Profitbase AS

# Profitbase Planner

## *Configuration and Operation*

## Personnel module

Profitbase

12.10.2020

Version 1.0

BETTER INFORMATION FASTER

## Content

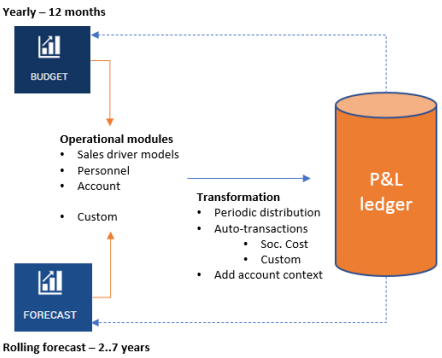


| Date: | Version: | Changed by: | Changes: |
|---|---|---|---|
| **29.5.2020** | 0.0 | TN | Initial content |
| **12.10.2020** | 1.0 | TN | Revised |
| | | | |
| | | | |

# 1 Abstract, intended audience and pre-requisites

The Profitbase Planner Configuration and Operation series consist of several documents dealing with the configuration and operation of individual Planner modules and functions.

Planner modules are operational input modules that contributors to the Budget and/or Forecast processes use to prepare the Profit & Loss (P&L) of their respective areas of responsibility. Different modules will typically cover parts of the P&L such as sales, personnel, cost, etc.




The modules are typically accessed from the Budget and Forecast summary workbooks and the input provided by the contributors are transformed into P&L transactions and fed back to the summary workbooks resulting in a P&L work-in-progress report summary.

The intended audience of this document is implementation partners configuring the solution initially and solution administrators responsible for operating it thereafter.

This document assumes that a Profitbase Planner solution has been deployed and that access to this solution is given to the reader.

The Personnel module is included as a standard Profitbase Planner module and comes in two versions:

- Budget
- Forecast

This document is common to these versions but uses examples from the Forecast version when describing the functionality.

# 2 Common functionality

Changes made to input sheets are not saved automatically. To save changes, click the “Save” button. The “Save” button will remain disabled until a change has been made.

To undo all unsaved changes, click the “Refresh” button.

To undo the last of a series of unsaved changes, click the Ctrl and Z keys simultaneously.

To insert new rows to an input sheet, right-click in the sheet and select one of the available options:

- Insert row
- Insert row below
- Insert copy of row

To delete a row from an input sheet, right-click the row in question and select:

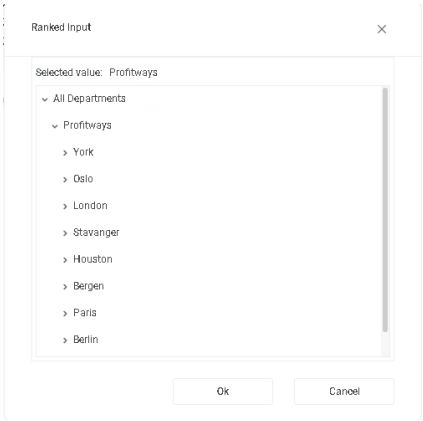
- Delete row

Please note, that although the row is no longer visible in the input sheet, the change must be committed using the “Save” button or undone using the “Refresh” button.

In input sheets, editable fields are distinguished from non-editable fields by fill color, editable fields have by default a white fill color.

In setting tables, a so-called ranked input concept is often used for the dimensional context. Ranked input allows for a high-level selection of dimensional nodes and gives the opportunity to alter the rank or specificity between rows.

A ranked input cell can be set through the ranked input selector by clicking the cell value (cell will display 3 dots if no value is set):




The ranked input selector will display the dimensional hierarchy and allows for the selection of a high-level dimensional node. The selection of a high-level node implies that the setting applies to all sub-ordinate nodes.

Select node and click “OK”.

Click “Cancel” to leave the selector without selecting.

In a table containing multiple rows, the rank or specificity of individual rows can be altered by moving the row up (decrease specificity) or down (increase specificity) by right-click the row in question and selecting:

- Move up
- Move down

The less specific the setting is, row should be high up in the table. The more specific the setting is, the further down in the table the row should reside.

