

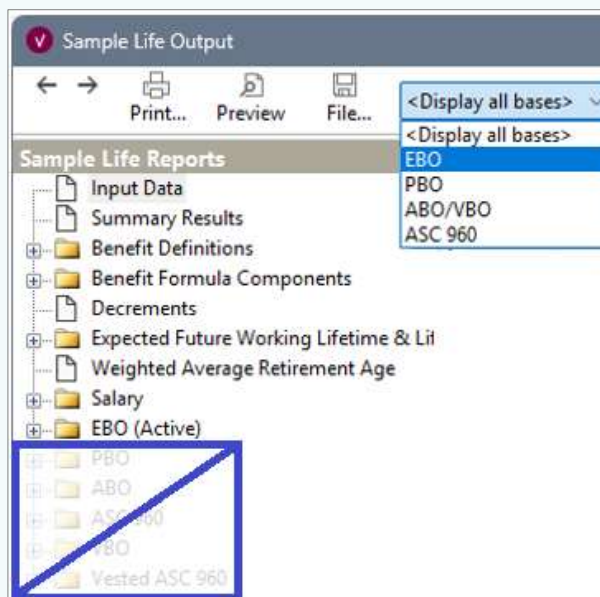
What's New in version 3.22

September 2025

ProVal version 3.22 introduces filtering by liability in Sample Lives, data import and merge in one step, improved Experience Study output, SharePoint integration, Gain/Loss analysis for LTD plans, and many additional features. Full details plus many other new features listed below.

Sample Lives

Sample life liability filter. A new filter in valuation and core projection sample lives lets you focus in on a single liability. Filtering by a liability removes reports that relate to other liabilities -- eliminating extraneous details which can often be significant and distracting – and makes checking sample lives much more straightforward.



Census Data

Import & Merge. You can now import your data and merge it into the current ProVal database in one step. This is especially useful when data is provided in multiple files. For example, if your client sends a file with updated pay information, you can import and merge the updated pay amounts directly into your valuation database, replacing the old values. Previously, you would need to import the data into a separate database before you could combine it with another database. This simplifies the process into one step.

Do you want to:

☐ Append records to the end of the database

☐ Replace the database

☒ Merge imported records

Key fields:

☐ AccBen

☐ CovgCode

☐ DOB

☐ DOH

☐ Form

☒ ID

☐ Name

☐ Salary

For records found in both files, overwrite:

☒ All values

☐ Allow values to be overwritten with missing values

☐ Only missing values

For records found only in the import data:

☒ Append to database

☐ Ignore

Individual Results Locking. Individual results generated by valuations, core projections, gain/loss analysis, and experience studies (i.e., runs that save individual results to a separate database) are now **locked automatically**. You can easily identify these databases in the Databases library, where the "Type" column indicates "Individual Results".

Databases					
<div> <div>+</div> <div>New</div> <div>Compare</div> <div>Ref'd By</div> <div>Erase</div> <div>Refresh</div> </div>					
Name		Records	Fields	Type	
Data 2024		845	12		
Indiv. Results 2024		537	4	Individual Results	!
GainLoss Indiv Results		557	54	Individual Results	

If needed, you can still make changes to an individual results database, but you will first see a warning message reminding you that it contains individual results and listing the run(s) that generated them.

ProVal

?

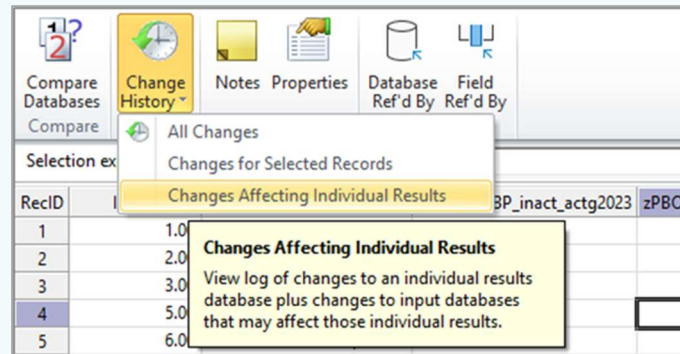
The database "Indiv. Results 2024" contains individual results from the following runs and is locked.

