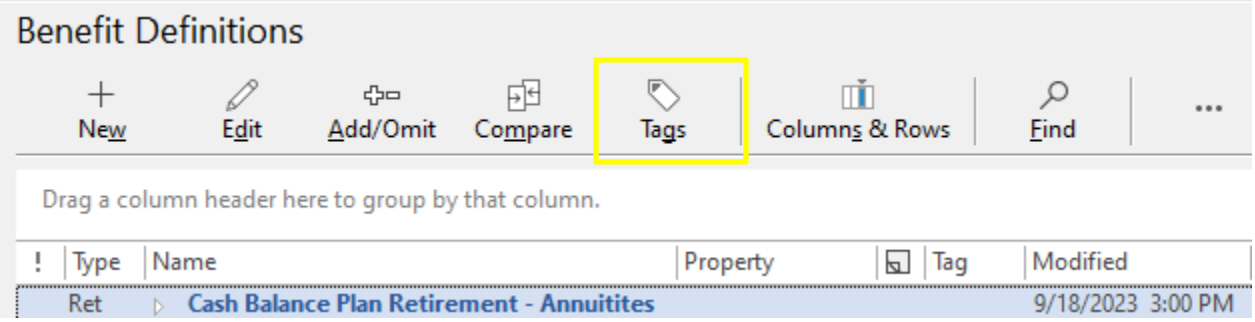
What's New in version 3.19 September 2023

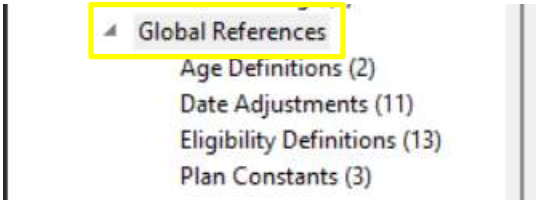
ProAdmin version 3.19 introduces interface enhancements for assigning tags, the ability to calculate factors within benefit formula table components, a new elapsed time service definition methodology, numerous U.S. 415(b) maximum enhancements as well as several usability improvements to calculation result exhibits. Full details plus many other new features are described below.

Interface

- **Tag 'em and add 'em.** You can now assign tags while using Add/Omit. For example, if you're editing a Plan Definition and selecting Benefit Definitions to add, you can modify tags for them right on the spot.

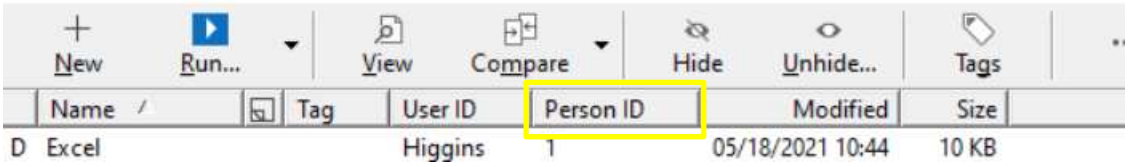


- **Global References** replaces the Misc. References label in the Plan Definition menu tree.



Calculation Libraries

- **PersonID** is now a column in the Estimate, Final, and Date/Age/Service libraries.

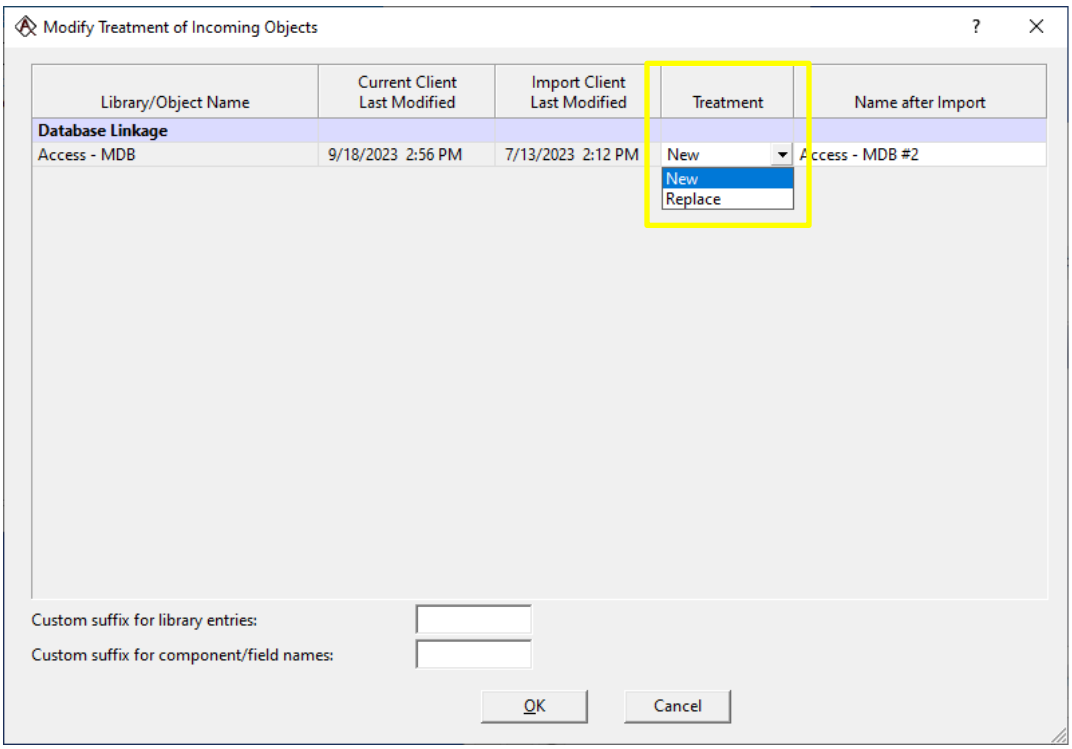


- **Populate** is now available on the Estimate and Date/Age/Service ribbon. Previously, a populate button was only available to copy an Estimate to a Final. Now, this button allows you to fill in the current calculation entry inputs (e.g., Estimated Benefit Calculation) using information from the other calculation libraries (e.g., Final Benefit Calculation or Dates/Age/Service Calculation) within the current Project. Topics that can be populated are Name, Data, Decrement Type, Decrement Date, Commencement Date(s)/Ages, Plan Definition, Census Specifications, Projection Assumptions, Output Definition, and the Calculation Results display settings (such as the last table that was displayed).

- **Multi-Edit** is now available in the Estimate, Final, and Date/Age/Service libraries. You can select multiple entries within these libraries and change selections such as Plan Definitions, Census Specifications, Projection Assumptions, and/or Output Definitions without losing the Data or Calculation inputs.

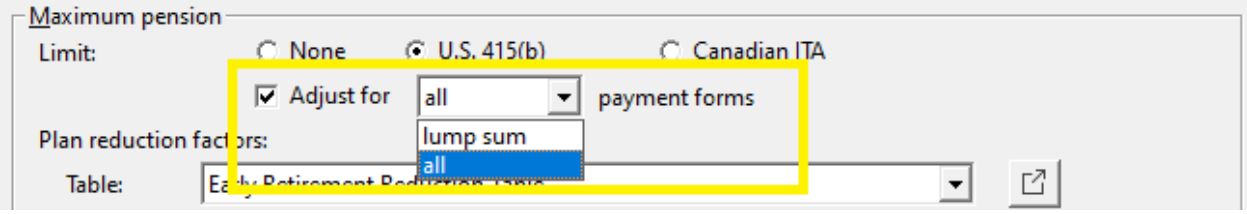
Import from Client

- **Import with replacement.** When importing a library entry that has the same name as an existing entry, ProAdmin now gives you the option to replace the existing entry, rather than always saving as new. This is extremely helpful when users are working in multiple copies of a client and work needs to be recombined into a single client.

