



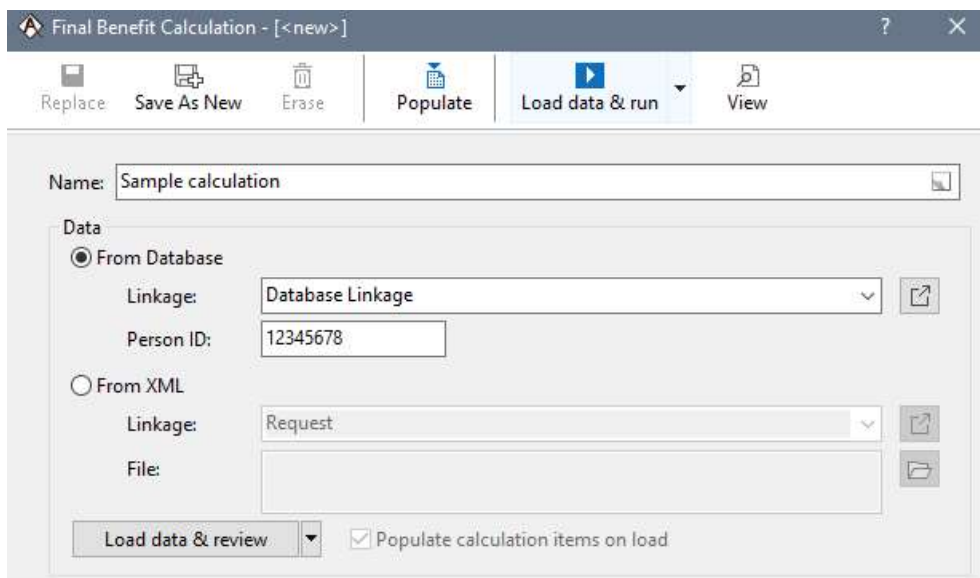
## What's New in version 3.20

June 2024

ProAdmin version 3.20 introduces an updated look and feel, date comparison in Eligibility Definitions, retroactive payment enhancements and additional mortality flexibility. Full details plus many other new features are described below.

### Interface

- ◆ **Updated look and feel.** ProAdmin windows now have a more modern look with a flatter appearance, more whitespace, and other effects for an improved user experience.



- ◆ **Type ahead** is now offered in all drop-down lists, not just those that contain field names. You can stop typing when you get to the entry that you want; ProAdmin autocompletes the entry name with the first match as you type.



- ◆ **Multi-edit is now easier to discover** simply by looking at the button – anywhere you see the pencil with a blue star – without having to try it to find out.



- ◆ In expressions, a slight delay was added to the “tip” that displays when hovering over a blue field name or operator. Previously, it appeared instantly, potentially making it difficult to read the expression beneath.
- ◆ A cut shortcut (Ctrl+X) was added to grids to let you cut information to be pasted elsewhere.

## Eligibility Definitions

- ◆ Eligibility Definitions can now compare an additional date in determining the earlier of all conditions and exceptions for eligibility. Additionally, you may select “and later” as a new option to base eligibility on the latest of all conditions/exceptions. This enhancement should negate needing to set up a Date Adjustment if, for example, a participant commences benefits at the later of date of termination or normal retirement date.

Conditions (no less than):

Age	Service	Points
55	10	

and later ▼ of DOT ▼ and NRD ▼

Exceptions (no more than):

Age	Service	Points

or earlier ▼ of <none> ▼ and <none> ▼

## Plan Definitions

- ◆ **Miscellaneous Parameters.** The option to round up monthly benefits for member and beneficiary or beneficiary only can now vary by coded field.

Round monthly benefit up for: < by Coded Database Field > ▼ Params...

Dates & Ages

Beginning of the middle of the month: < by Coded Database Field > ▼

- member & beneficiary
- beneficiary only

- ◆ **Calculated Dates.** In calculated dates, a new standard date of *April 1 of year following age 70 ½* was added. This is useful since actuarial increases begin on the April 1 of the year following age 70 ½, but the SECURE Acts permits later minimum required distribution dates.