Valuations - U.S. Qualified Pension
Valuation - Beginning of Period US IRv2

OK to unlock this database before proceeding?

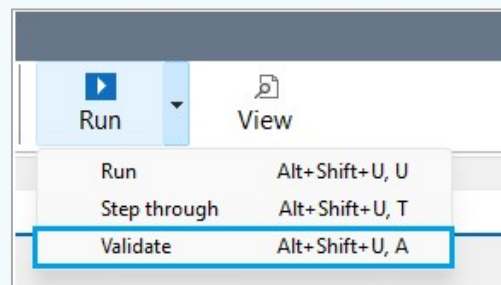
Unlock and proceed Cancel Print...

If you go ahead and **unlock individual results** or make **changes to the associated input database**, ProVal will add a flag (!) to the Database library to indicate that **changes affecting individual results** may have been made. To see the details of these changes, you can open the individual results database and go to Review > Change History > Changes Affecting Individual Results. (Note that only *data* changes will trigger the flag or be listed as changes affecting individual results. Changes to other inputs, such as valuation assumptions, will not.)



Expanded Data Scripts

- **Validate data scripts.** You can now validate a Data Script before running the script. In addition to validating each command, if the data script includes an Import File or Import Folder command, ProVal will check the data for new database field codes and errors in the import file(s). This allows you to catch and address issues before bringing the data into your ProVal client.



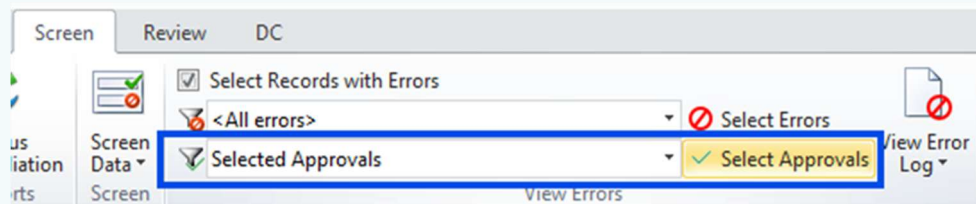
- **Import multiple – even hundreds – of files at once.** You can now import multiple files at the same time using a Data Script. The files must all be saved to the same folder and use the same record layout based on external column headings (this doesn't mean that all the files have the same number of fields or be in the same order – just pull from a common set of column headings). To bring the files in at the same time, select the new command "Import folder" in your Data Script, and browse to the folder where the files are saved. You can choose to append the records from each imported file or merge the records from each file based on key field(s).

Treatment of Imported Records

- ☒ Append records from each imported file (may create duplicate records)
- ☐ Merge records from each imported file

- **Delete files in a data script.** You can now add “Delete Database” steps to a Data Script, for example, to clean up temporary databases created by the script.

View selected approvals. When viewing records with errors in Spreadsheet Edit, you can now filter based on a specific approval reason. Previously you could filter to view all approvals but couldn't drill down further. This is useful when you provide descriptive reasons when approving an error. For example, if you have approved records with a change in hire date due to being rehired during the year, you can now select that approval reason from the dropdown and see only those rehire records with hire date changes.



Database notes preview in library. A new notes column in the databases library lets you see at a glance when a database has a note and hover over the icon to see a preview.

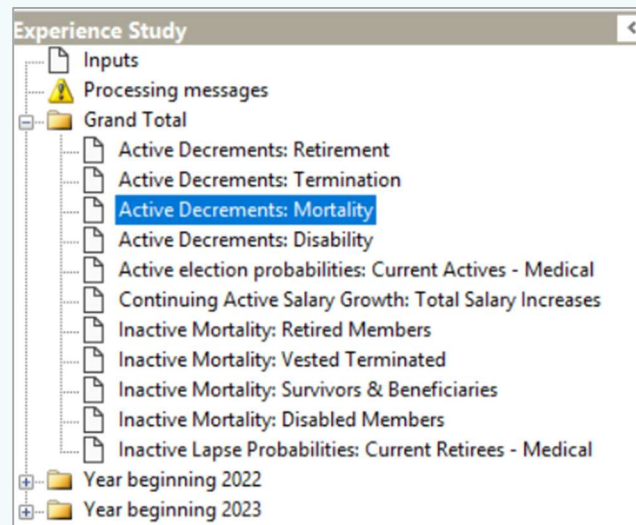
Name	Records	Fields	Errors	Approvals
Data2024 with missing data				
gl2023 indres				
group test6				
grouped file				
indres	828	9	0	0

Database updated July 2, 2025 3:44 PM
by Valuation: valuation 2023 with indres and nonpart record...