## 3 Principle of operation

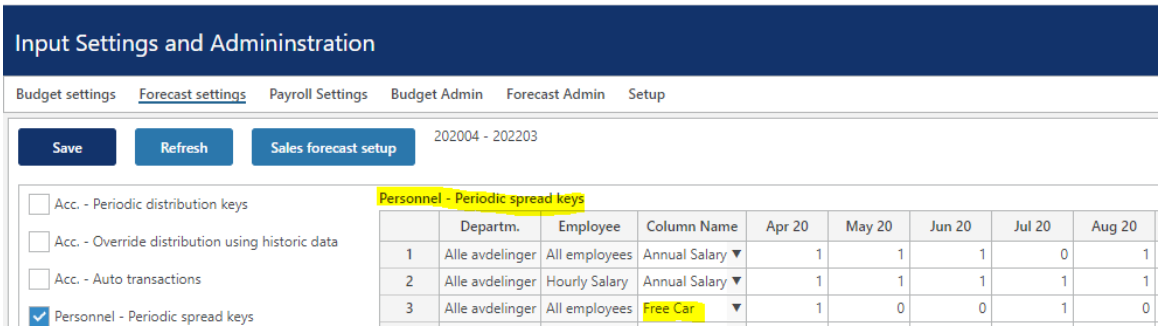
The Personnel module provides an input sheet for contributors to plan their FTEs (Full Time Equivalents) and associated cost and from it creates P&L transactions for payroll related expenses including associated social cost such as vacation pay, employer tax, pension cost and so on.

### Diver-based

The Personnel module uses a driver-based principle in which FTEs (Full Time Equivalents) are the driver.

Any user input is thus provided per FTE per month.

This further implies that periodic *spread* keys are used (as opposed to distribution keys) to lay out the *per-FTE-per-month* input values over time:



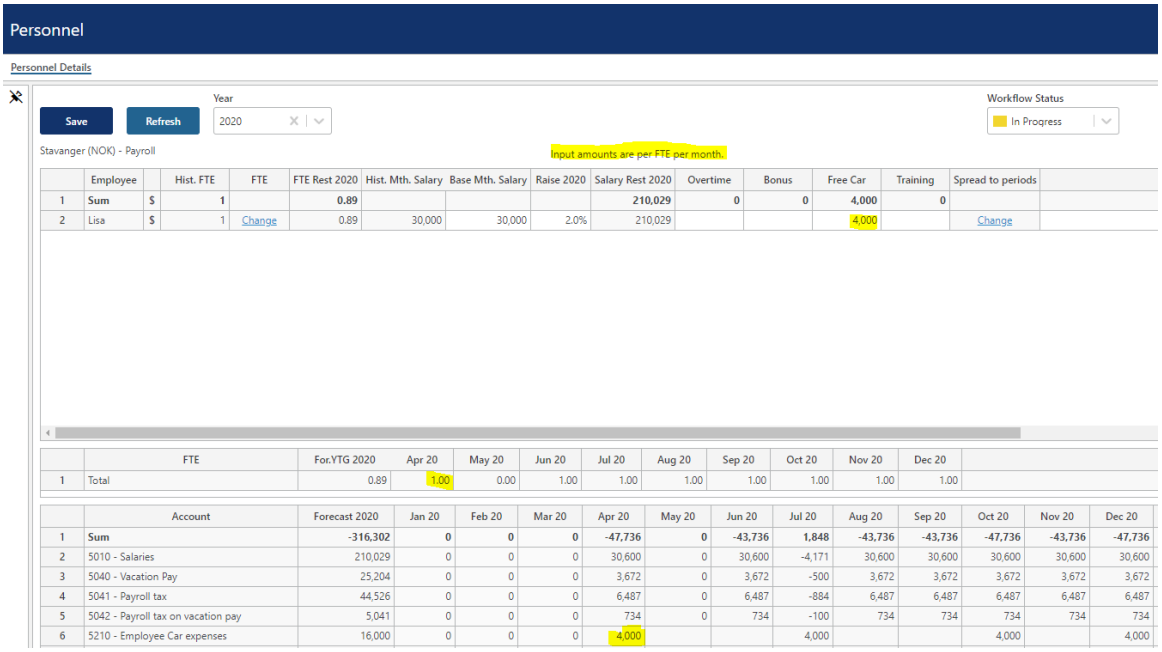

An input value translates to a Profit & Loss amount for a given month as:

[Input amount] * [FTE for the month] * [Periodic spread key for month]

In the case of April 2020 for employee Lisa:

4000 * 1 * 1 = 4000

Click the $ icon to view the P&L transactions generated from the row in question.