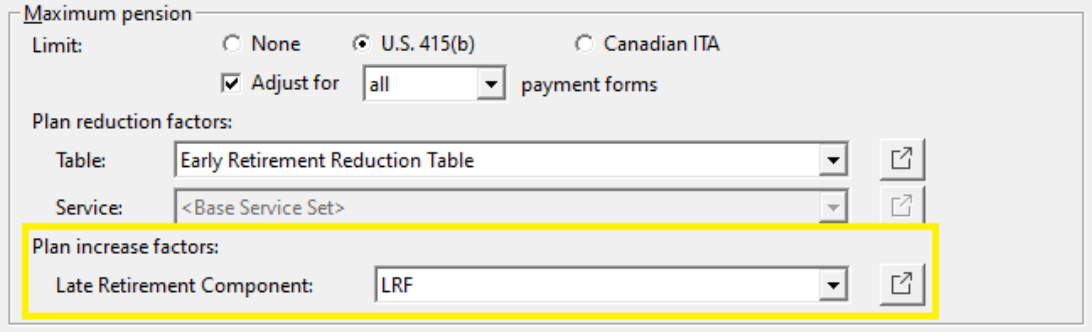


Regulatory Enhancements

- **Secure Act 2.0.** ProAdmin's calculation of the Minimum Required Distribution Age/Date was updated to reflect the changes required by the Secure Act 2.0. (This enhancement was released as a 3.18 patch but is included here in case you missed it.)
- **415(b) maximum at payment form level.** Benefit Definitions can now specify that the U.S. 415(b) maximum pension limit be adjusted by payment form for "all" (with some exceptions) payment forms if desired. The option to have special treatment just for lump sums is still available. For more information, see 415 Regulatory Enhancements on page 14.

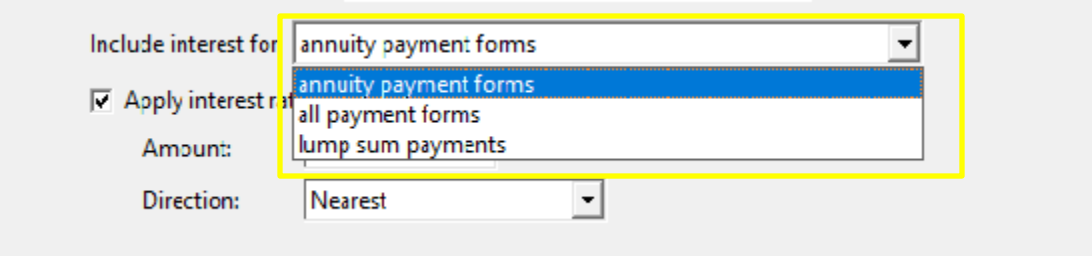


- **415(b) maximum can reflect plan increase factors.** For both early and late retirement benefit adjustments, the law specifies that 415(b) limit calculations reflect the lesser of the plan and statutory factors. Accordingly, you can now specify the plan increase factors in each Benefit Definition by way of a late retirement component (as long as that component calculates at commencement age, not annually). ProAdmin will ignore the benefit (if any) used in the component and just extract the factors for the 415 calculation. For more information, see 415 Regulatory Enhancements on page 14.



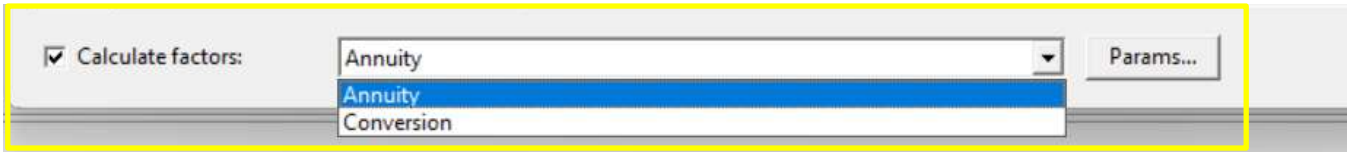
Plan Definitions

- **Retroactive Payments.** When applying interest, you can now apply to all payments, only annuities, or only lump sums. (This enhancement was released as a 3.18 patch but is included here in case you missed it.)

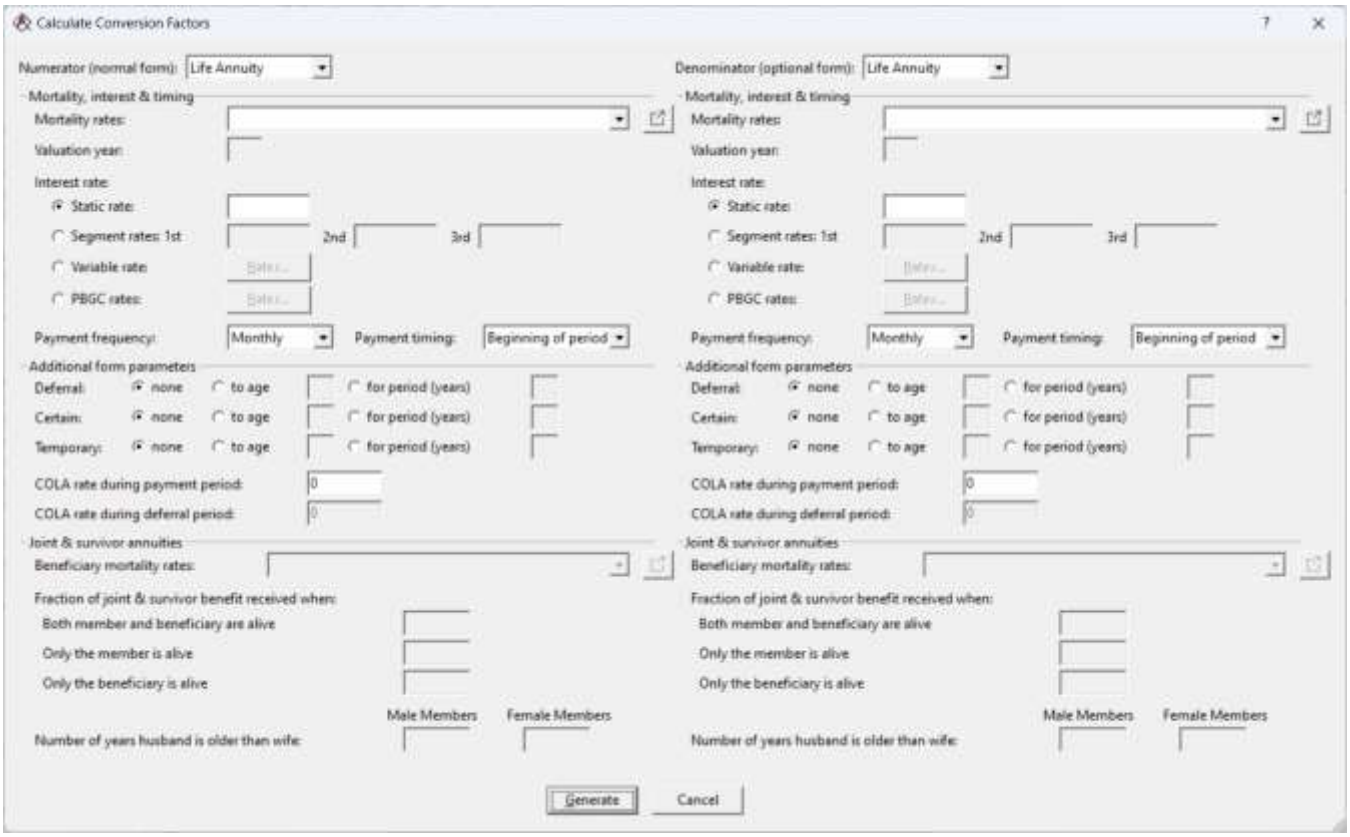


Benefit Formula Components

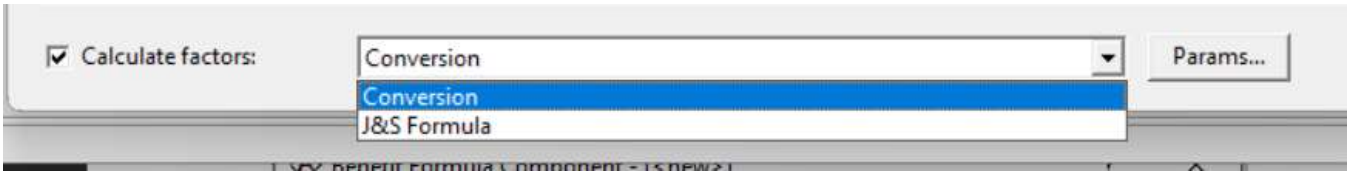
- **Conversion factors.** The ability to calculate annuity and conversion factors within Benefit Component and Payment Form Conversion Tables has been greatly enhanced. There is a new checkbox at the bottom of the Benefit Formula Component Table dialog that allows you to choose either annuity or actuarial equivalence conversion and then specify the calculation parameters. The resultant table will be ghosted to visually indicate that the table is calculated, and the parameters used for the calculation will always be saved and available under the Params button and in the view.



