**PAC and PMC Calculation**

The following demonstrates the algorithm used for PMC and PAC calculation of a policy, as found in the existing code.

**Value of PAC = PMC \* 12**

Following steps are used to calculate PMC/PAC:

**When payment entries exist for the policy**

When payment entries are found for a policy**,** then calculation is made depending on the policy mode:

1. **Monthly Mode and three payments found**

|  |  |
| --- | --- |
| **Invoice Date** | **Payments received** |
| Dec 2016 | $150.00 |
| Jan 2017 | $300.00 |
| Feb 2017 | $350.00 |
| Mar 2017 | $275.00 |
| April 2017 | $350.00 |

PMC = Avg(Payments) = (350+275+350)/3 = $325.00

PAC = PMC \* 12 = 325 \* 12 = $3900.00

1. **Quarterly Mode and 2 or more payments found**

|  |  |
| --- | --- |
| **Invoice Date** | **Payments received** |
| Jan 2017 | $275.00 |
| April 2017 | $350.00 |

PMC = Avg(Top 2 Payments) / 3

PMC = (350+275/2)/3 = $104.16

PAC = PMC\*12 = 104.16 \* 12 = $1250.00

1. **Semi -annual Mode and 2 or more payments found**

|  |  |
| --- | --- |
| **Invoice Date** | **Payments received** |
| Jan 2016 | $275.00 |
| June 2016 | $350.00 |
| Jan 2017 | $275.00 |

PMC = Avg(Top 2 Payments) / 6

PMC = (350+275/2)/6 = $52.08

PAC = PMC\*12 = 52.08\* 12 = $625.00

1. **Annual Mode/Random mode/One time mode and 1 or more payments found**

|  |  |
| --- | --- |
| **Invoice Date** | **Payments received** |
| Jan 2016 | $275.00 |
| Jan 2017 | $350.00 |

PMC = (Top 1 Payment) / 12

PMC = (350)/12 = $29.16

PAC = PMC\*12 = 29.16 \* 12 = $350.00

**When payment entries do not exist for policy**

In case, payment entries don’t exist and PMC value is not found from the above algorithm, then, following parameters are used :

* SplitPercentage value from policy
* ModalPremium or monthly premium from policy
* Commission - first year or renewal year [whichever applicable] from incoming schedule
* Enrolled value from policy

**If Incoming schedule type= % of commission**

InitPMC = (SplitPercentage \*ModalPremium \* Commission) / 10000

**If IncomingScheduleType = Per head commission**

InitPMC = (Enrolled \* Commission\* (SplitPercentage / 100)

**Final PMC Value is evaluated as :**

* Monthly Mode - InitPMC/1
* Quarterly Mode - InitPMC/3
* Semi - Annual Mode - InitPMC/6
* All other modes – InitPMC/12