The selection of this standard calculated date is also available in Batch Estimates and Standard output definition items.

- ◆ **Retroactive Payments.** Several enhancements have been implemented within retroactive payments:

- Retroactive payments can be determined for Estimates, Final calculations, or all Estimated and Final calculations. This is useful if retroactive payments are only applicable to Final calculations.

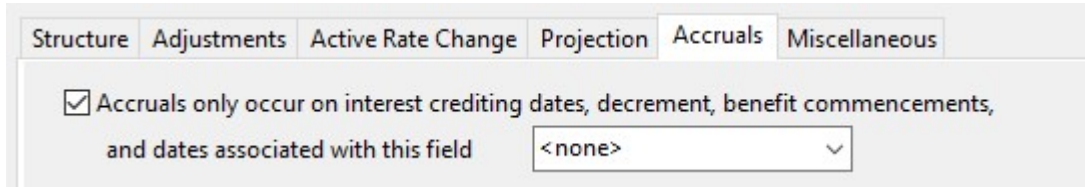
- Retroactive payments can now assume a monthly delay of first payment for all benefit commencement dates. Previously, a set payment start date was required to be specified. This is useful when assuming retroactive payments are for an administrative delay.

- If applying interest to retroactive payments based on an interest rate table, the rate can now be the prior month's interest (such as if banker's interest rules are in place for the plan) or be frozen at a specified date (such as if retroactive payments are accumulated with the interest rate applicable as of the normal retirement date).

- The retroactive payment calculation results exhibit now has a footnote with the interest rate details to facilitate checking.

## Benefit Formula Components

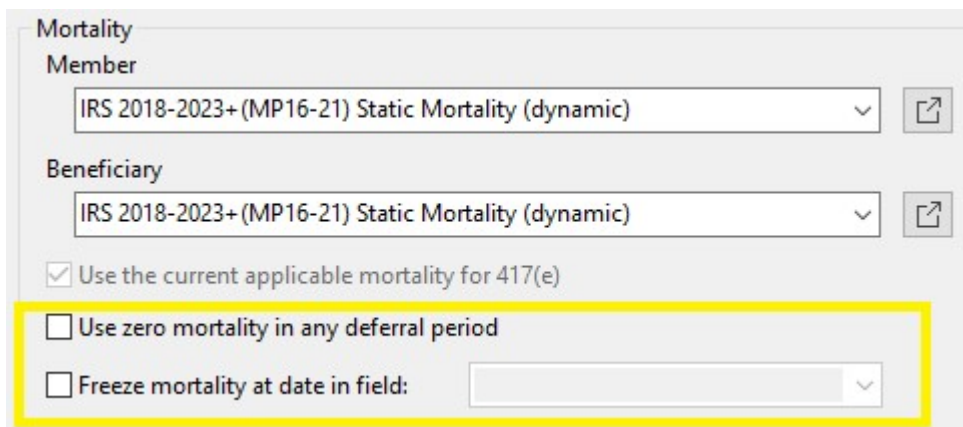
- ◆ **Cash balance.** A new option on the Accruals tab under the Interest Crediting topic limits service, basis, and interest accruals to interest crediting dates, decrement dates, and benefit commencement dates, plus the date(s) associates with an optional date field. Values at all other dates will not be calculated but will display the values from the previous date where the values were calculated. This option will prevent small rounding discrepancies than may have occurred when accruals were calculated at every potential date.



- ◆ **Canadian Registered Pension Plans YAMPE.** Two new accrual basis operators were added to accommodate Canadian plans:
  - #YAMPE – yearly additional maximum pensionable earnings
  - #AVGYAMPE n – the n-year average of the YAMPEYAMPE can now also be referenced as a Salary Limit in a Salary Definition or under the Salary parameters of a Custom Operator.

## Actuarial Equivalence

- ◆ You can now select to use zero mortality in the deferral period. This is useful in particular if assuming zero mortality in deferral for late retirement calculations, but it can also apply to payment form calculations (including 415 maximum calculations which reference the plan assumptions).
- ◆ If using a dynamic mortality table, you can now freeze Mortality at a date defined in a field.