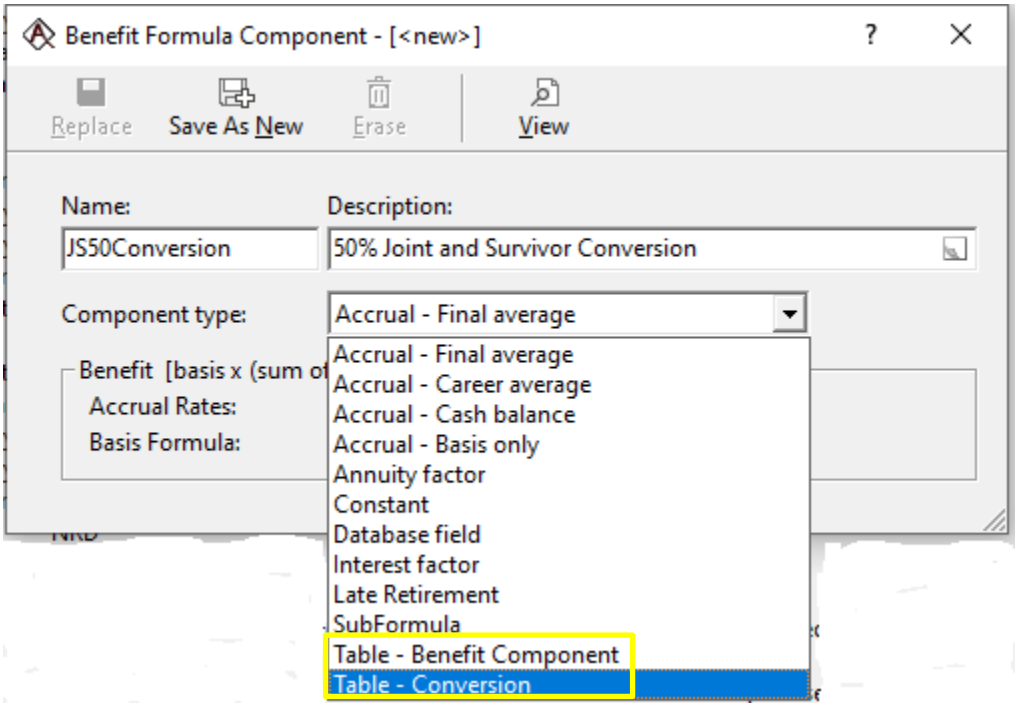
While the annuity parameters are essentially the same as before, albeit presented a little more clearly and comprehensively, the actuarial equivalence conversion options have been fleshed out to allow full control over the numerator and denominator of the calculation.



- **Payment form conversion tables.** Comparably to Benefit Component Tables, there is also a new checkbox at the bottom of the Payment Form Conversion Table dialog that allows you to choose either actuarial equivalence conversion or J&S Formula Conversion and then specify the calculation parameters.



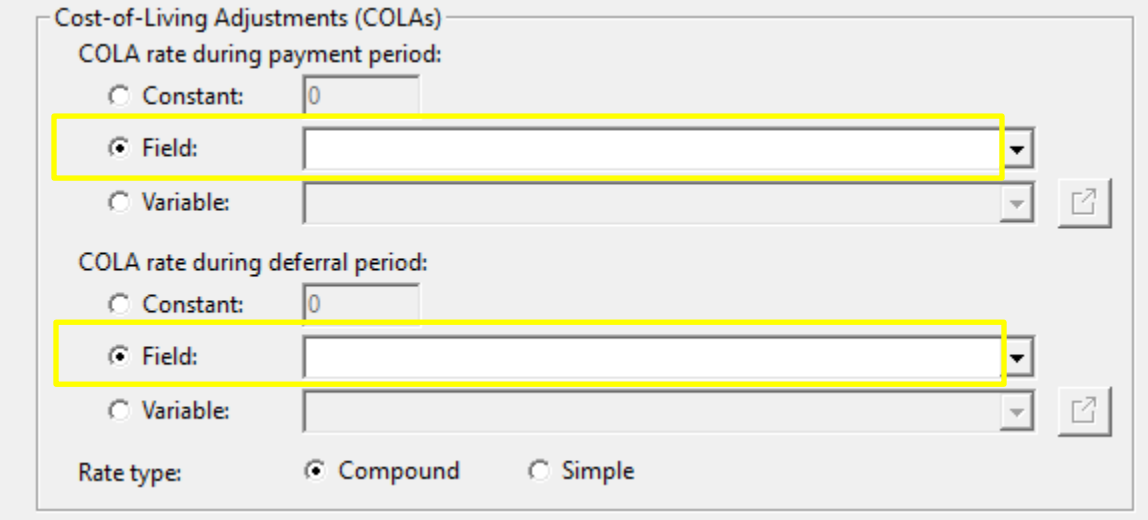
- **Table Components.** You can now reference a Payment Form Conversion Table from the Conversion table library directly in a Benefit Formula Component by choosing "Table – Conversion". Reference a Benefit Formula Component Table (previously the only option) by choosing "Table – Benefit Component."



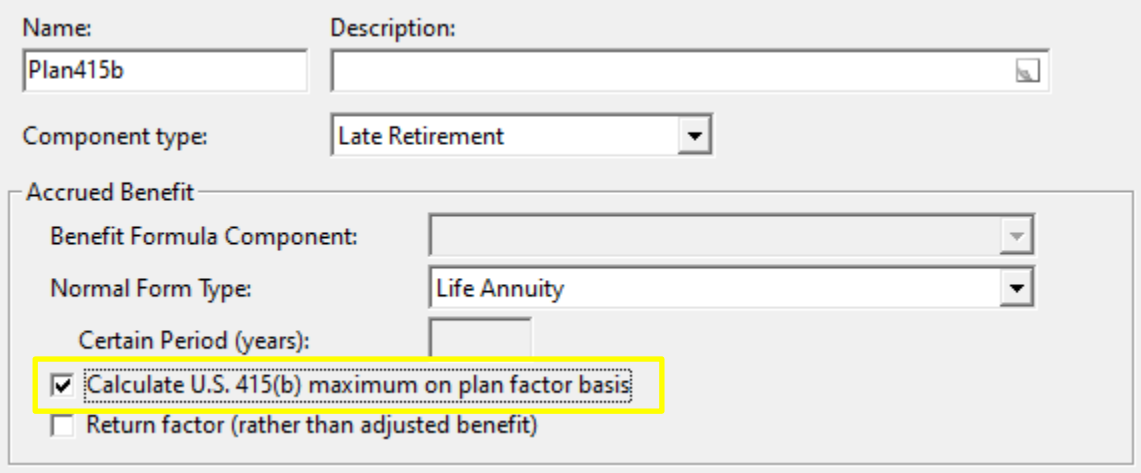
When viewing the Benefit Formula Component library, you will see conversion tables referenced as TblConv and the Benefit Component Tables as TblBC.

Type	Name	Description
TblConv	JSConversion	Joint and Survivor Conversion
TblBC	Erf	Early Retirement Table
TblBC	Vest	Vesting Schedule
SubFrmla	VestPct	
LateRet	LateRetirementBenefit	Late Retirement Benefit
Field	CBOpenAB	Cash Balance Opening Account Balance
FAS	RetBen	Retirement Plan Benefit

- **COLA rate by field.** Annuity factor (benefit formula and accrual basis) component COLA rates can now be set to reference a database field. This functionality is also available in payment forms and late retirement benefit formula components.

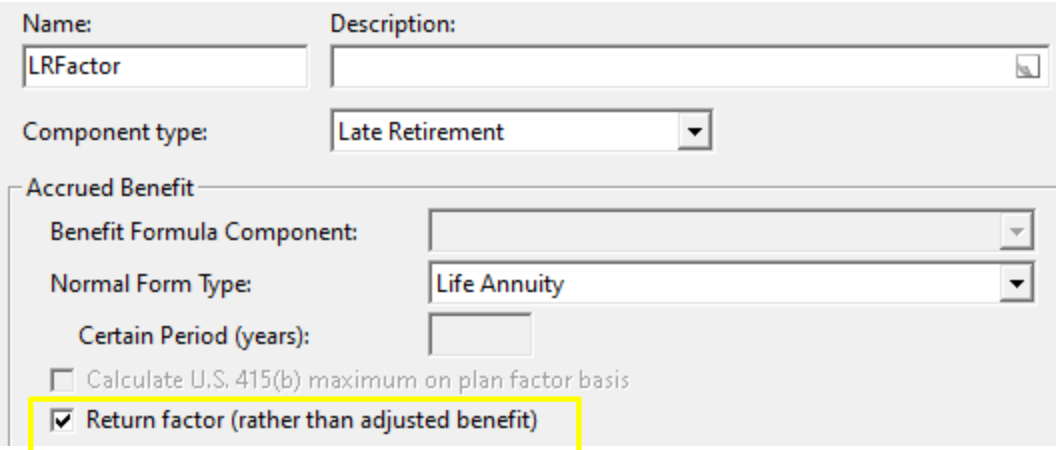


- **415(b) maximum benefit on plan factor basis**. The late retirement component has a new checkbox in the Accrued Benefit section that allows you to calculate the 415(b) maximum benefit limit adjusted for plan factors to each calculation age. This is a late retirement benefit calculation where the starting plan benefit is the U.S. 415(b) maximum dollar benefit for the calculation year (so the benefit formula component box is unavailable because n/a), and the final benefit is the plan basis 415(b) limit for the calculation year and age, where all the late retirement component parameters are available to fully describe the plan basis (except that the calculation must be at commencement, not annual).