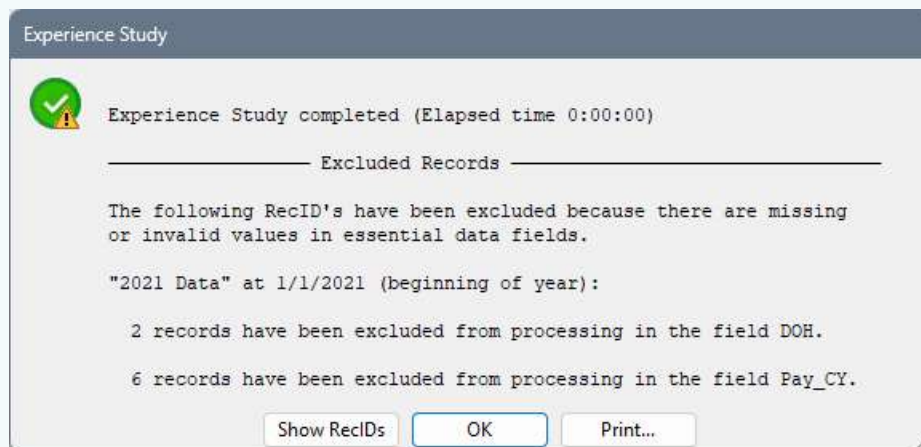
Decimal separator for delimited and fixed-width files. A new parameter in Record Layouts lets you specify whether the decimal separator for delimited and fixed-width files is a period or comma, as in “999.99” and “999,99”. This allows importing of csv and txt files from any region on one machine, without changing Regional Settings.

Experience Studies

Easier navigation of results. You can now quickly jump between different reports, with each table on its own page. For example, if you want to see the active mortality results, you can now just click “Active Decrements: Mortality” as shown below rather than scrolling through until you find it. Additionally, the reports are sorted by status to make reviewing them more intuitive, with all active reports together, vested valued as active reports together, etc.



Processing messages with run completion icons are now displayed when you run an experience study, consistent with runs elsewhere in ProVal.



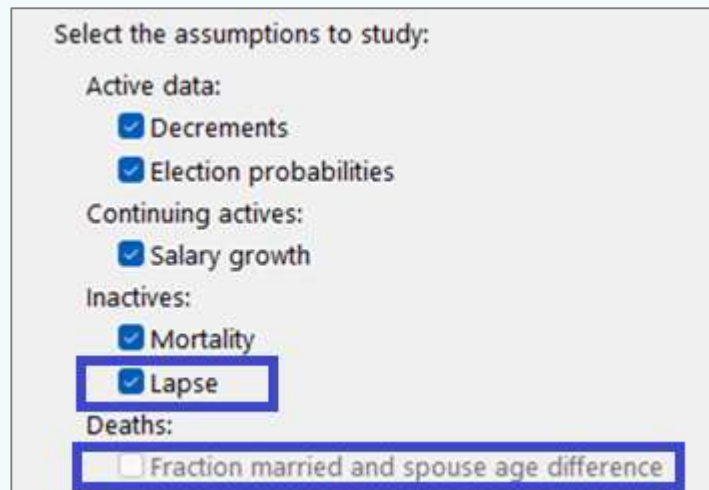
Additionally, you can show or hide RecIDs (e.g., for data defaults) by clicking the button in the processing messages or the output.



Backdoor buttons have been added in experience studies for census specifications, valuation assumptions, and plan definitions.

Analyze additional assumptions in experience studies.

- In OPEB mode, you can now analyze the **lapse assumption**.
- In German mode, you can now analyze **fraction married and spouse age difference**.



System

SharePoint integration. ProVal folders stored on SharePoint can now be automatically checked out upon opening and checked in upon closing. This functionality helps prevent multiple users from simultaneously accessing and modifying the same ProVal client files, ensuring data integrity and reducing the risk of version conflicts. To set up ProVal / SharePoint integration for your organization, see "SharePoint Integration.pdf" in the ProVal installation folder.