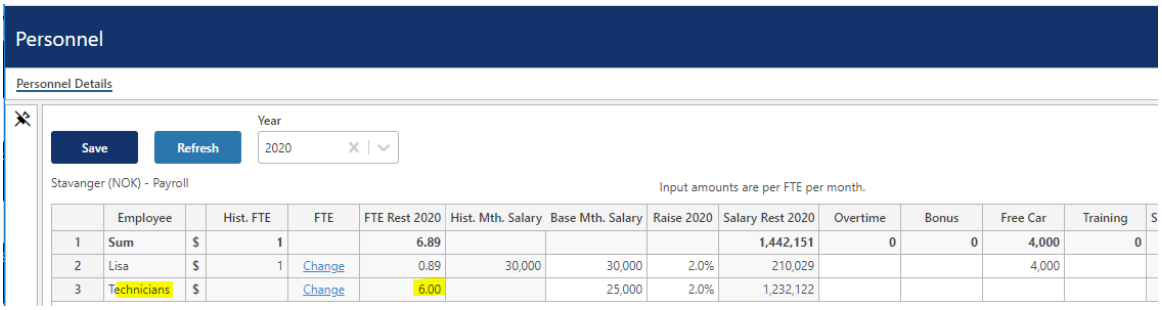

| | Employee | | Hist. FTE | FTE | FTE Rest 2020 | Hist. Mth. Salary | Base Mth. Salary | Raise 2020 | Salary Rest 2020 | Overtime | Bonus | Free Car | Training | Spread to periods |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Sum** | $ | **1** | | **0.89** | | | | **210,029** | **0** | **0** | **4,000** | **0** | |
| 2 | Lisa | $ | 1 | Change | 0.89 | 30,000 | 30,000 | 2.0% | 210,029 | | | 4,000 | | Change |

| | FTE | For.YTG 2020 | Apr 20 | May 20 | Jun 20 | Jul 20 | Aug 20 | Sep 20 | Oct 20 | Nov 20 | Dec 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Total | 0.89 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

| | Account | Forecast 2020 | Jan 20 | Feb 20 | Mar 20 | Apr 20 | May 20 | Jun 20 | Jul 20 | Aug 20 | Sep 20 | Oct 20 | Nov 20 | Dec 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Sum** | **-316,302** | **0** | **0** | **0** | **-47,736** | **0** | **-43,736** | **1,848** | **-43,736** | **-43,736** | **-47,736** | **-43,736** | **-47,736** |
| 2 | 5010 - Salaries | 210,029 | 0 | 0 | 0 | 30,600 | 0 | 30,600 | -4,171 | 30,600 | 30,600 | 30,600 | 30,600 | 30,600 |
| 3 | 5040 - Vacation Pay | 25,204 | 0 | 0 | 0 | 3,672 | 0 | 3,672 | -500 | 3,672 | 3,672 | 3,672 | 3,672 | 3,672 |
| 4 | 5041 - Payroll tax | 44,526 | 0 | 0 | 0 | 6,487 | 0 | 6,487 | -884 | 6,487 | 6,487 | 6,487 | 6,487 | 6,487 |
| 5 | 5042 - Payroll tax on vacation pay | 5,041 | 0 | 0 | 0 | 734 | 0 | 734 | -100 | 734 | 734 | 734 | 734 | 734 |
| 6 | 5210 - Employee Car expenses | 16,000 | 0 | 0 | 0 | 4,000 | | | 4,000 | | | 4,000 | | 4,000 |

## Plan by individual and/or groups

The planning dimensionality used comprise of the Department and Employee dimensions. Note that the Employee dimension may be set up with individuals or groups or a combination of the two:




| | Employee | | Hist. FTE | FTE | FTE Rest 2020 | Hist. Mth. Salary | Base Mth. Salary | Raise 2020 | Salary Rest 2020 | Overtime | Bonus | Free Car | Training | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Sum** | $ | **1** | | **6.89** | | | | **1,442,151** | **0** | **0** | **4,000** | **0** | |
| 2 | Lisa | $ | 1 | Change | 0.89 | 30,000 | 30,000 | 2.0% | 210,029 | | | 4,000 | | |
| 3 | Technicians | $ | | Change | 6.00 | | 25,000 | 2.0% | 1,232,122 | | | | | |

As Personnel-related settings are differentiated by the Employee dimension *hierarchy*, it is advisable to use appropriate group levels in the dimensional hierarchy to allow for a useful differentiation, for example:

- All employees
  - Fixed Salary
    - Lisa
    - Technicians
  - Hourly Salary
    - Sam (hourly)