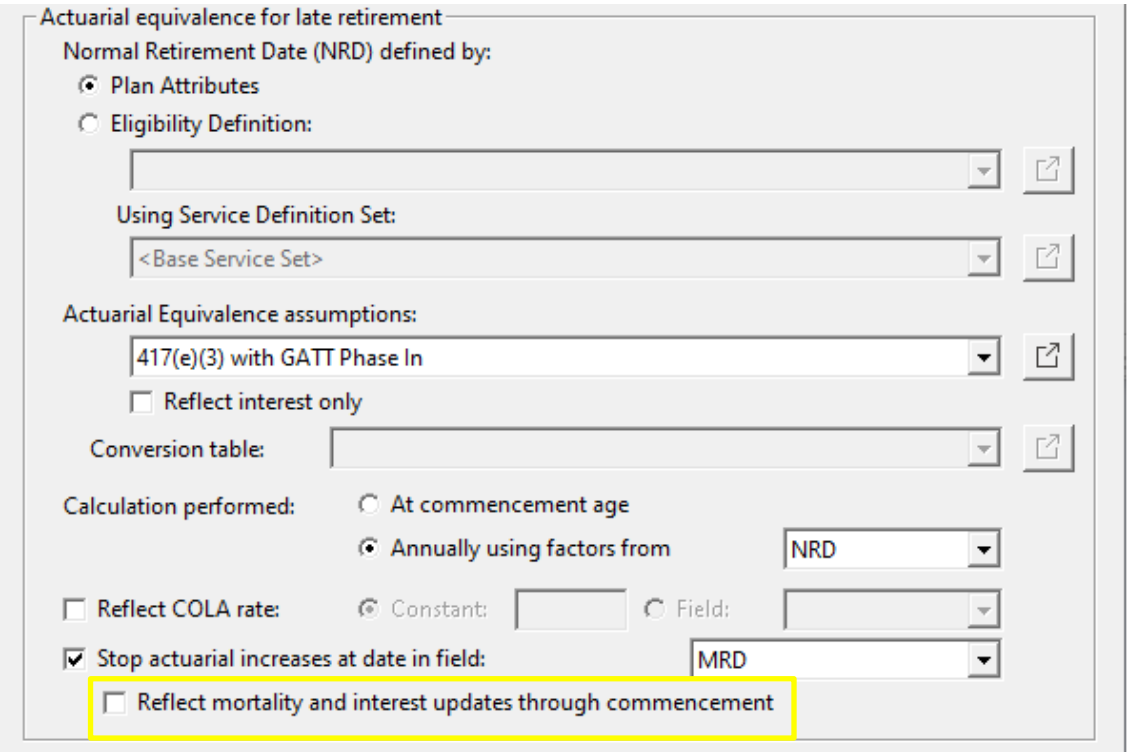
This calculation is useful if it is necessary to do maximum benefit calculations manually and you need to reflect the lesser of the plan and the statutory adjustment factors, where the statutory adjustment factors would be reflected in the #MAXBEN operator results.

- **Late retirement factor**. The late retirement component can now return the late retirement factor instead of an adjusted benefit. While this result was always possible to achieve by using a benefit of $1 for calculations performed at commencement age with simple assumptions, this new feature makes it also straightforward for calculations performed annually, including those using factors from the beginning of the plan year when the calculation involves dynamic mortality and/or segment rates. The increase factor returned can then be utilized manually in a calculation.



If the "Return factor (rather than adjusted benefit)" option is selected, the component will return the increase factor applicable for the given calculation date based on the other calculation parameters, as opposed to returning the greater of the applicable continued accrual benefit formula component or the actuarially increased prior period benefit value.

- **Stop actuarial increases**. The new "Reflect mortality and interest updates through commencement" checkbox for late retirement components that use the "Stop actuarial increases at date in field" option provides flexibility when the calculation involves dynamic mortality and/or tabular interest rates. The default behavior is now to freeze the mortality and interest rates at the stop date, but you may still optionally recognize changes to the underlying mortality and interest for dates after the stop date through commencement.

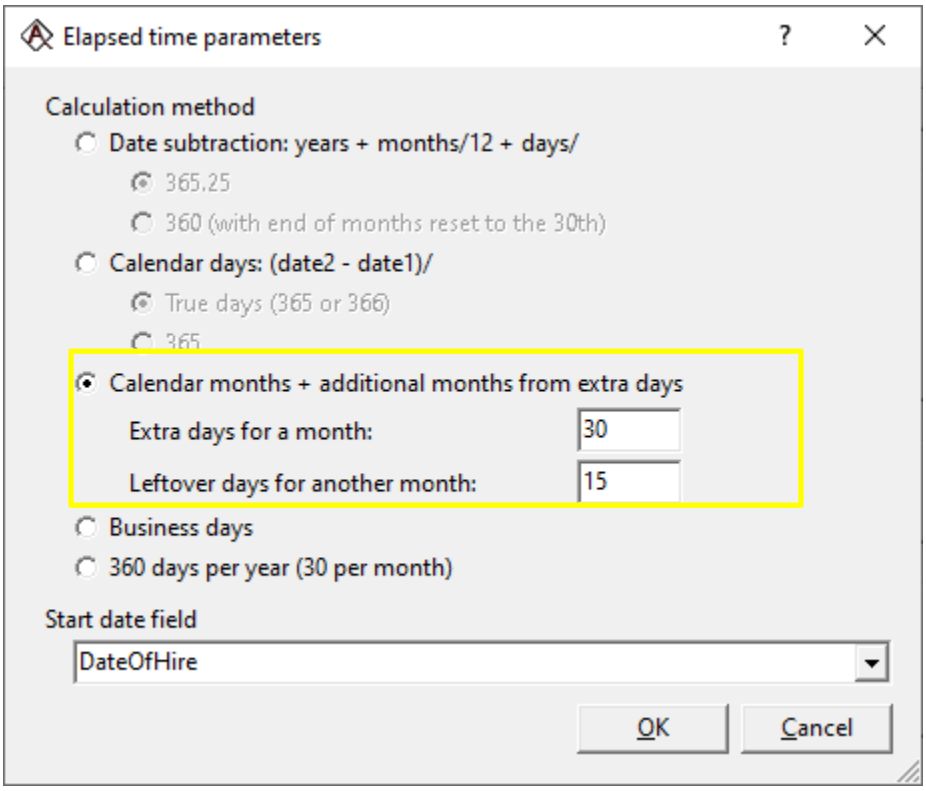


Service Definitions

- **Calendar months + months from extra days** is now available as an additional elapsed time method. This method allows you to accumulate any days that are earned outside of a completed month and convert them to extra months of service.

  For example, using the new parameters illustrated below of "Extra days for a month" of 30 and "Leftover days for another month" of 15, and assuming a hire date of 7/16/2010 and "+1 day" as a stop date adjustment (so service is valued through the day of termination), the following results will be generated:

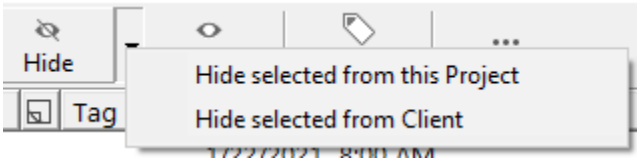
  - On a stop date of 8/30/2010 there are 45 days of service and no completed months. The service would be calculated as two (2) months. One (1) for the 30 extra days and 1 for the leftover days.
  - On a stop date of 08/31/2010 there is one (1) completed month and 15 extra days. The service would be calculated as two (2) months. The 15 days aren't sufficient to get an additional month using the Extra days (30) assumption but, the leftover days (15) assumption would be sufficient to earn a month.