The freeze at a field option is also available in Annuity Factor mortality parameters (the zero mortality during deferral option was already available).

## Mortality Rates

- ◆ The IRS 2024+ Applicable Mortality Table for 417(e) (dynamic) and IRS 2024+ Applicable Mortality Table for 417(e), 0 Pre-Comm (dynamic) will be used through 2025 since no new dynamic 417(e) table will be released for 2025.

## Interest Rate Tables

- ◆ A new option allows you to freeze an interest rate table at a specified date.

Source Table

Historical Interest Rate Table: Type: ALL

30\_Year\_Treas\_Rate.csv View Source

Adjustments

Only use initial spot rates

Freeze rates as of (mm/yyyy): 12/2024

## Age Definitions

- ◆ **Override beneficiary age.** The option to 'override beneficiary age to' is now always enabled. This permits the calculation of the beneficiary age to differ from the calculation of the member age. Previously, the calculations were required to use the same methodology if member age was set to nearest or last birthday. (This enhancement was released as a 3.19 patch but is included here in case you missed it.)

Age Definition - [<new>]

Replace Save As New Erase View

Name: Years & completed months Auto

Age definition:

Nearest

Last birthday

Years and completed months

Exact

Note: Factors will be interpolated to the fractional age

Alternate member date of birth

Alternate beneficiary date of birth

Round age to decimal places

Override beneficiary age to nearest (only applies to joint life factors)

## Census Definitions

- ◆ **Data Defaults.** A new option defaults missing scalar date fields to 1/1/1900. This eliminates the need to set up data defaults for fields used in a benefit formula but that only contain data for relevant records.

Default numeric fields to zero

Default scalar date fields to 1/1/1900

Note: A field can have multiple defaults with different selection expressions.

## Output Definitions

- ◆ **Final Average details.** Output Definitions now allow you to write out the Final Average Accrual Definition results to XML or Access, similarly to the Cash Balance and Career Average Accrual Definitions detailed results that were previously available. For example, after updating an Output Definition referencing an XML Output Linkage to "Return benefit formula component details" for a final average formula component, the following output would be included in the XML:

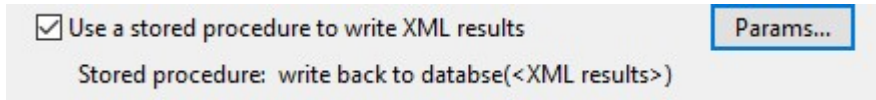
```
<Details>
  <Date>2017-12-31</Date>
  <MemberAge>54.25</MemberAge>
  <BenefitService>28.5</BenefitService>
  <AccrualRate>0.57</AccrualRate>
  <AccrualBasis>160120.950396485</AccrualBasis>
  <BFCResult>91268.9417259963</BFCResult>
</Details>
```

- ◆ **XML Output Linkage**

- **Payment form name.** The payment form name can now be selected as a Key Field in XML Output Definition results. This feature will allow client-specified names of payment forms to be extracted and used by other systems or communications.

– Payment Form Detail		
<input checked="" type="checkbox"/> Code:	uniqueBenefitId	←
<input checked="" type="checkbox"/> Percent:	SecondaryPercentage	←
<input checked="" type="checkbox"/> Units:	Duration	←
<input checked="" type="checkbox"/> Name:	BenefitDescription	←
<input checked="" type="checkbox"/> Normal indicator:	IsMarriedNormalForm	←
<input checked="" type="checkbox"/> Conversion factor:	FormFactor	←

- **Stored Procedure to write XML results.** A new option lets you use a stored procedure to write XML or XML+XSL results back to an SQL database. When you run a Final, Estimate or Dates/Ages/Service calculation with an Output Definition that uses an XML Output Linkage with this option checked, you will see new items on the Options dropdown menu to allow you to write back to a database. This new feature will allow an individual calculation run in ProAdmin Desktop to be made available in your database for viewing in an online platform or for use in your batch processing.