Excel performance. Reading from and writing to Excel from within ProVal (e.g., importing data from Excel or saving Data Questions to Excel) is now much faster. As a bonus, you no longer need to have MS Office installed. This is especially useful for servers, such as those used to access ProVal's API, which generally do not have MS Office installed.

Mod file name (rare) is now included in run output so it's easy to tell if one was used.

OPEB Plans

Gain/Loss Analysis on Long Term Disability (LTD) valuations is now available.

Source	Gain/(Loss)	Percent of expected liability	Underlying Source Value		
			Actual	Expected	Actual over Expected
1. Data corrections ⓘ	0	0.00%			
2. Inactive mortality and recovery ⓘ					
(a) Disabled members	174,842	4.20%	9.00	5.28	1.706
(b) Survivors & Beneficiaries ⓘ	241,612	5.81%	3.00	0.45	6.716

OPEB funding interest rate changes based on expected return. In stochastic assumptions, you can now vary the funding interest rate assumption based on the asset mix's expected return. Previously, this functionality was only available in Canadian and U.S. Public modes.

Funding Interest Rate

☒ Vary based on

Asset mix

Times

1

Horizon:

Last simulation year

APBO standard stochastic output variable. In stochastic forecasts, APBO has been added as a standard stochastic output variable. Previously, you had to set this up as a custom variable to view the results in ProVal.

Pension Plans

Cash balance interest credits projected to commencement. Cash Balance benefit formula components now include an option to project interest credits to commencement, i.e., during the deferral period between decrement and commencement age as defined in the payment form. Previously, you had to include the post-decrement interest credits separately in the benefit formula.

Projection

☒ Project with

☒ interest credits

☐ pay credits using

basis: frozen in year before decrement

rates: projected accrual rates times 100 %

to

☒ Commencement age

Lump sum installments by field. The number of lump sum installments can now be determined by a database field, either with the number of installments or with the payment stop age. Previously, only a fixed number of installments was available.

☒ Divide into annual installments

☒ Fixed number 10

☐ Number defined by field

☐ Stopping at age

Or fewer if amount would fall below 0

All Plans

Administrative expenses as a fraction of pay can now be specified in your Asset & Funding Policy. Previously, if your administrative expense assumption was based on pay, you would have to convert it to a dollar amount to enter in the Asset & Funding Policy. This was not ideal when running a forecast where salary merit scales apply. Now you can select either "total pay" or "valuation pay" using the "fraction of" dropdown.

Administrative Expenses

Dollars: 0 + Fraction of : 0.05

Include in:

☐ Funding normal cost

☐ Accounting expense

assets

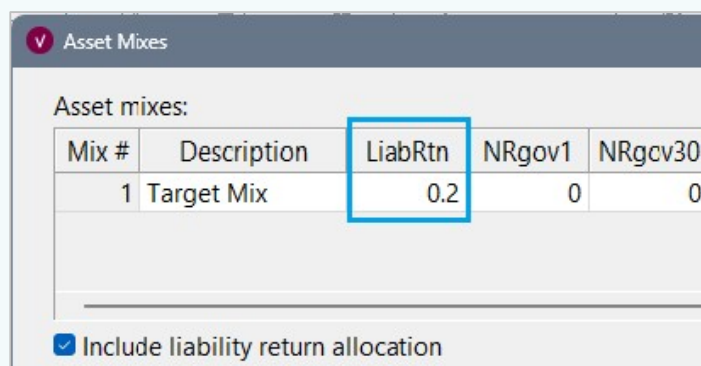
total pay

valuation pay

A new weighted average retirement age (accounting) exhibit has been added for valuation sets which details the calculation of weighted average retirement age using the underlying accounting assumptions.