Note: please review the command reference help for more details on this new method.

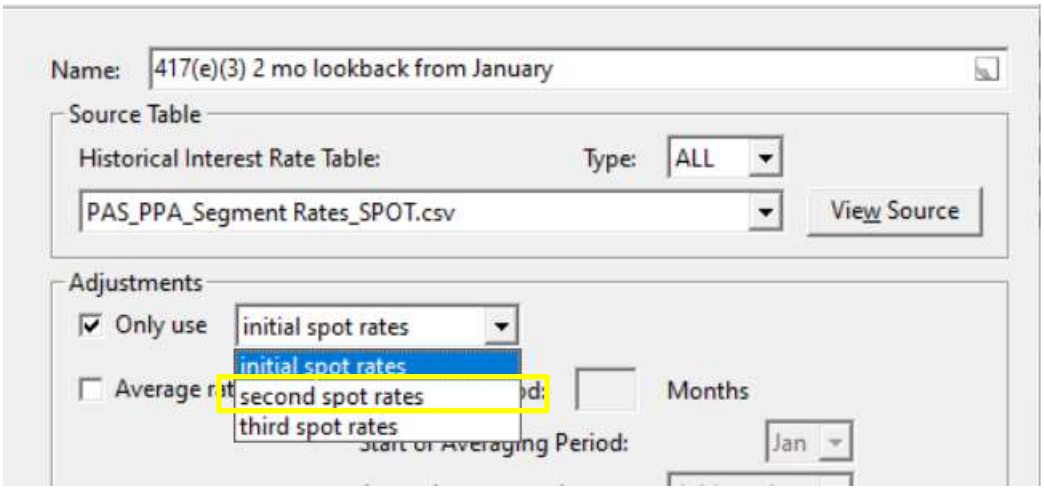
Mortality Tables

- You can now hide mortality tables from a client – rather than just hiding from individual projects. For example, you might hide obsolete tables or tables that are not applicable to your plan.



Interest Rate Tables

- You can now select that the second segment rate is the only value to use from a spot rate table.

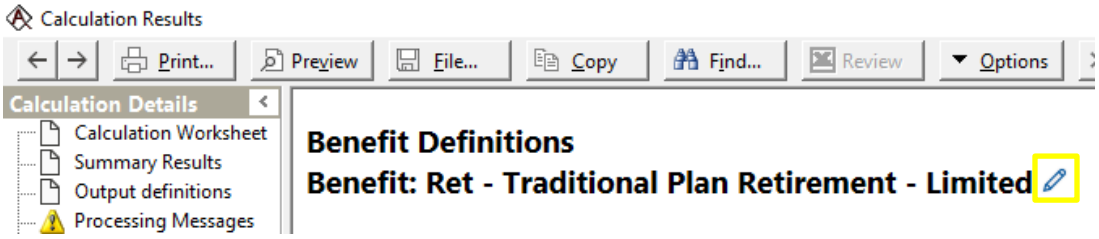


Operators

- **a #FSTDAY b** returns the first day of the period (specified by a 1= calendar year, 2 = plan year, 3 = semi-calendar year, 4 = semi-plan year, 5 = calendar quarter, 6 = plan year quarter, 7 = month) containing date b.
- **a #LSTDAY b** the last day of the period of the period (specified by a 1= calendar year, 2 = plan year, 3 = semi-calendar year, 4 = semi-plan year, 5 = calendar quarter, 6 = plan year quarter, 7 = month) containing date b.

Calculation Results

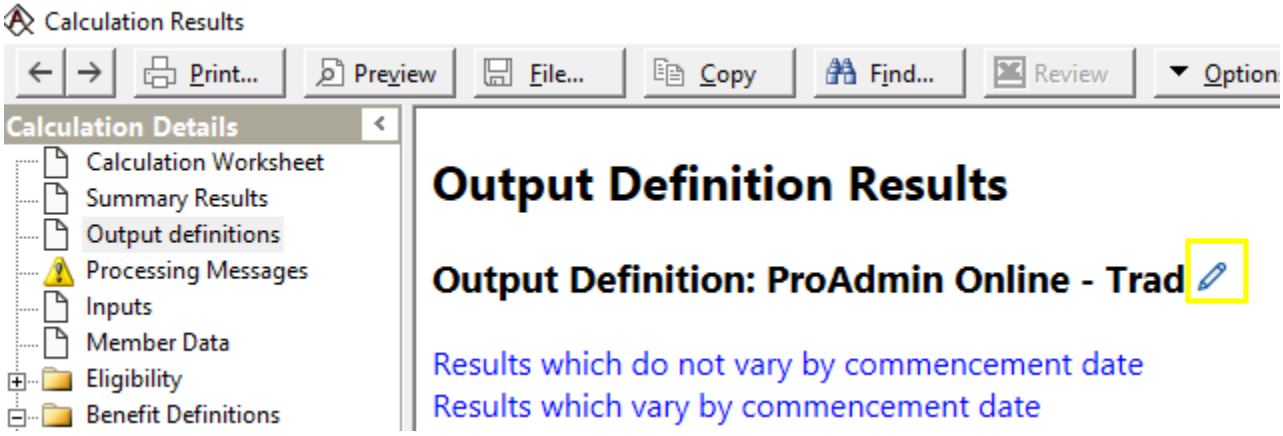
- **Editing entries**. You can now directly edit library entries, such as Plan Definitions, from within Calculation Results. If you see something that needs to be revised, you can do so right on the spot without having to back out of the results. What's more, you'll instantly see the revised results as soon as you've saved the change.



Please note that this functionality is not available in Calculator mode.

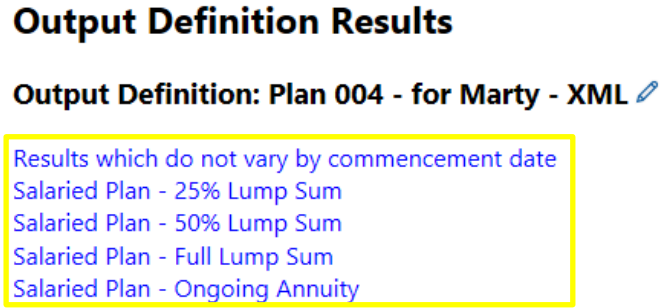
- **Summary Results** now have hyperlinks for Benefit Definitions, Benefit Formula Components, Accrual Basis Components and Service Definition Sets.

- **Output Definition results** have several new and useful hyperlink features:
  - There is a new editing link at top of the exhibit that allows you to view and even modify the Output Definition parameters.



  - Hyperlinks have been added for "Results that do not vary by commencement date" and "Results that vary by commencement date". If you click on an item's description, it will take you to the Benefit Formula component (which may or may not have the same name) that produced the result.

  - Output Definitions referencing XML Output Linkages that display results at the benefit level also have hyperlinks, and the titles have been improved to be more meaningful.



- **Member Data** is the new name for the prior Input Data in the Calculation Results and Run & Compare dialogs to avoid confusion with Inputs on the navigation tree.

- **Benefit Formula Component Table exhibits** where the component varies by coded field now have the field (value) and table name included in the footnotes for ease of review.

```
Description       = Early Retirement Table
Varies by field   = Location (Milford)
Table name        = 7.2% for the first 5 years 3.6% thereafter
Age Definition    = Years and completed months
Age determined at = calculation date
Factor rounding   = final step rounded to the nearest 0.0001
```

- **Members ineligible for benefits.** The Processing Messages have been improved to note as the first item if a member is not eligible for any benefits. Additionally, the NOT ELIGIBLE message is now at the top of the error section within the calculation completion dialog shown below, as well as the Processing Messages exhibit and Output Definition Processing Messages section.

```
Warnings

The member is NOT ELIGIBLE for any benefits.
```

- **Salary error message adjustment.** In certain cases a calculation correctly aborted but the messages detailing why were buried and difficult to find. Now the error messages will show up under the Processing Errors header.