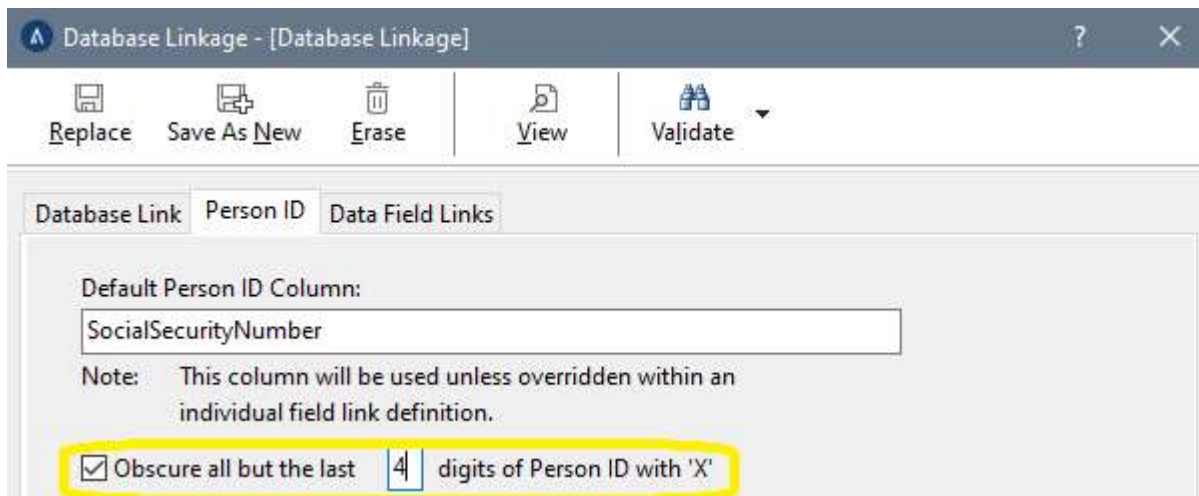
For more information, see [Writing XML Results to SQL](#) on page 10.

## Data Dictionary

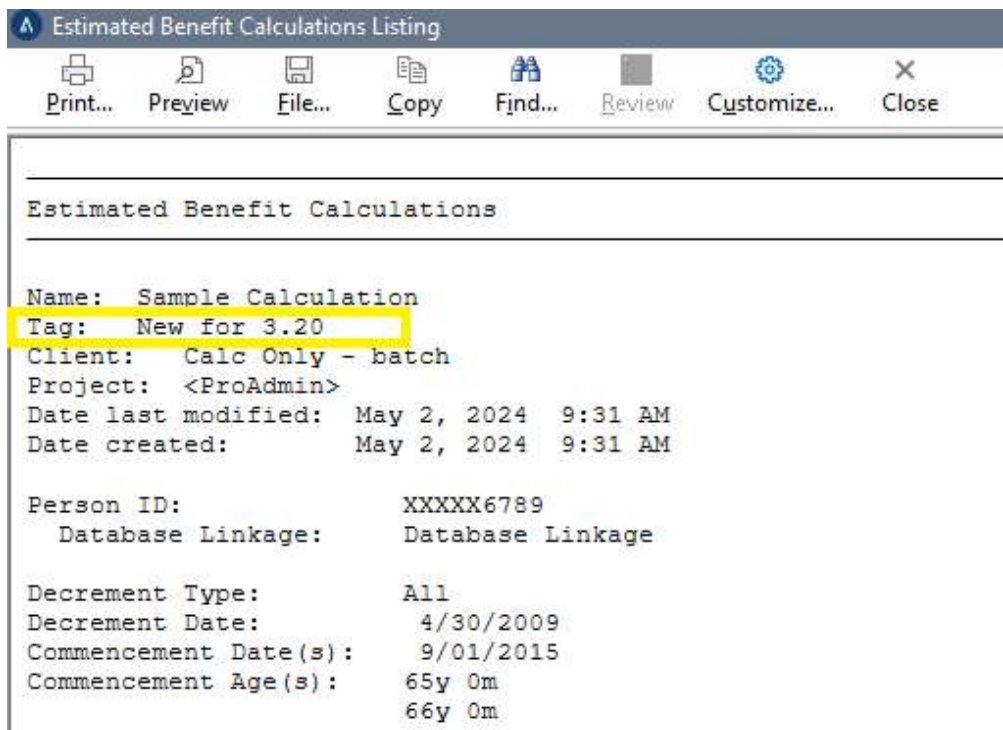
- ◆ **Coded field's modified date** in the data dictionary will no longer change when the only revision is to the sort order of codes and labels. This avoids it appearing as a substantive change to be reviewed.

