

**Functional Requirements Document**

**ITSR 895573 – NY HO Phoenix to GW Renewal Conversion**

**RPA**

**2/1/2021**

**Version 1.01**

**Revision History**

| **Version** | **Date** | **Author** | **Description** |
| --- | --- | --- | --- |
| 1.0 | 2/1/21 | Susy Ongko | Initial version |
| 1.01 | 3/22/21 | Susy Ongko | Added Jessica Butler to users list with access to drop input file to the shared folder (section 5.1.1.1.4) |
|  |  |  |  |

**Approvers and Reviewers**

The following individuals have been identified as the reviewers/approvers for this document. Unless otherwise stated, approvals will be stored in the project folder.

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# Overview

This document describes the Robotic Process Automation (RPA) for NY Homeowners renewal conversion process. The NY HO conversion bot (aka Notorious B.O.T.) will assist the Underwriting team to create New York Homeowners renewal policies in GW PC.

# Scope

* The following are the NY HO Renewal Conversion bot scope:
  + Create renewal conversion
    - For data mapping from Phoenix to PC, use ‘NYHO\_Mapping\_Document\_DevV2.xlsx’
    - For Tier value, use data mapping in ‘NY\_Renewal\_Conversion\_Tier.xlsx’
  + Apply rate capping factor so the renewal premium is within a 30% threshold when compared to the Phoenix policy premium
  + Rate and issue renewal

The functionality to clear required documents will be addressed by an existing business bot (CallieClear).

* Systems:
  + RPA, PC, UiPath
* State:
  + NY
* Line of Business:
  + Homeowners (HO)

# Success Criteria

## UAT Testers

|  |  |
| --- | --- |
| **Name** | **Title** |
| Amanda Cheney | Mgr., Homeowners Package |
| Christopher McGregor | Admin UW |
| Nicole Vilchis | R&I Analyst |

## UAT Success Criteria

### Bot creates and issues a renewal conversion

### Bot applies a rate capping factor so that the difference between the renewal premium and the Phoenix policy premium is within a 30% threshold (as defined in Rate Capping logic in section 5.3.5)

# Assumptions and Constraints

1. NY HO Conversion bot will be processed by an unattended bot
2. The renewal conversion will be created using the data provided in the input file
3. Data mapping document shows the Phoenix fields mapped to the Guidewire fields
4. The Phoenix policy will be mapped to the renewal conversion GW screens based on mapping provided by the business
5. This process will not impact the actual application (PC); the bot is a software that is installed in VDI (virtual machine) and runs scripts to open applications and execute steps as defined in the FRD
6. Robotic processing is not intended to replace application programming
7. Robotic processing is not intended to address all possible scenarios
8. Robotic processing is not intended to replace or program Underwriting decision making
9. When an unexpected error message appears on the screen, bot will capture the exception in the report and move to the next policy for processing
10. An input file will be dropped weekly; bot will check for an input file and starts processing every Monday
11. If an input file is not available, bot will email the business
12. If bot fails to trigger completely, the bot team will handle the error internally, and email business if needed
13. Bot will generate weekly transaction reports. Any other reporting needs can be discussed with R&I UW team
14. Renewal policy premium can be within +/- 30% of the Phoenix policy premium

# Functional Requirements

## Pre-Processor

### **Input File**

#### The excel input file will be dropped in the following shared network folder:

##### File location: [\\n1brec01a\bpa\_data\_pr\NYHO\Input](file:///\\n1brec01a\bpa_data_pr\NYHO\Input)

##### File name: NYPHXHOGWDATAyyyymmdd.xlsx

#### yyyymmdd denotes the date on which the file was dropped (e.g., NYPHXHOGWDATA20210219.xlsx for a file that was dropped on 2/19/21)

##### File format: Excel

##### The following business users have access to the network folder:

| **Name** | **Title** |
| --- | --- |
| Amanda Cheney | Mgr., Homeowners Package |
| Christopher McGregor | Admin UW |
| Antoinette Woodward | UW Business Analyst |
| Jamie Cunningham | Assistant Process Manager |
| Jessica Butler | Underwriter |

### **Weekly job**

#### A weekly job will be scheduled to pick up the input file from the shared network folder and load it into the NYHOInputQueue.

##### Only one weekly input file is expected to be in the shared location at one time.

#### Orchestrator will record the policy number, date and time the policy is loaded into the NYHOInputQueue.

#### Additionally, bot will check for duplicate policies (i.e., whether a policy has previously been processed) in the NYHOValidationQueue.