Batch Estimates

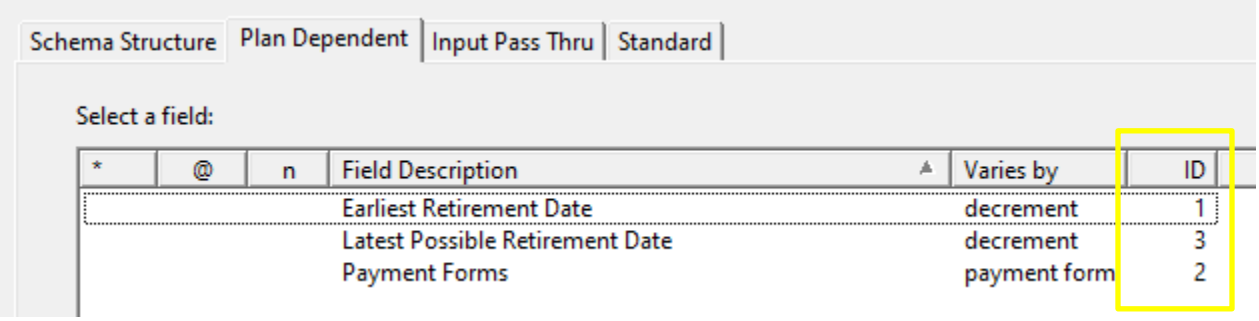
- **XML Output.** Batch Estimates may now use an XML Output Definition to write calculation results to XML files (in a specified directory). If an xml output file already exists, you have the choice of replacing the existing xml files or numbering a new/unique file name.

  The unique name for an XML calc is 'BA_*personid_acd_termdate*'.xml. The *acd* displays either an age or a date depending on what was requested. Dates are in YYYY-MM-DD format. For example: BA_001404971_2023-09-01_2009-05-31.xml

- **View results.** When you are in Calculator mode the View button is changed to View results to better depict the behavior.

XML Linkages

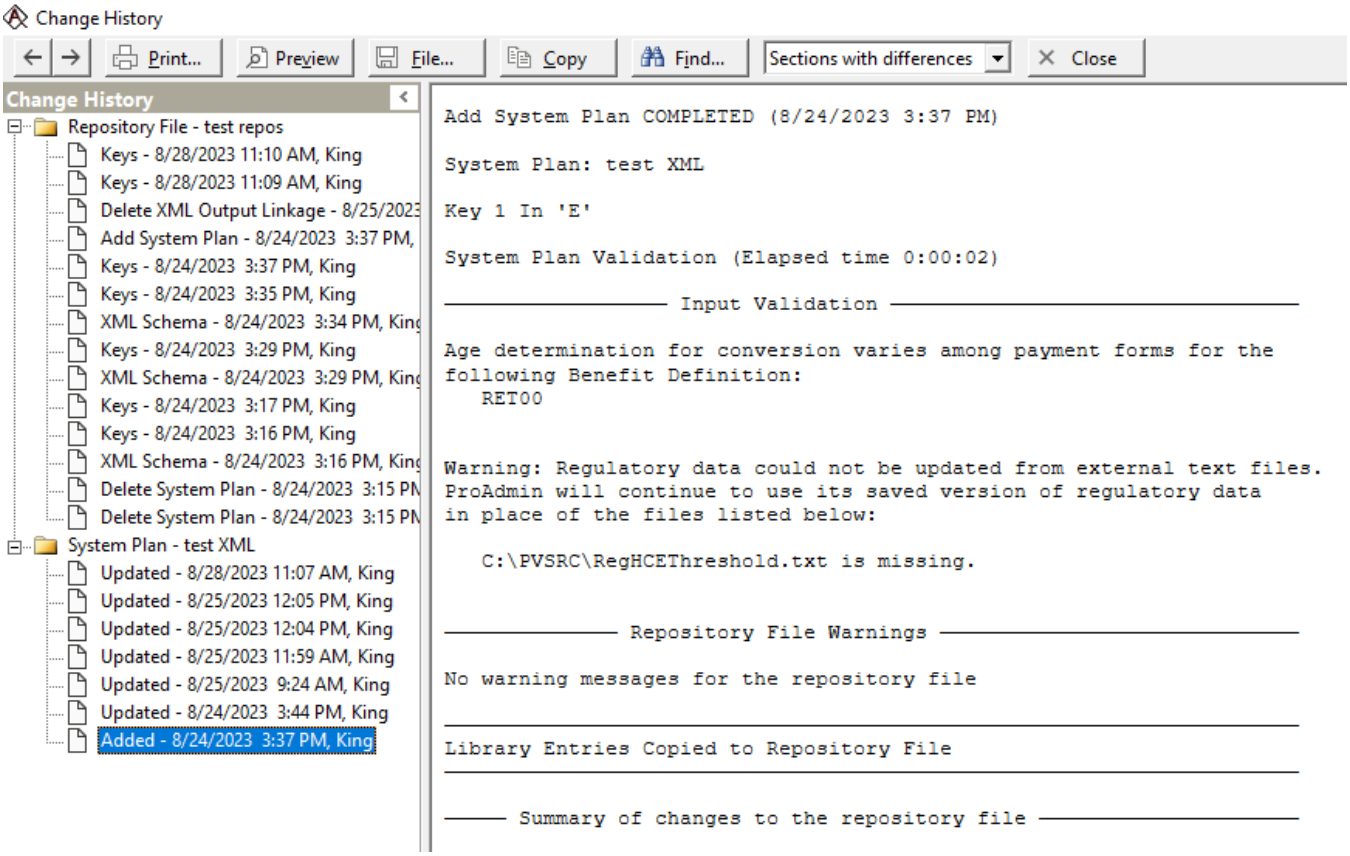
- **Field ID displayed.** When viewing Plan Dependent or Input Pass Thru fields within an XML Output Linkage, the field ID stored within the library is now displayed to facilitate comparisons of linkages. This is particularly helpful if you want to change the XML Output Linkage referenced by an Output Definition because the Output Definitions use these internal IDs (not the Field Description) to identify the referenced XML Linkage fields.



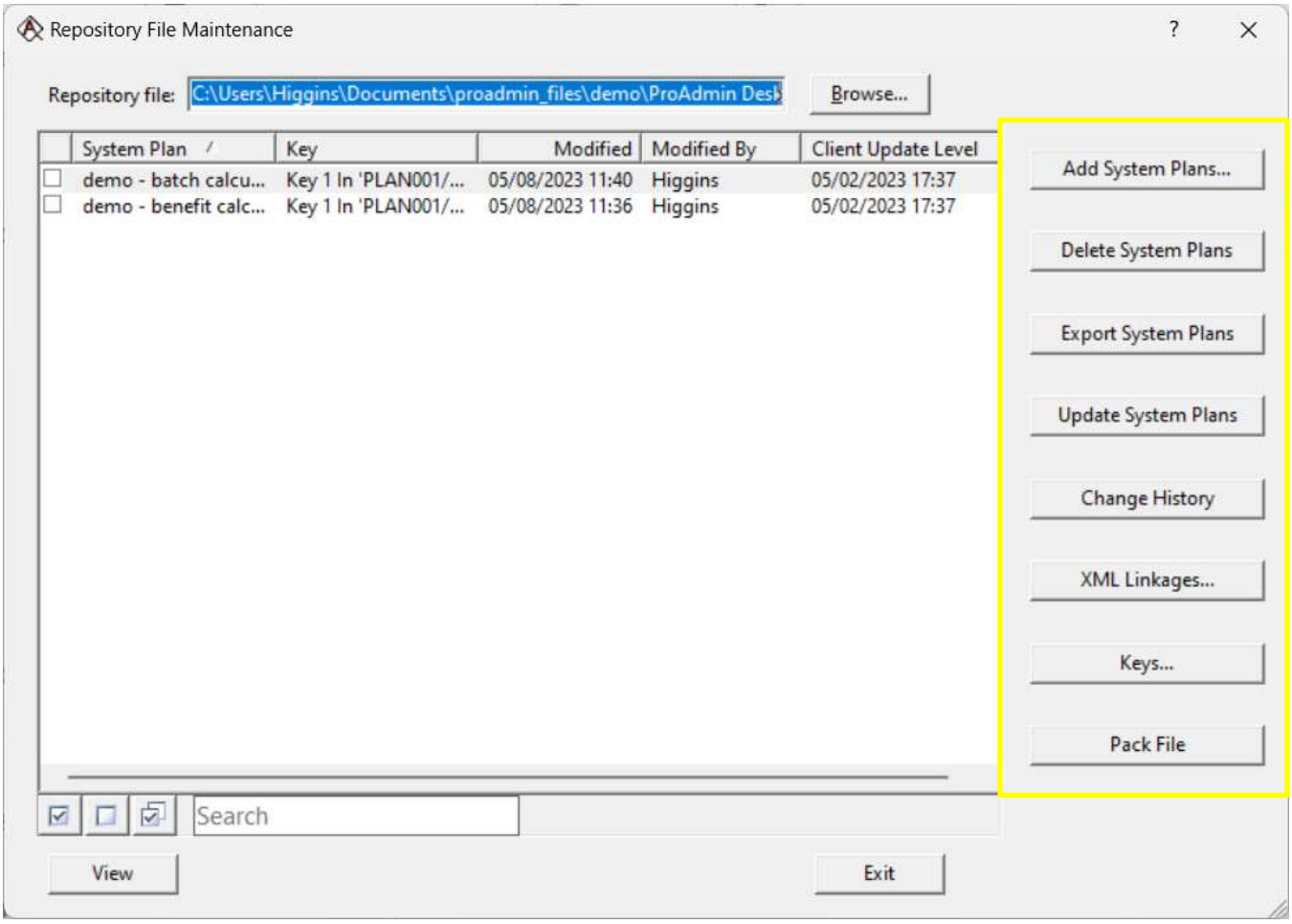
- **Filtering.** When selecting a tag that has a parent container and another container begins similarly, now only tags for the selected parent container are displayed. Previously, if you were working with the container *ParticipantData/Employee* and there was also a container *ParticipantData/EmployeeStatusHistory* then fields from both containers would have been included as choices for the *ParticipantData/Employee* tag.