## Calculation Results

- ◆ **Obscure Person ID.** If using a database linkage, a new option allows Person ID to be obscured when viewing or printing calculation results.

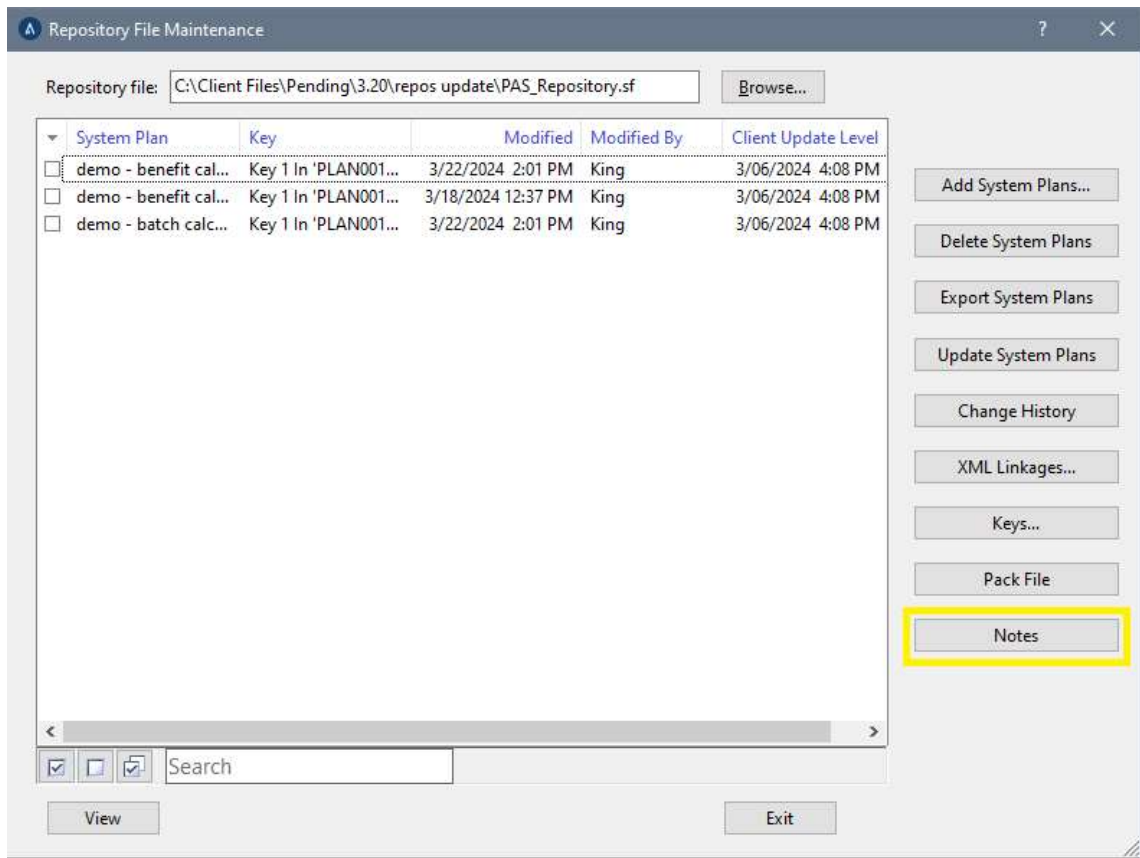


- ◆ **Tags** are now displayed in detailed results and library listings.



