IFRS 17 . PREMIUM ALLOCATION APPROACH

PAM1000 PAA Dashboard

Operator User Manual

Upload the workbook · Configure the run · Read the position.

Empirica . Actuarial Consulting

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OVERVIEW

What PAM1000 PAA is

PAM1000 PAA is Empirica's IFRS 17 Premium Allocation Approach valuation platform. Upload one macro-enabled workbook containing the input sheets, configure the run on the PAA Setup page, press Run PAA — and the platform executes all 39 engine modules, produces the Trial Balance, Subledger and four disclosure roll-forwards, and assembles the fully-formatted PAA_Files pack.

1 One workbook in

Upload a single .xlsm with all input sheets. Setup is read from within the workbook, so there is no separate form to fill in.

2 39 modules, one output

The Python engine executes all 39 calculation modules in dependency order and writes a single consolidated workbook: PAA_Results.xlsx.

WHY IT MATTERS

Auditable: every run is stored, tagged and retrievable by run ID.

Formula-safe: the engine detects uncalculated workbooks and refuses to proceed — no silent wrong outputs.

Setup-authoritative: the PAA Setup page drives every run; the workbook's own Setup is overridden by your selections.

THE BIG PICTURE

The workflow at a glance

1 PAA Setup

Reporting dates, currency, scope and method options

2 Upload workbook

Drop the .xlsm on the PAA Input & Run page

3 Run PAA

Data-check → 39 modules → PAA_Results.xlsx written

4 PAA Dashboard

Balance sheet, income statement, disclosure waterfalls

5 Reports

PAA_Files pack: disclosures, financials, charts

6 Reference

PAA Setup · Reference metadata · Results explorer

Follow the navigation menu top to bottom. Each step has its own page.

ORIENTATION

The navigation menu

The PAA section has five pages, worked top to bottom. The highlighted item is the page you are on.

PAA Input & Run	Upload the .xlsm workbook; set the endpoint; press Run PAA
PAA Dashboard	Balance sheet, income statement, liability movement, disclosure waterfalls
PAA Setup	Reporting dates, currency, scope flags and method options
PAA Reference metadata	Account codes and segment mappings from the uploaded workbook
PAA Reports & Disclosures	Browse all 41 sheets of PAA_Results.xlsx; download the PAA_Files pack

STEP 1

1

PAA Setup: configure the run

Open PAA Setup before uploading or running. Your selections are sent with every run and override the workbook's own CFG_Setup sheet. When you upload a workbook, dates are pre-filled from its CFG_Setup sheet — edit them here to override.

General Setup

Reporting date (previous) · Reporting date (current) · Reporting currency

Calculation Scope

Insurance · Cash-backs · Reinsurance · PAA GICs · Claims commission · Onerous loss component · Pre-recognition cashflows (insurance and reinsurance)

PAA Practical Expedients

Acquisition CFs as expenses · LRC time-value-of-money · LIC time-value-of-money

Other Options

Track premium debtors · IFIE in P/L or OCI · LIC accretion yield curve (current or locked-in) · Loss component approach · RA simplification · LIC RA level · Disaggregate RA change

Rule: confirm every option against the prior period's signed basis before running a new period.

STEP 1 . CAUTION

Get the options right the first time

The Setup options are not cosmetic. A wrong setting still produces a clean-looking run but the numbers will not reconcile. Most non-reconciling runs trace back to a Setup mismatch, not an engine error.

Worst case	Wrong reporting date or scope flag. The run completes cleanly but the LRC, LIC or ARC balances do not match expectations; the reviewer rejects the output and a full re-run is needed.
Base case	Options match the prior period's basis. Results land where expected; a quick comparison of the balance sheet opening vs prior-period closing is all that is needed.
Best case	Every option confirmed against the signed prior-period basis before running. Clean results first time, no rework.

Rule of thumb: before running a new period, review PAA Setup from top to bottom and compare each option to last period's signed basis.

STEP 2

2

Upload the input workbook

Go to PAA Input & Run and upload a single macro-enabled workbook (.xlsm). The engine reads all input sheets from inside it.