Server Tools

- **Change History.** The repository file will now retain a change history that you can view at any time. The history will detail any additions, deletions or updates to the repository that were made through ProAdmin version 3.19 or later.



- **Repository File Maintenance** has been redesigned to place the commands on the main dialog box rather than hidden under a Manage button so you can easily see and access the available options. Note the new Change History button among the prior commands now easily visible in the example below.



System

- The 4 GB limit on library and database files has been removed. Previously, this limit could have resulted in a FILE FULL error for clients with lots of calculations or (more likely), repositories with lots of client files.
- The System Info display now shows the Microsoft.Jet.OLEDB and Microsoft.ACE.OLEDB versions that are in use.

Fulfillment Tool

- The Fulfilment Tool was updated to use the correct ADO provider when connecting to the Access database. Microsoft.ACE for accdb databases and Microsoft.Jet for mdb databases.

Training

- ProAdmin Introductory self-paced training is now available online. Please go to https://www.winklevoss.com/proadmin/training/ to register.

Changes Log

- Be sure to read the changes log about updates to certain calculations that may change results. You can easily access the file by clicking on Help, Changes Log.

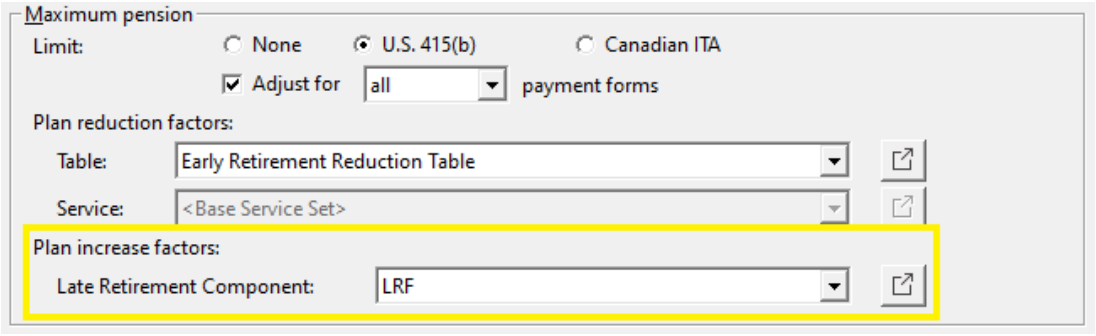
415 (b) Regulatory Enhancements

ProAdmin version 3.19 includes several enhancements to the 415(b) maximum benefit calculations that continue to build on the ProAdmin 3.17 additions of, among other things, the ability to properly limit lump sum benefits. The marquee enhancement in ProAdmin 3.19 is the ability to directly calculate the maximum limit at the payment form level for most payment forms. Additional enhancements allow you to (1) use plan increase factors as part of the 415(b) limit calculation, and (2) return the 415 maximum on a plan basis directly from a late retirement component (for manual calculations). Finally, some 415 limit calculation changes were made and included in the Changes Log as they are not optional and might change prior results:

- The maximum benefit limit will no longer decrease due to an increase in age (or service) of the member. A decrease might otherwise happen if plan reduction factors are reflected in the limit and they have a cliff. This change was implemented for post-1983 years only due to the limit itself dropping from $136,000 to $90,000 at that time.
- When calculating lump sum annuity factor components, dynamic mortality is now treated consistently with the rest of the maximum benefit calculation in that "pre-2008 (dynamic) mortality assumes the 2008 plan year". This treatment is noted in the maximum benefit limit and annuity factor details.

415(b) Maximum Benefit Plan Factor Increase Option

Within a Benefit Definition, late retirement benefit formula components that are parameterized to calculate factors at commencement age can now be selected as the 415(b) plan increase factor.

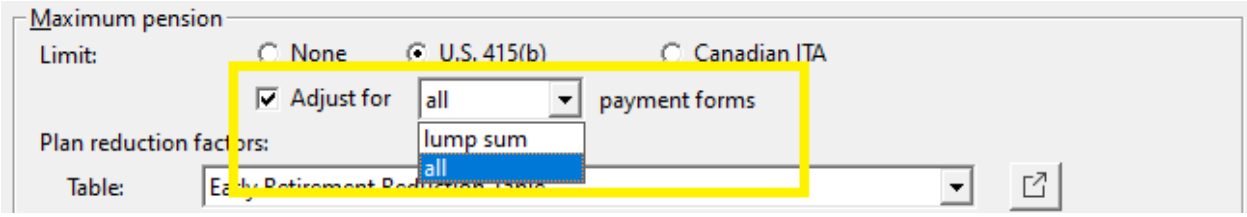


If an increase factor is specified, ProAdmin will increase the 415(b) dollar limit after age 65 by the lesser of the IRS statutory or plan increase factor (normalized to age 65) from the selected Late Retirement Component. Prior to ProAdmin 3.19, the 415(b) dollar limit was only increased by the statutory factor; this will still be the case if plan increase factors are not applicable. The statutory factors are calculated based on the interest and mortality parameters specified under Regulatory Data > U.S. Maximum Benefits.

Date	Member Age	Participation Service	Dollar Maximum	Plan Factors	Normalized Plan Factors	Statutory Adjustment Factors	Final Adjustment Factors*
12/31/2015	62y 3m	11.000000	210,000	1.000000	1.000000	1.000000	1.000000
12/31/2016	63y 3m	11.000000	210,000	1.000000	1.000000	1.000000	1.000000
12/31/2017	64y 3m	11.000000	215,000	1.000000	1.000000	1.000000	1.000000
10/01/2018	65y 0m	11.000000	220,000	1.000000	1.000000	1.000000	1.000000
12/31/2018	65y 3m	11.000000	220,000	1.024996	1.024996	1.018818	1.018818
12/31/2019	66y 3m	11.000000	225,000	1.136587	1.136587	1.096012	1.096012
12/31/2020	67y 3m	11.000000	230,000	1.264229	1.264229	1.180112	1.180112
12/31/2021	68y 3m	11.000000	230,000	1.410849	1.410849	1.272668	1.272668
12/31/2022	69y 3m	11.000000	245,000	1.580011	1.580011	1.375994	1.375994
9/30/2023	70y 0m	22.000000	265,000	1.725873	1.725873	1.456718	1.456718
10/01/2023	70y 0m	22.000000	265,000	1.725873	1.725873	1.456718	1.456718

415(b) Calculation Extended to All Payment Forms

ProAdmin 3.17 included an enhancement that allowed the IRC Section 415(b) maximum benefit limit to be adjusted for lump sum payment forms within Benefit Definitions. ProAdmin 3.19 now also allows the limit to be adjusted for annuity payment forms other than life annuity or qualified joint and survivor annuity.



When the adjustment checkbox is marked and set to the "all" option, ProAdmin will calculate the minimum number of benefit limitations as needed for the given payment forms within the Benefit Definition. Each limit calculated will be the applicable 415(b) life annuity limit adjusted by the lesser of the statutory basis or the plan actuarial equivalence basis as specified in Plan Attributes. The number of limits determined is dependent on whether the participant has a non-spouse beneficiary or not. For all participants, separate limits will be calculated for

- Life annuities
- Lump sums
- Certain and life options with different certain periods
- Payment forms with distinct COLAs

For married participants, joint and survivor options are limited by the "Life annuity or QJSA default" limit. Additional limits are calculated for joint life payment forms with distinct numbers of years certain. For participants with non-spouse beneficiaries, separate limits are calculated for all options with distinct continuation percentages and certain periods.

