added flag is mandatory
 - Validation on excel header, all necessary header will store in PCCWChangeRecordHeadersService class
 - Validation on member mandatory field:
 - macquarie-service: Check each member: policy no., effective date, action
 - iConnect experience layer: in MerberService.validateMembersAlterationRequests()
- If member record violate the validation rules, this record should be marked with fail reason and continue the member alteration process
 - macquarie-service: row number of the error data should be stated in responseMsg
 - For example (macquarie-service):
 - responseStatus: "partially_success"
 - responseMsg: "row 8 : missing 'Action'"
 - epreciousCensusRecordList : {the rest of the successful data}
 - iConnect experience layer: Locate which row of member data in the excel file based on the responseStatus and responseMsg from macquarie-service and the validation logic from MerberService.validateMembersAlterationRequests(), consolidate the error excel file and attach to api response
 - For example (iConnect experience layer):
 - responseStatus: "partially_success"
 - responseMsg: "Some of the member data violate the validation rules. For detail, please check the error file."
 - errorFileName : {Original member file + fail reason at the last column of each fail record }
 - epreciousCensusRecordList : {the rest of the successful data}
 - user can submit the successful data first

3. Technical spec

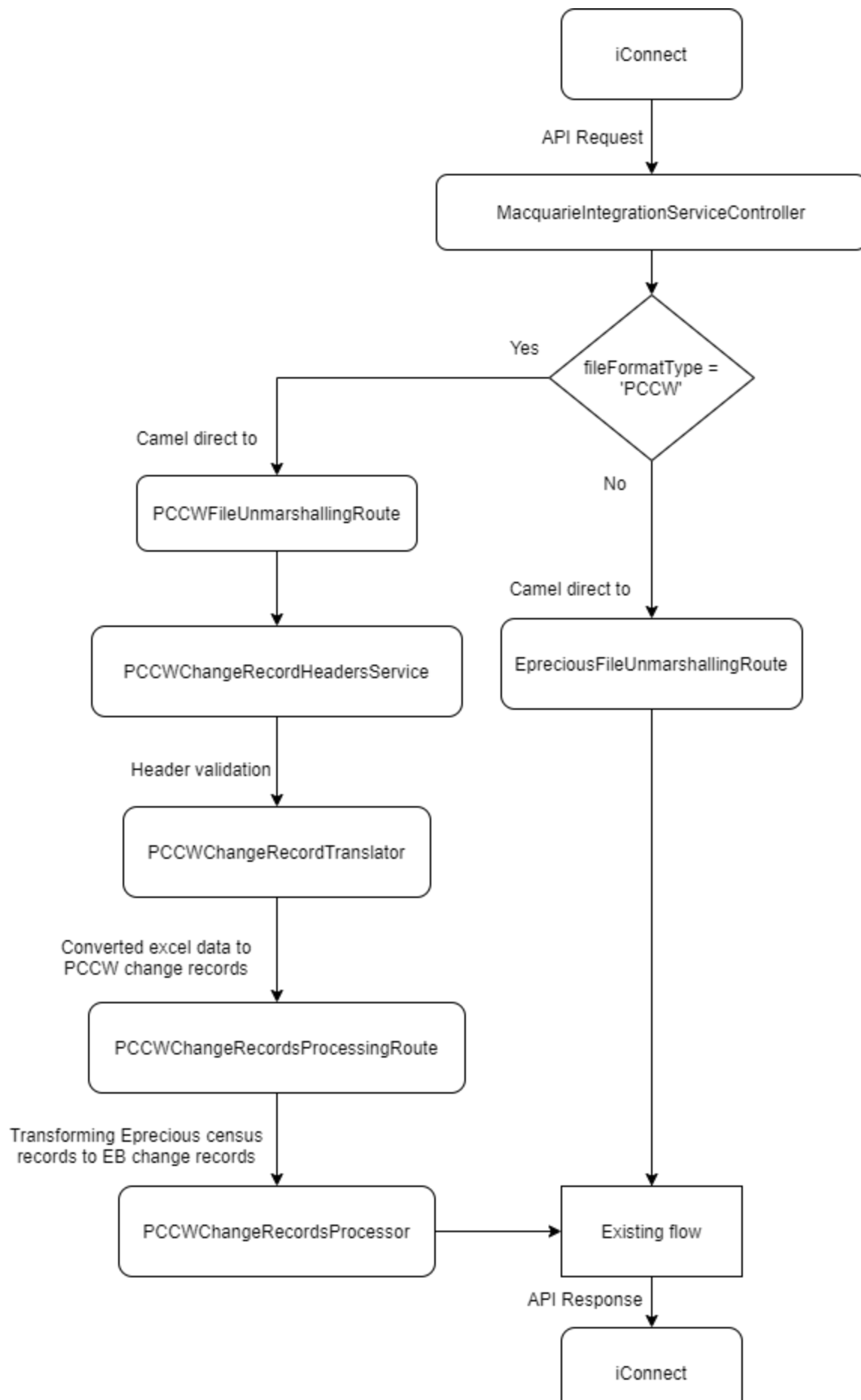
- MacquarieIntegrationServiceController.java
 - Adding new api request param fileType
 - if fileType = 'PCCW', redirect to new route PCCWFileUnmarshallingRoute
- PCCWFileUnmarshallingRoute.java (new)
 - Similar with EpreciousFileUnmarshallingRoute
 - Camel route for unmarshalling the PCCW member excel file and translate to PCCWChangeRecord
- PCCWChangeRecordHeadersService.java (new)
 - Similar with EpreciousCensusRecordHeadersService
 - Declare the PCCW member excel file header
- PCCWChangeRecordTranslator.java (new)
 - Similar with EpreciousCensusRecordTranslator
 - Map the data from each row of PCCW member excel file to PCCWChangeRecord
- PCCWChangeRecord (new)
 - Similar with EpreciousCensusRecord
 - Entity class for PCCW member
- PCCWChangeRecordsProcessingRoute (new)
 - Similar with EpreciousCensusRecordsProcessor
 - Processing the PCCWChangeRecord and translate to EbChangeRecord
 - In processAdd, processChange, processTerminate, remove setLifeProductDetail and add new method setMedicalProductDetail
 - For change or terminate member, as the member is existing member of that policy, user can only input employee number, dependent ID number, Member Name, date of birth and the product information. The rest will be retrieved by policy-service API
 - setMedicalProductDetail will set PCCWChangeRecord.product and PCCWChangeRecord.product base on the relationship code, Grade ,HS option, SMM option and OP option of the member
 - see Appendix 2 for the mapping
 - Can be reference MacquarieChangeRecordsProcessor.createProductGroup and MacquarieChangeRecordsProcessor.createPlanGroup for set data to PCCWChangeRecord.product and PCCWChangeRecord.product

4. Test Case (Unit Test / API Request Response)

- Normal
 - All data in excel should translate to list of EbChangeRecord
- Error

- Uploading excel file that do not match the format
- Some member are missing the mandatory field
- For change or terminate member, policy-service cannot find existing member (TBC, existing flow are also missing...)
- Product setting are violating the mapping excel

5. Appendix





PCCW_member_u..._mapping.xlsx