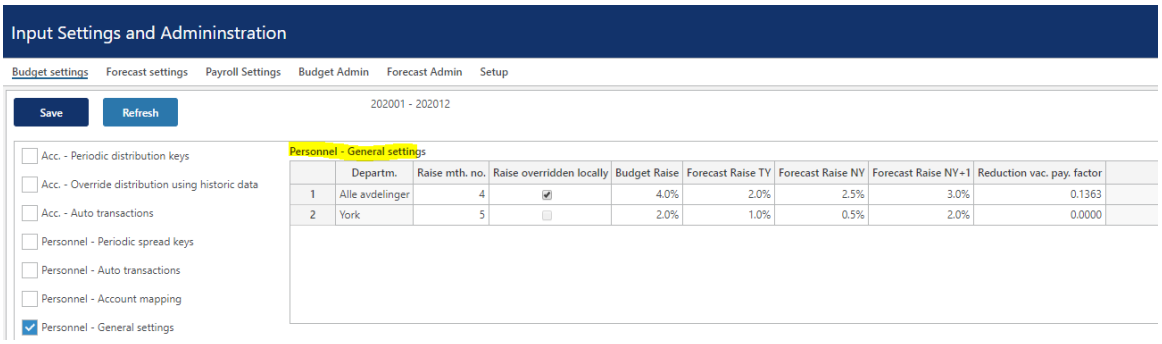
For details on dimension maintenance and personnel source data, please refer to Data management.

## Salary calculation and distribution

Specific to the salary calculation, is the annual salary increase and for which month in the year it occurs.

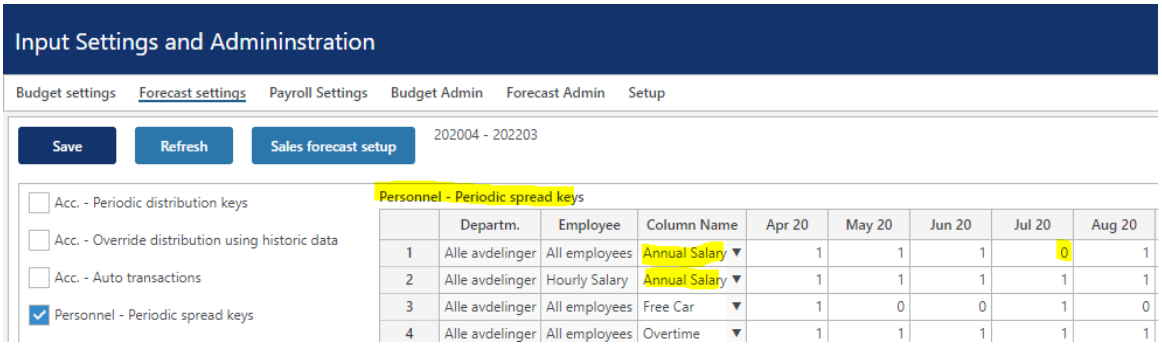
The Base monthly salary is the (average) monthly salary at the start of the plan and will be automatically updated when rolling over to a new year (see Forecast roll forward actions for details).

The salary raise – percentage and raise month - may be set centrally with the option of local adjustment or not:




These settings may be differentiated using more specific Department levels as shown in the example above.

The input Base monthly salary is spread, taking into account the raise settings, based on the Annual Salary spread key:




If vacation pay is relevant, the Annual Salary key should reflect this by setting the key for the vacation pay month(s) to a value between 0 and 1 as show above.

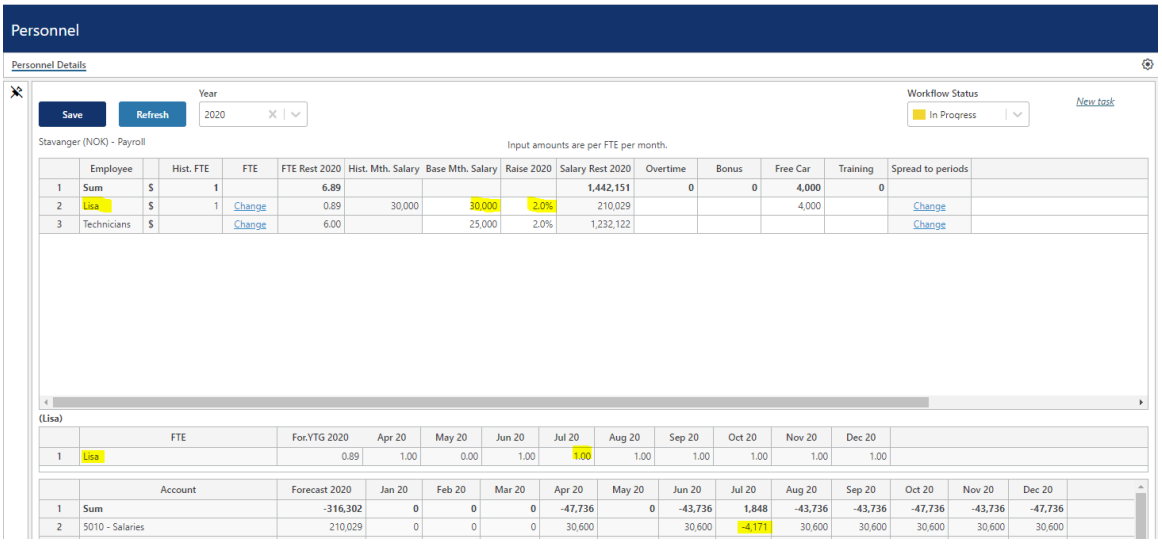
For situations in which the vacation does not reflect exactly one month, the “Reduction vac. Pay factor” in the “General Settings” may be used. The “Reduction vac. Pay factor” will be applied as a reduction factor to the salary for vacation pay months.