##### If a NYHO policy # already exists, bot will skip processing that policy

##### Once bot has successfully created the account, bot will add the NYHO policy to the NYHOValidationQueue

##### Orchestrator will record the policy number, account number and the date and time the policy is loaded to the NYHOValidationQueue.

#### When the job successfully processes the input file, a successful process email will be sent out to the BPA team.

#### When the job fails to process the input file, an error email will be sent out to the BPA team.

### **Successfully processed input file notification email**

#### Input file successfully processed

##### To: [BPATeam@mercuryinsurance.com](mailto:BPATeam@mercuryinsurance.com)

##### Subject: Input file is processed successfully!

##### Body: Hello,

Input file for NY HO is processed successfully. The file uploaded to NYHOInputQueue.

Thanks,

NY HO Bot

### **Input file not available notification email**

#### Input file was not available to process

##### To: [BPATeam@mercuryinsurance.com](mailto:BPATeam@mercuryinsurance.com)

##### Subject: Input file is not processed successfully.

##### Body: Hello,

Input file is was not available to process. Please look into it.

Thanks,

NY HO Bot

# Login – Guidewire PC

### User Name: UW\_BPA

### Password: Stored in orchestrator

### Role: Manager

### Browser: Chrome

### URL: <https://transcendpc.mercuryinsurance.com/pc/PolicyCenter.do>

# Conversion Entry Process

The bot will use the bot’s NY HO mapping document, weekly input file, Territory & Tier mapping document, and Rate Capping logic to create a new account and renewal conversion policy.

### **Bot’s NY HO mapping document:**

* [NYHO\_Mapping\_Document\_DevV2](https://itportal/applications/bpa/Shared%20Documents/01.%20Analysis/NYHO/NYHO_Mapping_Document_DevV2.xlsx)

### **Weekly Input file:**

The following is a sample of the weekly input file as provided by business:



#### Bot will read the weekly input file one row at a time

### **Territory & Tier mapping document**

* NY\_Renewal\_Conversion\_Tier.xlsx  
  (link is not provided in this FRD due to sensitive information)

#### Bot will take the ‘TERRITORY’ and ‘TIER’ column values from the input file, which correspond to ‘Current Territory’ and ‘Current Tier’ column values respectively in NY\_Renewal\_Conversion\_Tier.xlsx.

#### Using these 2 values, bot will get the corresponding ‘Mapped New Tier’ value and enter it into the ‘Tier’ field on PC’s New Renewal Creation screen.

### **Rate Capping logic**

#### NY HO renewal policy premium should be within a 30% threshold (+/-30%) when compared to the Phoenix policy premium. Bot will calculate and enter the appropriate rate capping factor AFTER the renewal policy has been created and rated.

##### On the New Renewal Creation screen (i.e., when renewal was first created), bot will leave the default value of “1.000” in the ‘Rate Capping Factor’ field

##### After the renewal policy has been successfully rated and a premium is generated, bot will (a) perform the following calculations, and if applicable, (b) enter an updated value in the ‘Rate Capping Factor’ field on Policy Info screen and click ‘Renew’ button.

*Rate Capping Factor Calculation Steps:*

1. Get Phoenix expiring term’s full term premium (i.e., ‘PHX Premium’ column in input file)  
   *e.g., $1,000*
2. Get the next term premium without rate capping in GW (i.e., Rate the renewal policy with Rate Capping Factor = 1.000)   
   *e.g., $1,400*
3. Rate capping derivation:
   1. Calculate the lower range which is 30% less than PHX premium and upper range which is 30% more than PHX premium

*e.g.,   
Lower range = 70% \* $1,000 = $700  
Upper range = 130% \* $1,000 = $1,300*

* 1. Check if GW premium is within the range of (a) lower range of 30% less than PHX premium and (b) upper range of 30% more than PHX premium  
     *e.g.,  
     $1,400 is NOT within the range of $700 and $1,300*
  2. If GW premium is within the range, then enter Rate Capping = 1
  3. If GW premium is lower than lower range, then Rate capping = lower range (30% less than phx premium) divide by GW premium
  4. If GW premium is higher than the upper range, then Rate capping = upper range (30% more than phx premium) divide by GW premium  
     *e.g., since $1,400 is greater than $1,300, then  
     Rate capping factor = $1,300 / $1,400 = 0.92857…*
  5. Rounding rule for 3d and 3e is round DOWN to 3 decimal points  
     *e.g., round down to 3 decimal points = 0.928*

As reference, below is a NY HO Rate Capping tool that can be used to verify rate capping factor calculation.