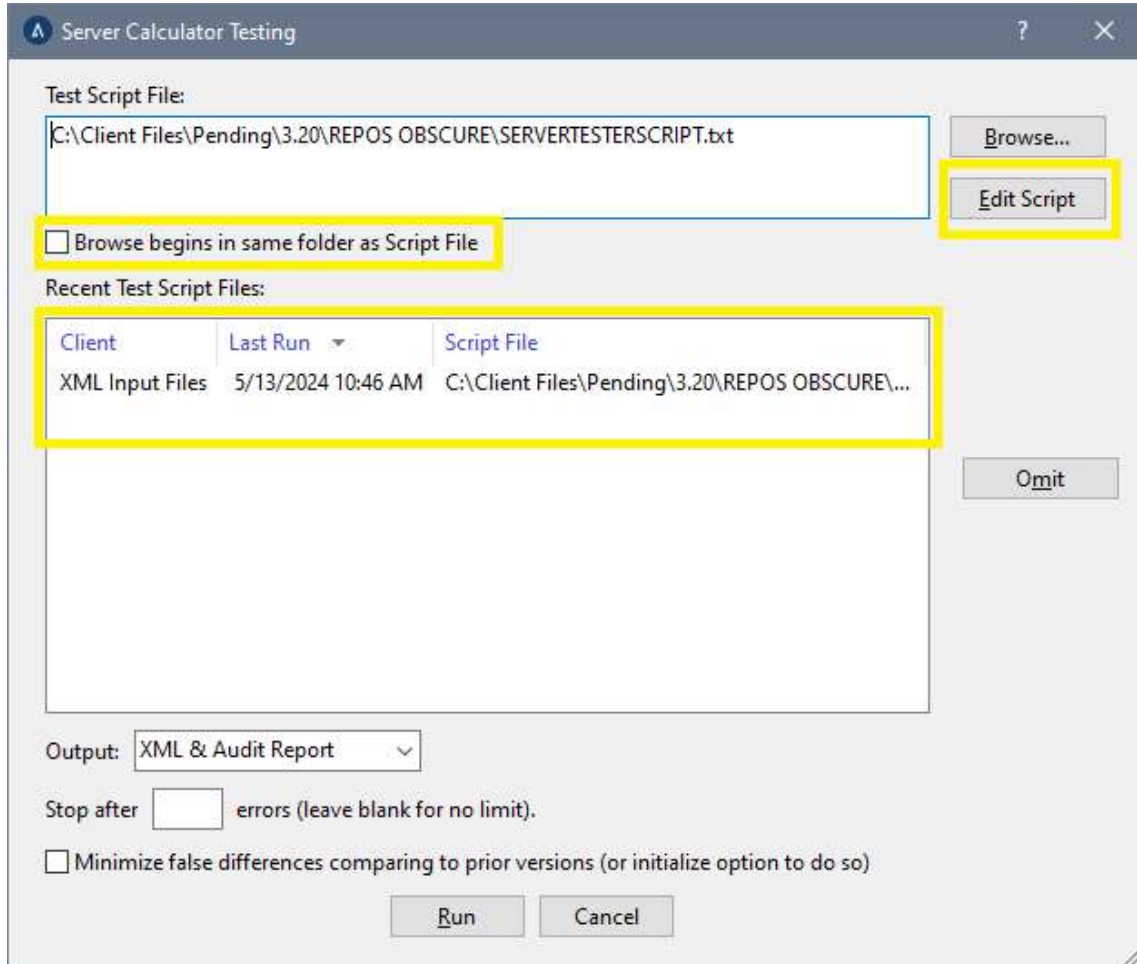
## Server Tools

- ◆ **Repository File Maintenance.** The Notes feature has been added to Repository File Maintenance.





- ◆ **Server Calculator Testing.** To improve usability of the Server Calculator tester, three enhancements have been added:
  - A button to easily allow you to *Edit* the *Script* file
  - A checkbox to control the starting point for file searches
  - A listing of recent test script files from which to choose



## Desktop Tester

- ◆ The Desktop Tester results are now more useful. They show new statistical categories, new subtotals, and new labels in the tester log file to better identify calculations.