What the workbook contains	All input sheets: CFG_Setup, CFG_Assumptions (earning patterns, yield curves, exchange rates), CFG_MetaData (account codes, transaction types, segment mappings), REF_Datasets, the IN_Ins_ insurance sheets, the IN_Rei_ reinsurance sheets, and the POST_TrialBalance / POST_Subledger templates. The yellow disclosure and financials sheets are not uploaded — they recalculate from the engine output.
Formula-cache health check	On load, the engine checks that REF_Ins_Groups derived columns ("Current Impact of Discounting" and "Current Impact of Risk Adjustment") are populated. If they are empty the engine refuses to run and tells you exactly what to do: open the file in Excel, press F9, save, then re-upload.
Dates pre-filled from workbook	Picking a file reads the previous and current reporting dates from the workbook's CFG_Setup sheet and pre-fills them in PAA Setup. Edit the dates on the PAA Setup page before running if you need to override them.

Watch-out: cloud-synced workbooks can arrive with a stale formula cache. The engine detects this and refuses to run with a clear error and fix instructions.

STEP 2 . CAUTION

Get the workbook right before uploading

The engine reads cached cell values from the workbook. If it has never been opened in Excel after the input data was entered or the calculation tabs were removed, many formula-driven cells will be blank or stale — and the engine will either refuse to run or produce wrong outputs.

Worst case

Workbook uploaded without recalculating in Excel. The engine detects empty REF_Ins_Groups derived columns and refuses to proceed, printing a clear error: open in Excel → F9 → Save → re-upload.

Base case

Workbook was opened in Excel at least once after the data was populated. Formula cells have valid cached values and the engine proceeds normally.

Best case

Workbook opened in Excel, F9 pressed and saved immediately before upload. All cached values are current; the engine runs and produces correct results first time.

Rule of thumb: before uploading, open the workbook in Excel, press F9 (Calculate Now), save, and close.

STEP 3

3

Run the engine

1

Set the endpoint

Enter the PAM1000 run route in the Endpoint box (e.g. http://localhost:8080/run). The platform routes to the PAA engine automatically via the X-Engine header.

2

Press Run PAA

The platform uploads the workbook and your PAA Setup selections to the server. The 39-module Python engine runs in the background. A progress bar and live log show each step. A failed step reports an error — never a silent completion.

3

Run completes

PAA_Results.xlsx is written (41 sheets: Summary + Reconciliation + one sheet per module). The platform then assembles the PAA_Files pack (disclosures, financials, charts) and auto-loads the Dashboard.

Run PAA Engine

Set endpoint

Run PAA

The run log can be downloaded for the audit file.

39 engine modules

CALC_Ins_LRC_1 · CALC_Ins_LRC_2 · CALC_Ins_LIC_Claims (3) · CALC_Ins_LIC_CashBacks (3) · CALC_Ins_FX · CALC_Ins_AcqExp_Unalloc (4) · CALC_Rei_ARC (3+PreFX) · CALC_Rei_ARIC_Recov (3) · CALC_Rei_ARIC_CedComm (3) · CALC_Rei_FX · CALC_Rei_NetCovCost_Unalloc (4) · POST_Rei_ReiAsset_Open/Close · POST_Ins_InsLiab_Open/Close · POST_TrialBalance · POST_Subledger

STEP 4

Read the PAA Dashboard

The PAA Dashboard populates automatically once the run completes. It is driven entirely by the run's Trial Balance and Subledger.

Balance sheet charts

Opening vs closing bar chart and a closing-composition doughnut, showing assets and liabilities at both reporting dates.

Income statement (indicative)

Insurance revenue, claims incurred and other items flowing to profit for the period.

Liability movement waterfall

Step-by-step movement from opening to closing position: premiums, earned, claims, finance and other adjustments.

Disclosure waterfalls

Two headline IFRS 17 roll-forwards — Total Insurance Liabilities (I) and Total Reinsurance Assets (R) — toggled via the I/R dropdown.

Statement of financial position

Tabular balance sheet statement ready for review and sign-off.

Download PAA pack

One-click download of PAA_Files.xlsx: fully formatted disclosures, financials and chart schedules that recalculate on open in Excel.

STEP 5

5

Reports and disclosures

PAA Reports & Disclosures lets you browse all 41 sheets of PAA_Results.xlsx on screen. The downloadable PAA_Files pack contains the fully formatted versions ready for sign-off.

PAA_Results.xlsx (41 sheets)

Summary · Reconciliation · one sheet per module (CALC_Ins_LRC_1 through POST_Subledger). Browse and filter any sheet directly in the platform.

PAA_Files pack (disclosures & financials)

The bundled template injected with the run's Trial Balance and Subledger. Disclosure schedules, financials, charts and dashboards recalculate on open in Excel.

RA & IL roll-forwards

POST_Rei_ReiAsset_Open, POST_Rei_ReiAsset_Close, POST_Ins_InsLiab_Open, POST_Ins_InsLiab_Close — the four IFRS 17 PAA disclosure schedules, one row per insurance or reinsurance group.