### **Create Account**

#### On menu bar, bot clicks Account and selects New Account

#### System displays Enter Account Information screen

#### Bot fills in the fields (e.g., First name and Last name) as indicated in the bot’s NY HO mapping document with data from the input file, and click Search button

#### Bot clicks Search button

#### System displays applicable search results

#### Bot clicks Create a Personal Account button

#### System displays Create Account screen

#### Bot fills in the fields needed from the mapping document and input file

#### Bot clicks on Validate button to validate the address

##### If the address is validated by Melissa service, system will refresh the screen and display the address in read-only and display Edit Address button

##### If the address is not validated, the “Address Standardization could not find address” error message will display

###### Bot clicks OK button to resolve the address standardization message

#### Bot clicks Search icon on Organization field

#### System displays Organizations screen

#### Bot enters the Producer Code and clicks Search button

#### System displays search results

#### Bot clicks Select button for the desired agency

#### System displays back the Create account screen with the selected producer populated

#### Bot clicks Update button to create the account

#### System displays the Account File Summary screen

##### If bot is not able to create account, a business exception error will be invoked and the following message will be added to the report:

###### Exception occurred during Account Creation

Bot will end the renewal conversion process for the renewal and proceed to the next policy in the input file

### **Create Renewal Conversion**

Bot will create renewal conversion after the successful completion of the new Account. The Mapping document and input file will be used to enter data needed for the renewal creation process.

#### From the Account File Summary screen, bot clicks on Quick Links dropdown

#### Bot clicks New Renewal Conversion

#### System displays New Renewal Conversion screen

#### Bot fills in the fields needed from the mapping documents and input file

#### Bot clicks Convert/Renew button

#### System displays Renewal Draft Screen

#### Bot clicks on Review Changes link

##### If bot is not able to create a renewal conversion, a business exception error will be invoked and the following message will be added to the report:

###### Exception occurred during new renewal conversion

Bot will end the renewal conversion process for the renewal and proceed to the next policy in the queue

### **Qualification screen**

#### System displays Qualification screen

#### Bot fills in the fields needed from the mapping documents and input file

#### Bot clicks Next button

##### If bot encounters any error on this page, a business exception error will be invoked and the following message will be added to the report:

###### Exception occurred during Qualification screen

Bot process ends for this policy. Bot moves to the next policy.

### **Policy Info screen**

#### System displays Policy Info screen

#### Bot fills in the fields needed from the mapping documents and input file

#### Bot clicks Next button

##### If bot encounters any error on this page, a business exception error will be invoked and the following message will be added to the report:

###### Exception occurred during Policy Info screen

Bot process ends for this policy. Bot moves to the next policy

### **Dwelling screen**

#### System displays Dwelling screen

#### Bot fills in the fields needed from the mapping documents and input file

#### Bot clicks Next button

##### If bot encounters any error on this page, a business exception error will be invoked and the following message will be added to the report:

###### Exception occurred during Dwelling screen

Bot process ends for this policy. Bot moves to the next policy.

### **Dwelling Construction screen**

#### System displays Dwelling Construction screen

#### Bot fills in the fields needed from the mapping documents and input file

#### On RCT Record ID field, bot clicks Get Replacement Cost button

#### Bot clicks Next button

##### If bot encounters any error on this page, a business exception error will be invoked and the following message will be added to the report:

###### Exception occurred during Dwelling Construction screen

Bot process ends for this policy. Bot moves to the next policy.

### **Ownership screen**

#### System displays Ownership screen with Mortgagee, Vesting, Additional Named Insureds, Additional Insureds and Certificate Holders Information sections

#### Bot fills in the fields needed from the mapping documents and input file

#### Bot clicks Next button

##### If bot encounters any error on this page, a business exception error will be invoked and the following message will be added to the report:

###### Exception occurred during Ownership screen

Bot process ends for this policy. Bot moves to the next policy.