## System

- ◆ The handling of temporary ZZZ.SF files at the end of a file pack has been reworked to decrease the likelihood of having these temporary files be inadvertently leftover if there is a connectivity glitch.
- ◆ License server users can now collect information about ProAdmin usage, including number of users, number of clients, and number of license request denials. This information will be automatically stored in the LicenseDir folder.

## 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.

# Writing XML Results to SQL

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Many ProAdmin users are utilizing SQL databases to store their data and support online functionality. To bridge a gap between ProAdmin desktop and your online tools, we are providing a tool to export calculation results to an SQL database using a stored procedure.

You must set up a stored procedure in your SQL database prior to using this new functionality. The rules you set up inside the stored procedure will depend on your internal data needs. For example, the XML will only contain calculation data and you may wish to append demographic data as part of the stored procedure's tasks.

To tell ProAdmin which stored procedure to use, you will find a new option in the XML output Linkage.

Select an output topic:

- Key Fields
- \* Audit Report
- User-Defined Errors/Warnings
- Application-Defined Errors/Warnings
- System Errors

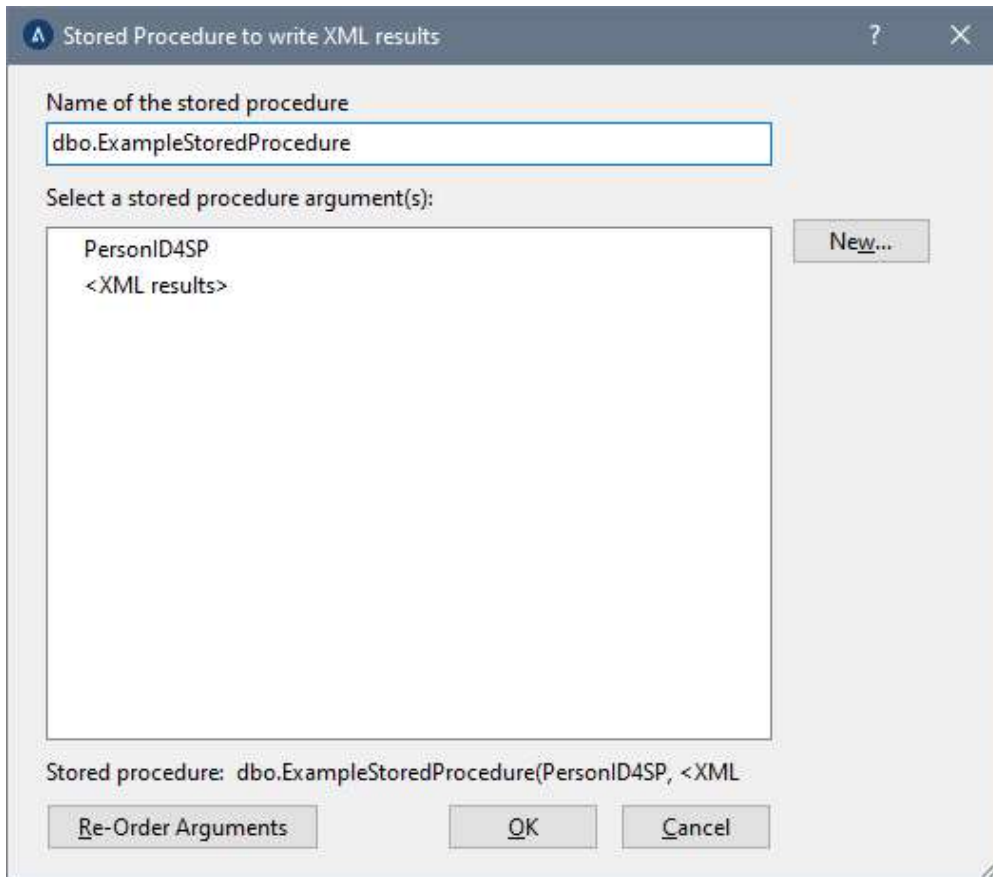
\* Incomplete topic definition

Write nillable nodes to the XML output

Use a stored procedure to write XML results Params...