Trial Balance & Subledger

Full double-entry posting detail for the period, in the 7-column format: Date, Asset/Liability, Account, Group Code, Amount, Reporting Segment, Account Code.

REFERENCE

Input sheets in the upload workbook

The engine reads these sheet groups from the uploaded .xlsm. Sheets not in the list are ignored. Reinsurance sheets are optional — leave them out if reinsurance scope is set to No.

Setup & configuration	CFG_Setup · CFG_Assumptions (earning patterns, yield curves, exchange rates) · CFG_MetaData (account codes, TT codes, segment maps) · REF_Datasets
Insurance — groups	REF_Ins_Groups · IN_Ins_Cohort_IF · IN_Ins_Cohort_New
Insurance — premiums & AE	IN_Ins_Prem_CFs · IN_Ins_Prem_Debtor · IN_Ins_Prem_WrtOff · IN_Ins_AcqExp_CFs · IN_Ins_AcqExp_Creditor · IN_Ins_AcqExp_WrtOff · IN_Ins_AcqExp_Unalloc
Insurance — claims	IN_Ins_Claims_Act · IN_Ins_Claims_RA · IN_Ins_Claims_ExpCFs · IN_Ins_CashBacks_Act · IN_Ins_CashBacks_RA · IN_Ins_CashBacks_ExpCFs · IN_Ins_InvComp_CFs
Reinsurance — groups	REF_Rei_Groups · IN_Rei_Cohort_IF · IN_Rei_Cohort_New (optional) · REF_Rei_Ins_Map (optional)
Reinsurance — cashflows	IN_Rei_Prem_CFs · IN_Rei_Prem_Creditor · IN_Rei_Prem_WrtOff (optional) · IN_Rei_NetCovCost_CFs · IN_Rei_NetCovCost_Unalloc · IN_Rei_Recov_ExpCFs · IN_Rei_Recov_Act · IN_Rei_Recov_RA · IN_Rei_CedComm_ExpCFs · IN_Rei_CedComm_Act · IN_Rei_CedComm_RA (all optional) · IN_Rei_InvComp_CFs (optional)
Trial Balance & Subledger	POST_TrialBalance · POST_Subledger (templates: injected with engine output by the pack builder)

The yellow disclosure / financials / dashboard sheets are NOT uploaded — they live in the bundled PAA_Pack_Template and recalculate from the engine outputs.

GOOD PRACTICE

Before you finish a run

A few quick checks before sharing or filing the results.

✓ **PAA Setup confirmed**

Reporting dates, currency and every scope and method option match the prior period's signed basis.

✓ **Run completed cleanly**

The progress bar reached 100%, the run log shows no errors, and PAA_Results.xlsx was produced.

✓ **Dashboard populated**

The PAA Dashboard shows the current run's balance sheet and income statement figures.

✓ **PAA pack downloaded**

PAA_Files.xlsx downloaded; disclosures and financial statements recalculate on open in Excel.

✓ **Run log filed**

Downloaded from the run page and saved to the audit file for this period.

REFERENCE

Quick troubleshooting

Symptom	Likely cause	What to do
Engine refuses to start	Formula-cache health check failed — REF_Ins_Groups derived columns are empty	Open workbook in Excel → F9 → Ctrl+S → close → re-upload
Numbers look wrong for period	Wrong reporting date or scope / method option in PAA Setup	Review PAA Setup against prior-period signed basis, correct and re-run
Run fails mid-way	An input sheet is missing a required column or has blank rows inside a data table	Open run log, read the first error message, fix the input sheet and re-upload
PAA pack cannot be opened	Pack was downloaded before the assembly step finished	Wait for the run status to show Done, then download again from the Dashboard
Dashboard shows old run data	Dashboard is cached on a previous run	Click Load latest run on the PAA Dashboard page
Disclosure waterfall totals differ	Trial Balance or Subledger template rows do not cover all expected transaction types	Check the Subledger template in the workbook for missing transaction type rows

IN ONE LINE

Setup · Upload · Run · Read · Sign off.

Confirm every option on PAA Setup against last period's signed basis. Open the workbook in Excel, press F9, save. Upload it on PAA Input & Run. Press Run PAA. When complete, read the Dashboard, download the PAA pack, and file the run log. Done.

ΠΑΘΗΜΑΤΑ ΜΑΘΗΜΑΤΑ

Pathemata mathemata — what we suffer, we learn. Confirm the Setup. Press F9 before uploading. Let the engine tell you what is wrong.