Forecasting

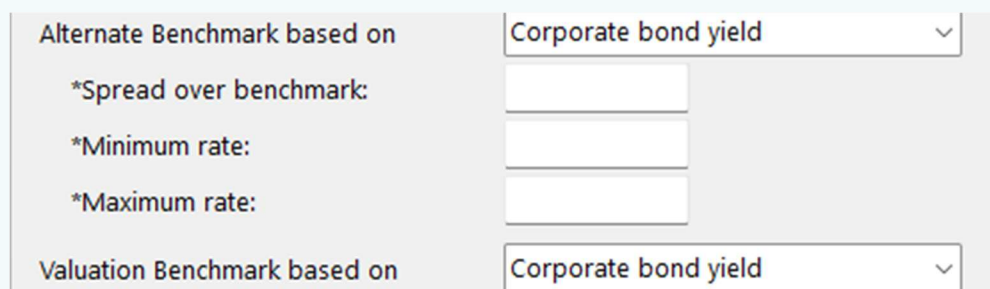
Built in liability return asset class. In stochastic assumptions, a new checkbox lets you easily define an asset class based on liability returns. The liability basis is defined in the Asset & Funding Policy > Forecast Analysis topic. Previously, this was done manually by exporting the liability return trial detail from your forecast and importing it into your Capital Market Simulation.



Mix #	Description	LiabRtn	NRgov1	NRgov30
1	Target Mix	0.2	0	0

☒ Include liability return allocation

The corporate bond yield is now an option for all benchmark yields in Stochastic Assumptions > Benchmark Yields when it is available from your Capital Market Simulation.



Alternate Benchmark based on	Corporate bond yield
*Spread over benchmark:	
*Minimum rate:	
*Maximum rate:	
Valuation Benchmark based on	Corporate bond yield

For U.S. qualified plans, you can now limit the expected return to the 3rd segment rate under all return options when smoothing funding assets based on excess return over expected. Previously, you could only limit it to the 3rd segment rate if the return was based on the expected rate.

Expected Return Based on Prior Year

Assets:

Return:

☒ Not greater than 3rd segment rate

Plan Amendments for post-termination benefits are now supported.

In addition, a new backdoor button has been added to the Plan Amendments topic in Projection Assumptions that lets you edit the benefit definitions without leaving the Projection Assumptions you are editing.

Plan Amendment

Initial benefit: Ret - FAE Benefit 2.25%

Replacement benefit:

Type of amendment: ☒ Permanent change in year

U.S. Qualified Pension Plans

PBGC 4044 yield curves. When populating a Yield Curve library entry in U.S. Qualified mode, you can now look up the new PBGC 4044 yield curve rates (in addition to published monthly PPA corporate bond yield curve rates).

Look up yield curve

Rates on last day of month:

Year	Month	0.5	1.5	2.5	3.5	10.5	20.5	30.5
2025	4	4.70	4.45	4.38	4.44	5.27	5.81	5.79
2025	3	4.72	4.60	4.59	4.65	5.26	5.73	5.73
2025	2	4.74	4.65	4.62	4.68	5.19	5.57	5.58
2025	1	4.77	4.83	4.89	4.96	5.48	5.80	5.80
2024	12	4.79	4.82	4.88	4.95	5.44	5.81	5.78
2024	11	4.92	4.79	4.72	4.72	5.05	5.42	5.36

Note: Rates at durations 1.0, 2.0, ..., 100.0 are disregarded.

Rate type:

Multiemployer vested liability effective interest rate and average benefit timing have been added for valuations and core projections. This is useful for employer withdrawal liability calculations of plans that received special financial assistance (and are now required to use the PBGC 4044 yield curve).

Contribution of Excess Assignable Pension Cost for CAS. For plans with PPA & CAS law type, a new checkbox has been added to allow excess Assignable Pension Cost to be contributed on the first quarterly contribution date. This ensures that any excess assignable pension cost flows through assets in a forecast.

CAS

Fraction of contributions reimbursed:

☒ Contribute excess Assignable Pension Cost on first quarterly due date

Government Forms update. The Schedule SB form has been updated for 2024 to export the benefit payment schedule using the benefit payments associated with the effective interest rate for plans where annuity substitution applies. This change was made based on clarifying language provided in the 2024 Schedule SB instructions. Note that this enhancement was included in an update to ProVal 3.21 but included here in case you missed it.

Maximum tax-deductible contribution option. An option has been added for PPA and PPA & CAS law types to use the pre-map-21 minimum required contribution for the maximum taxable contribution calculation.