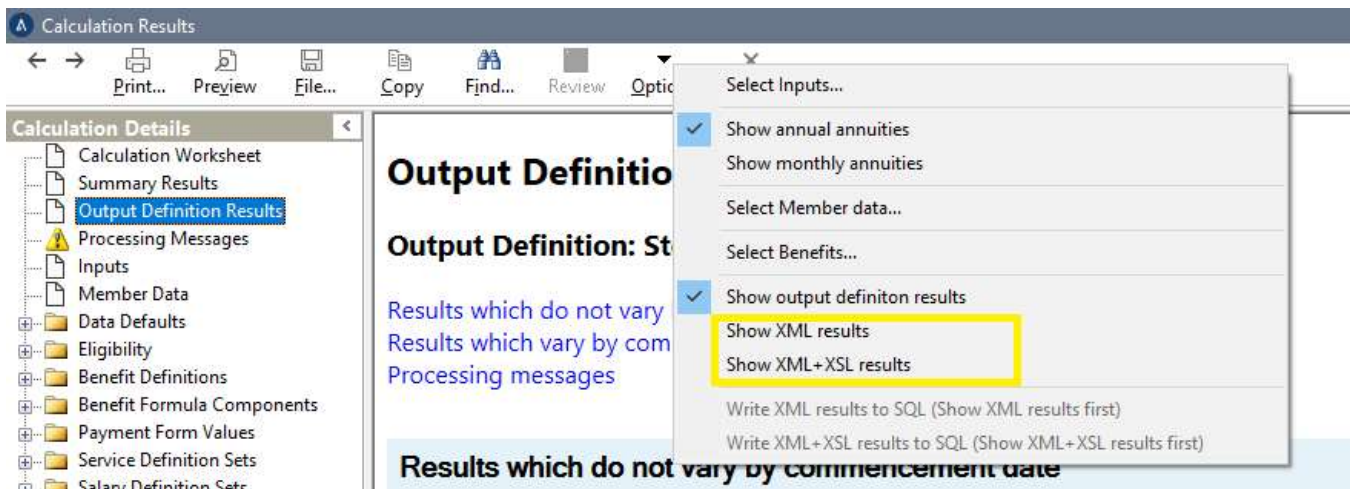
Stored procedure: `dbo.ExampleStoredProcedure(PersonID4SP, <XML`

Within the Schema Structure tab, select *Use a stored procedure to write XML results*. This enables the Params... button, allowing you to configure the setup further.



Stored procedure arguments will be listed for review and editing. The required default argument *<XML results>* will pass the calculation results to the SQL database in XML format. You may add any other arguments needed to uniquely identify the calculation and satisfy any Key requirements of the table you are updating with calculation results. Additionally, you can reorder your arguments to align with the stored procedure's expectations.

Once your XML Output Linkage is updated, confirm your Output Definition is referencing the correct Linkage and select it when running a calculation. Once the calculation is processed, select Show XML results, or Show XML + XSL results, if available, from the Calculation Results viewer.



Once the XML results are viewed, the new options to write the results are available for selection; the options to write results to SQL will remain ghosted until then.

In the final step, enter the credentials needed to write to the database, the server name, and the database name.

The screenshot shows a dialog box titled "Use a stored procedure to write XML to MS-SQL". The dialog is divided into several sections for configuration. Under "Connect using:", there are three radio button options: "Database Linkage" (with a dropdown menu showing "SSPI"), "Windows Authentication", and "SQL Server Authentication" (which is selected). Below these are input fields for "User ID:" and "Password:". Further down are fields for "Server Name:" and "Database:". At the bottom, there is an "Encrypted connection string:" text area and two buttons labeled "OK" and "Cancel".

When the write operation is completed, you will receive a confirmation message, errors from ProAdmin, or errors you've setup to be thrown from your stored procedure. If successful, the XML is now available in the field you have chosen and ready for use.