While ProAdmin can calculate an accurate 415 limit for the vast majority of payment forms; currently, there are a few more complex options for which a proxy is used. Social security leveled, pop-ups for non-spouse beneficiaries, certain only, cash refunds, and temporary annuity payment forms are limited using the "life annuity or QJSA default" limit; for these payment forms, this treatment produces the same result as if the maximum benefit limit was *not* adjusted for payment forms. A warning message is issued when a calculation is run for which these payment forms are available.

Each limit table calculated will be located within a maximum benefit limits folder for each benefit definition. All applicable limits, besides the life annuity or QJSA default and lump sum form(s), will have a generic name of "StdForm x" or "JS Form x." The payment forms for which the limit is applicable will be stated in the footnote below the calculation details.

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*  Lesser of Normalized Plan Factors and Statutory Factors
   Pre-2008 (dynamic) mortality assumes 2008 plan year.
   Limit applies to these payment forms: "50% JS w 10 YCL" and "75% JS w 10 YCL"
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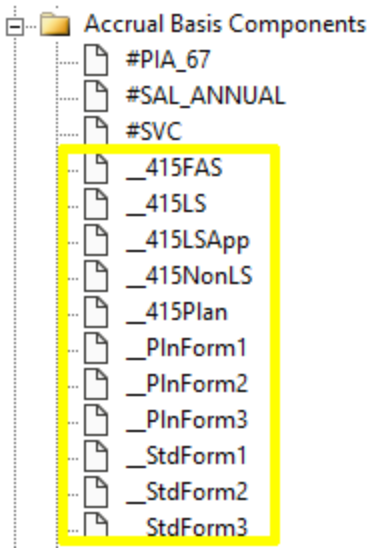
The statutory and plan basis factors used in determining the limits are presented in the maximum benefit limit details for each limit. The complete details of each factor can be found under the Accrual Basis Components detailed results directly or via the corresponding links in the maximum benefit limit details. Similarly to the maximum benefit limit details, the accrual basis component footnotes list the payment forms for which they are relevant.



The calculation of the payment form adjustments can be found in the Maximum Benefit Limit detailed results. For all applicable annuity payment forms, the adjustment is the lesser of the statutory conversion, using 5% interest and the applicable 417(e) mortality, and the plan basis conversion from the single life annuity payment form.

Date	Member Age	Participation Service	Dollar Maximum	Plan Factors	Normalized Plan Factors	Statutory Adjustment Factors	Final Adjustment Factors*	Participation Fraction	Commencement Age Maximum	Service from Hire	Service Fraction
12/31/2015	54y 3m	11.000000	210,000	0.406897	0.508608	0.591910	0.508608	1.000000	106,807.66	10.500000	1.000000
12/31/2016	55y 3m	11.000000	210,000	0.508335	0.635403	0.631934	0.631934	1.000000	132,706.21	11.500000	1.000000
12/31/2017	56y 3m	11.000000	215,000	0.541675	0.677077	0.675085	0.675085	1.000000	145,143.26	12.500000	1.000000
12/31/2018	57y 3m	11.000000	220,000	0.575015	0.718751	0.726756	0.718751	1.000000	158,125.17	13.500000	1.000000
12/31/2019	58y 3m	11.000000	225,000	0.608355	0.760425	0.775822	0.760425	1.000000	171,095.57	14.500000	1.000000
12/31/2020	59y 3m	11.000000	230,000	0.641695	0.802099	0.829374	0.802099	1.000000	184,482.70	15.500000	1.000000
12/31/2021	60y 3m	11.000000	230,000	0.683365	0.854185	0.887300	0.854185	1.000000	196,462.53	16.500000	1.000000
12/31/2022	61y 3m	11.000000	245,000	0.750025	0.937508	0.949952	0.937508	1.000000	229,689.41	17.500000	1.000000
9/30/2023	62y 0m	11.000000	265,000	0.800020	1.000000	1.000000	1.000000	1.000000	265,000.00	18.250000	1.000000
10/01/2023	62y 0m	11.000000	265,000	0.800020	1.000000	1.000000	1.000000	1.000000	265,000.00	18.250000	1.000000
12/31/2023	62y 3m	11.000000	265,000	1.000000	1.000000	1.000000	1.000000	1.000000	265,000.00	18.250000	1.000000
12/31/2024	63y 3m	11.000000	265,000	1.000000	1.000000					18.250000	1.000000

Highest 3-Yr Salary Ave. (prorated)	Life Annuity Maximum	5% app. mortality LA	5% app. mortality form basis	Statutory form factor	Plan basis LA	Plan basis form	Plan form factor	Final form Factor	$10,000 Exemption (prorated)	Maximum Benefit Payable
187,500.00	106,807.66	15.111452	15.220919	0.992808	12.540628	12.780500	0.981231	0.981231	10,000.00	104,803.03
213,333.33	132,706.21	14.888123	15.013858	0.991625	12.334460	12.595129	0.979304	0.979304	10,000.00	129,959.72
243,333.33	145,143.26	14.658757	14.802431	0.990294	12.120661	12.404735	0.977100	0.977100	10,000.00	141,819.41
266,666.67	158,125.17	14.743724	14.891724	0.990062	11.898767	12.209601	0.974542	0.974542	10,000.00	154,099.59
270,000.00	171,095.57	14.451828	14.624677	0.988181	11.668499	12.010192	0.971550	0.971550	10,000.00	166,227.86
275,000.00	184,482.70	14.179174	14.379008	0.986102	11.429820	11.807139	0.968043	0.968043	10,000.00	178,587.21
280,000.00	196,462.53	13.906438	14.132844	0.983980	11.182925	11.601193	0.963946	0.963946	10,000.00	189,379.29
285,000.00	229,689.41	13.693168	13.929351	0.983044	10.928213	11.393167	0.959190	0.959190	10,000.00	220,315.82
293,333.33	265,000.00	13.530983	13.783604	0.981672	10.733008	11.236329	0.955206	0.955206	10,000.00	253,129.58
293,333.33	265,000.00	13.530983	13.783604	0.981672	10.733008	11.236329	0.955206	0.955206	10,000.00	253,129.58
293,333.33	265,000.00	13.460728	13.720617	0.981059	10.666284	11.183902	0.953718	0.953718	10,000.00	252,735.16
293,333.33		13.249963	13.531657	0.979183	10.466111	11.026622	0.949167	0.949167		

When adjusting the U.S. 415(b) maximum pension limit for all payment forms, the plan basis payment form conversion applicable to the limit will always be based on the plan actuarial equivalence defined within Plan Attributes. Accordingly, for plans where payment forms are converted using something other than the defined plan actuarial equivalence, tabular conversions for example, it may be more advantageous to not adjust the limit for all payment forms. This is particularly true if the plan factors are expected to be less than the statutory factors. In such a case, if a benefit is limited by the 415(b) life annuity maximum, the plan factors will be applied to the limited benefit resulting in the proper maximum benefit for the payment form. Furthermore, #MAXBEN can always be used to manually calculate the 415(b) limit applicable to each payment form, when necessary.

When choosing to not adjust the U.S. 415(b) maximum pension limit for all payment forms, the application of the limit will remain consistent with ProAdmin 3.18. The only exception being the other ProAdmin 3.19 maximum pension enhancements allowing the use of plan increase factors, disallowing the maximum benefit limit to decrease, and applying consistent treatment of dynamic mortality.

415(b) maximum benefit on plan factor basis

If a manual calculation of the maximum benefit is needed, the late retirement benefit formula component can now be used to return the 415(b) maximum benefit increased on the plan basis. This can be compared to the statutory limit in #MAXBEN. When using the new "Calculate U.S. 415(b) maximum on plan factor basis" checkbox in the Accrued Benefit section, the starting benefit is the U.S. 415(b) maximum dollar limit benefit; therefore, the Benefit Formula Component is not needed and becomes unavailable. The result of this component is the 415(b) dollar limit increased based on the selected late retirement component parameters. Similarly to the plan increase factors for the maximum pension within a Benefit Definition, this calculation must be done at commencement age; the annual calculation options are unavailable (ghosted).