### **Coverages screen**

#### System displays Coverages screen

#### Bot fills in the fields needed from the mapping documents and input file

#### As referenced in NYHO\_Mapping\_DocumentDevV2.xlsx (Coverages tab), bot will select the higher of the Coverage A amount populated by RCT or provided in the weekly input file (for HO3 and HO6)

#### If system displays the following message, bot clicks OK

##### Message: “Coverage Changes will be replaced with the new package selected default. Do you wish to continue?”

#### Bot clicks Next button

##### If bot encounters any error on this page, a business exception error will be invoked and the following message will be added to the report:

###### Exception occurred during Coverages screen

Bot process ends for this policy. Bot moves to the next policy.

### **Prior Policies/Losses and View Quote screen (prior to Rate Capping)**

#### System displays Prior Policies/Losses screen

#### System click ‘Prior Losses’ tab

#### Bot fills in the fields needed from the mapping documents and input file

##### If bot encounters any error on this page, a business exception error message will be invoked. The following message will be displayed:

###### Exception occurred during Prior Policies/Losses.

Bot process ends for this policy. Bot moves to the next policy.

#### Bot clicks Rate button

##### Bot may need to click Rate button up to 8 times to clear possible warning messages

##### If bot encounters any error on this page, a business exception error message will be invoked. The following message will be displayed:

###### Exception occurred during View Quote screen.

Bot process ends for this policy. Bot moves to the next policy.

### **Policy Info and View Quote screen (Rate Capping)**

#### System displays View Quote screen with a total premium amount

#### Bot performs Rate Capping Factor calculation steps as outline in section [5.4.5 Rate Capping logic](#_Rate_Capping_logic)

#### Bot clicks Edit Renewal button

#### Bot clicks ‘Policy Info’ from the left navigation pane

#### System displays Policy Info screen

#### Bot enters the calculated rate capping factor in Rate Capping Factor field

#### Bot clicks Rate button

#### Bot may need to click Rate button up to 8 times to clear possible warning messages

#### System displays View Quote screen

#### Bot clicks Renew button

#### System displays Renewal Renewing screen

##### If bot encounters any error during this process, a business exception error message will be invoked. The following message will be displayed:

###### Exception occurred after rate capping in Policy Info screen.

Bot process ends for this policy. Bot moves to the next policy.

### **Reporting**

Bot will send a weekly report of processed policies (in .csv file) with the following column headers.

### **Report format**

#### Phoenix Policy Number

#### Renewal Account Number

#### Transaction Status

#### Renewal Policy Number

#### Screen Name

#### Exception Message

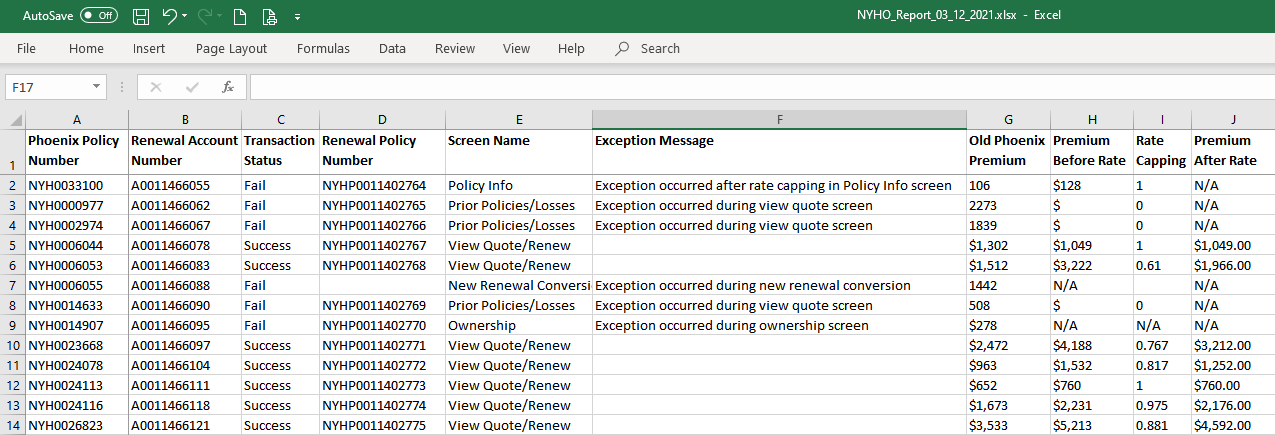
#### Old Phoenix Premium

#### Premium Before Rate Capping

#### Rate Capping

#### Premium After Rate Capping

Below is a sample of the report:



### **Email report**

#### The report will be attached to an email and sent to the business and bot teams:

##### To: Business recipients below and [BPATeam@mercuryinsurance.com](mailto:BPATeam@mercuryinsurance.com)

##### Subject: NY HO Renewal Conversion Report

##### Body: Hello, Please find the attached report for NY HO Renewal Conversion. Thanks, Bot

#### Business recipients

| **Name** | **Title** |
| --- | --- |
| Kelly Glover | Dir., Underwriting |
| Amanda Cheney | Mgr., Homeowners Package |
| Christopher McGregor | Admin UW |
| Jamie Cunningham | Assistant Process Manager |
| Antoinette Woodward | UW Business Analyst |
| Jayson Carter | UW Business Analyst |
| Julie Nulty | System Admin UW |

# Non-functional requirements

Not applicable

# Security Considerations

Security is not changing as part of this implementation.

# Application Controls

To ensure that all appropriate application controls are included in the Functional Requirements Document, the Business Analyst must complete the Application Controls Table.

**Application Controls Table**

| **ACO #** | **Application Control Objective (ACO)** | **Financial Statement Assertion** | **Applicability Explanation**  **(Yes or No and why)** |
| --- | --- | --- | --- |
| ACO-01 | Ensure **adherence to defined business rules** in the flow and accuracy of processing | Accuracy, Completeness, Validity | Yes, section 5 |
| ACO -02 | Ensure that **only authorized transactions** are input and accepted by the application | Validity | Yes, section 5 |
| ACO-03 | Ensure that **only accurate data** are input and accepted by the application | Accuracy | Yes, section 5 |
| ACO-04 | Ensure that transactions are **processed completely** (no more, no less) **within an application** | Completeness | Yes, section 5 |
| ACO-05 | Ensure that transactions are **processed completely** (no more, no less) **between an application and its internal and external interfaces** (both inbound and outbound) | Completeness | Yes, section 5 |
| ACO-06 | Ensure that **system generated transactions** and **values** are **accurate and reliable** | Accuracy | Yes, section 5 |
| ACO-07 | Ensure that **system calculations** are **accurate** | Accuracy | Yes, section 5 |
| ACO-08 | Ensure that **errors and exceptions** (e.g., transaction reversals, overrides, error corrections) **are handled properly**, with the appropriate level of authority and audit trail | Validity, Completeness | Yes, section 5 |

# Appendix

## Master Calendar for weekly renewal conversion dates

### The following Master Calendar was created by R&I to show the timelines for each week’s renewal conversion:

* [Notorious B.O.T. Master Calendar](https://teams.microsoft.com/l/file/6C771FEF-97D5-41E1-9ECD-FC56ED8F06D9?tenantId=0d8ef88b-e7e1-4f18-b332-ab564f6cda49&fileType=xlsx&objectUrl=https%3A%2F%2Fmercuryinsurance.sharepoint.com%2Fsites%2FNYHOConversionPHXtoGW%2FShared%20Documents%2FGeneral%2FNotorious%20B.O.T.%20Master%20Calendar.xlsx&baseUrl=https%3A%2F%2Fmercuryinsurance.sharepoint.com%2Fsites%2FNYHOConversionPHXtoGW&serviceName=teams&threadId=19:8f4b3fa711a34d949bf139eb26b5d76f@thread.tacv2&groupId=cd2853a7-3978-4aff-975c-39097bee8c44)

## Business mapping document

### Bot’s NY HO mapping document was created based on business’s data mapping document:

* [NY Renewal Conversion Mapping.xlsx](https://teams.microsoft.com/l/file/D09BDBA5-DA8D-4CF5-8F96-B778307A131A?tenantId=0d8ef88b-e7e1-4f18-b332-ab564f6cda49&fileType=xlsx&objectUrl=https%3A%2F%2Fmercuryinsurance.sharepoint.com%2Fsites%2FNYHOConversionPHXtoGW%2FShared%20Documents%2FGeneral%2FNY%20Renewal%20Conversion%20Mapping.xlsx&baseUrl=https%3A%2F%2Fmercuryinsurance.sharepoint.com%2Fsites%2FNYHOConversionPHXtoGW&serviceName=teams&threadId=19:8f4b3fa711a34d949bf139eb26b5d76f@thread.tacv2&groupId=cd2853a7-3978-4aff-975c-39097bee8c44)

## No separate data file for MPD, DOB, Gender and Marital Status

### The data for PPA policy number (as used for Multi-Policy Discount), Date of Birth (DOB), Gender and Marital Status will be provided in the weekly input file (i.e., there’ll be no separate data file)