

System Ref. AGCC

System Name Renewal Flow

## AGCC - RENEWAL FLOW

FUNCTIONAL SPECIFICATIONS – UNIT PROCESS

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DOCUMENT CONTROL

Document Control: Revision History

Revision	Author	Date	Description
0.1	Rinkesh Kalani	24/06/2024	First draft

# 1. INTRODUCTION

This document describes renewal service.

The main advantage of this document is to understand the internals of renewal service.

The Document will focus on below topics:

- Renewal Service.

## 2. HIGHLEVEL DESCRIPTION

This document describes renewal service.

In high level, renewal process is an asynchronous process of document generation of Axon policies.

## 3. DETAILED DESCRIPTION

### 3.1 Renewal Service:

Renewal process is a document generation of Axon policies. Renewal plays special role in AGCC. It involves asynchronous processing whereas normal Axon generate is synchronous process of generating the documents.

To avoid the confusion on asynchronous processing, Renewal batch is called at Axon side to send the request in batch and not at AGCC side. For AGCC, renewal is just a normal online request.

#### 3.1.1 Services List:

- Qis New Controller
- Qis Pre Processor
- Orchestration Service
- Generate Service
- Generate Message Sender
- Generate Message Listener
- Delivery Service
- Delivery Message Sender
- Delivery Message Listener

#### 3.1.1.1 Qis New Controller:

##### 3.1.1.1.1 Renewal Generate Request

Axon sends request to ESB. We receive Input from ESB, we process the request and send it to pre-processor. Once after request is processed successfully, we check whether it is renewal using flag from orchestration response and if yes, we send the `GenerateMessageRequest` to EMS Generate

queue and will send success response to ESB. Otherwise, we send the normal generate response.

#### **3.1.1.1.2 Renewal Delivery Request**

Axon sends request to ESB. We receive Input from ESB. We process the request and send it to pre-processor. Once after request is processed successfully, we send the `DeliverMessageRequest` to EMS Delivery queue and will send success response to ESB. Otherwise, we send the normal delivery response.

### **3.1.1.2 Qis Pre Processor:**

At pre-processor we parse the input and check whether `IPreprocessorRequest` request contains reference of renewal uuid for "jobTypeRef" tag. If it is present, we check whether content is "processContinuationRequests" value, we update userid to "Renewal".

If userid is "Renewal" we consider it as renewal request else it will be processed as regular generate. The request which is consider as Renewal will be updated with event flow type as `GENERATE_UUID_RENEWAL` and send to qis new controller and from there it will be send to orchestration service for further processing.

### **3.1.1.3 Orchestration Service:**

#### **3.1.1.3.1 Request for Renewal Generate**

At Orchestration service we iterate at two levels, one at communication level and inside communication we iterate at document level. At this level we perform operation base on specific event-flow using switch case. As this request is updated with `GENERATE_UUID_RENEWAL` event-flow, it will be send to generate service.

#### **3.1.1.3.2 Request for Renewal Delivery**

At Orchestration service we iterate at two levels, one at communication level and inside communication we iterate at document level. At this level we perform delivery by calling delivery service. If response contain renewal communication, we don't perform copy for legal representative. We return to Qis controller and from there we return ESB and confirm communication is delivered.

### **3.1.1.4 Generate Service:**

#### **3.1.1.4.1 Request from Axon**

At Generate service we call a specific method especially implemented for renewal flow. `generateRenewalUuid()` method will be generating a UUID and creates an entry in Document table and update the document status to 10 and returns response with document external id. From here we return to orchestration and to Qis new controller.

#### **3.1.1.4.2 Request from Queue**

At Generate service we call `generateDocument()` method and we send the already generated renewal uuid. Before calling the UUID service we check whether renewal uuid is present. If present we skip the uuid generation and we continue with other generate process like enrichment, scriptura etc.

### 3.1.1.5 Generate Message Sender:

At Qis new controller after we received response back from orchestration, we check whether it is renewal request or not, if yes, we dump the renewal request to a file path and prepare GenerateMessageRequest with required details like file path, Renewal UUID, internal id and doctype, then we call EMS queue service to put the message in Generate queue to start the asynchronous process of renewal generate.

### 3.1.1.6 Generate Message Listener:

At Generate Message listener, we have onMessage() method to listen to messages send by EMS queue service. Once a message is received, session parameters will be set and we load the actual generate request using the file path received from GenerateMessageRequest . We send the actual request to pre-processor and from there it will be sent to generate service to perform actual generate in asynchronous way.

### 3.1.1.7 Delivery Service:

#### 3.1.1.7.1 Request from Axon:

At Delivery service we check below conditions to decide if communication is renewal:

```
if (communication does not contain file path && communication is not a legal  
represent) {  
    fetch communication document and check for first document user id if it is  
    renewal, we return communication to orchestration.  
}
```

#### 3.1.1.7.2 Request from Queue

At Delivery service we do normal delivery as file path will be present in the communication and no other conditions are performed. Once after delivery is done, we return success to orchestration.

### 3.1.1.8 Delivery Message Sender:

At Qis new controller after we received response from orchestration, we check whether it is renewal request or not, if yes, we dump the renewal request to a file path and prepare DeliverMessageRequest with required details like file path, communication externalid, and internal id then we call EMS queue service to put the message in Delivery queue to start the asynchronous process of renewal delivery

### 3.1.10 Delivery Message Listener:

At Delivery Message listener, we have onMessage() method to listen to messages send by EMS queue service. Once a message is received, session parameters will be set, and we load the actual delivery request using the file path received from DeliverMessageRequest the document is delivered.