U.S. Defined Contribution Plans

Special catch-up contributions. A new option in the D.C. Allocation tool's Regulatory Data topic lets you reflect the increased catch-up contribution limit for participants aged 60-63, as introduced by the Secure 2.0 Act effective January 1, 2025.

Limits to apply:

☒ 401(a)(17) Maximum Compensation

☒ 402(g) Deferral Limit

☒ 414(v) Catch-up Limit

☒ 414(v) Age 60-63 Special Catch-up Limit

☒ 415(c) Defined Contribution Limit

Canadian Registered Pension Plans

Triennial valuation interest only normal cost option. When running Triennial valuations, a new option increases the normal cost by interest only during interim years.

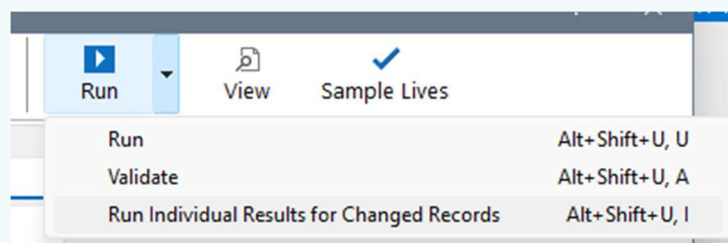
Employer Normal Cost Methodology

Estimate the employer normal cost for the interim years as

- ☐ Percentage of total pay ▼
- ☐ Percentage of employee contributions
- ☐ Dollar amount per member
- ☒ Increase with interest

German Pension Plans

Run Individual Results for Changed Records. Once individual results are saved from a valuation, if changes are made to the input data, you can choose to rerun individual results for only those changed records. This will save processing time for very large input data files.



Pensionskassen, funded by both employer and employee contributions, can now be handled in ProVal. Select Pensionskasse assumptions and ProVal will use the special funding methods required, as well as produce output items specific to this type of plan, including Pensionskasse Reserve and Risk Capital. For more information on these calculations, see Help > Help Topics > Technical Reference > German Pensionskassen.

Assumption Type:

- ☐ Tax/Funding
- ☐ Accounting
- ☒ Pensionskasse

Zulagenbewertung Method. In Census specifications, select the Zulagenbewertung Method to assume 100% married and beneficiary determined at valuation date for spouse benefits.

Beneficiary Data:

Method

Zulagenbewertung ▼

PSVaG legal vesting can now be calculated by coded database field. Under the Legal Vesting topic in your plan definition, you may now select whether a participant is calculated as non-vested or vested for PSVaG purposes, or you can tell ProVal to calculate service for the participant to determine if they are vested for PSVaG purposes. In addition, a new individual result returning the PSVaG status is now available.

PSVaG Legal Vesting Calculation

☐ Calculate for all participants
☒ Calculate by coded database field

Database field:

Specify the legal vesting calculation for each code:

Database Code	PSVaG Legal Vesting Calculation
APT	
AVT	non-vested
TVT	vested
PVT	calculate

Richttafeln 1983 is now available as an option for biometric formulae in valuation assumptions.

Biometric Formulae:

Retirement and termination rates enter

☒ Dependent probabilities
☐ Independent probabilities

Mortality rates can now be specified by calendar year of valuation.

Report Writer

When saving exhibits to a file, the default file type is now "Access Database (.accdb)", recognizing that the most common reason to save exhibits is for use in ProVal's report writer.


ProVal API

The new API functions ***BatchGetJobs***, ***BatchGetWorkerStatus***, ***BatchRunVal***, ***BatchRunValSet***, ***BatchRunCore***, and ***BatchRunDetFore*** let you execute and monitor runs via ProVal's Batch server.

The new API function ***ImportDataCorrections*** lets you import Data Corrections.

The new API function ***RunAdFact*** lets you calculate annuity factors, conversion factors, and commutation functions from within another application (e.g., Excel) based on an existing Administration Factors library entry in ProVal.

Help

Intro videos. Several ProVal commands now include short intro videos () that demonstrate how to use the command. It's a great way to learn or get a refresher on a feature you don't use very often. You can currently find intro videos in Descriptive Statistics, Resolve Duplicates, and Accrual Definitions.

Changes Log

Be sure to read the changes log (see the "changes log.doc" file in the ProVal directory) about updates to certain calculations that may change results.