Salary for vacation months is calculated as:

[FTE July] * [Base Mth. Salary] * (100 + [Raise 2020])/100 * [1- **Annual Salary** Spread key July 2020] * [Reduction vac. Pay factor] * -1

Example employee Lisa:

1 * 30000 * ((100 + 2)/100) * (1 – 0) * 0.1363 * -1 = - 4171



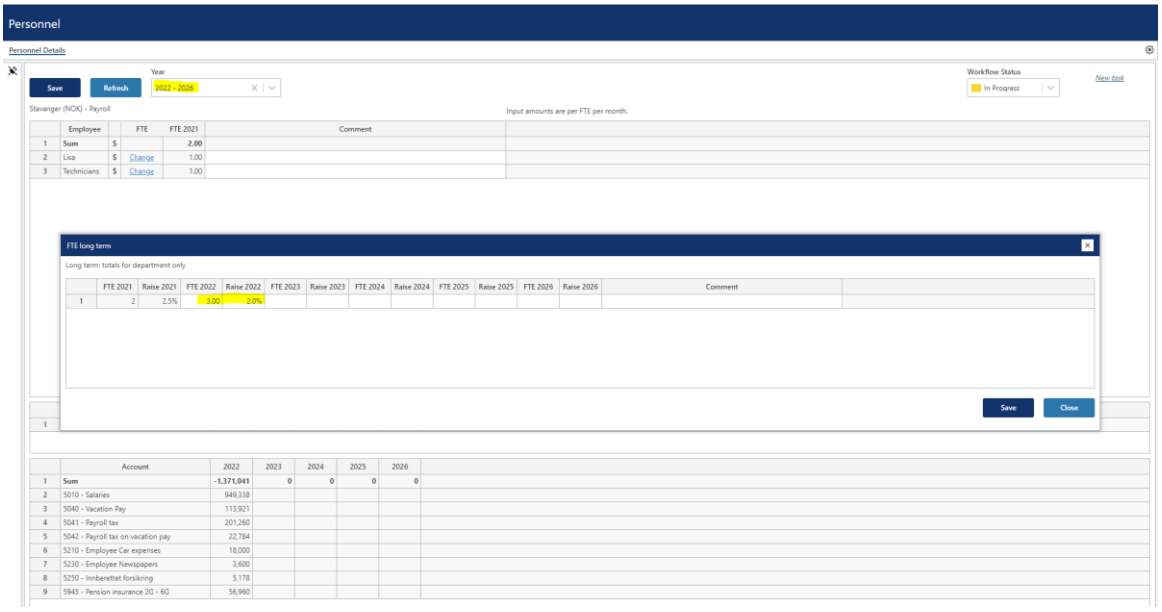

Calculation example above based on:

- Base Mth. Salary: 30000 NOK
- Raise 2020: 2% from April 2020
- Vacation pay month: July 2020
- FTE July 2020: 1
- Reduction vac. Pay factor: 0.1363

## Long-term forecast

For long-term (beyond next year) forecasting, the level of detail is less – input is done *for the department as a whole*:

- FTE for given year
- Expected annual salary raise for given year



The detailed forecast for next year is used as a basis for scaling the long-term forecast based on the change in FTE and annual salary raise. The periodic distribution for next year is replicated for the long-term forecast.

## Forecast roll forward actions

### 1.1.1 Source data

The input module will be updated with source data when rolling forward.

Any new department/employee combinations that exist in the personnel source fact data will automatically be processed into the input module and the FTE and monthly salary data for the plan will be initiated from the values in the source fact data.

Make sure to keep the personnel source fact data current. Please refer to Data management for details.

### 1.1.2 Calculations

For every rollover during a year, FTE (the driver) for the new month(s) added, will attain the value of the last month prior to the rollover. As FTE is the driver, this means that the personnel cost will be automatically calculated also for new months.

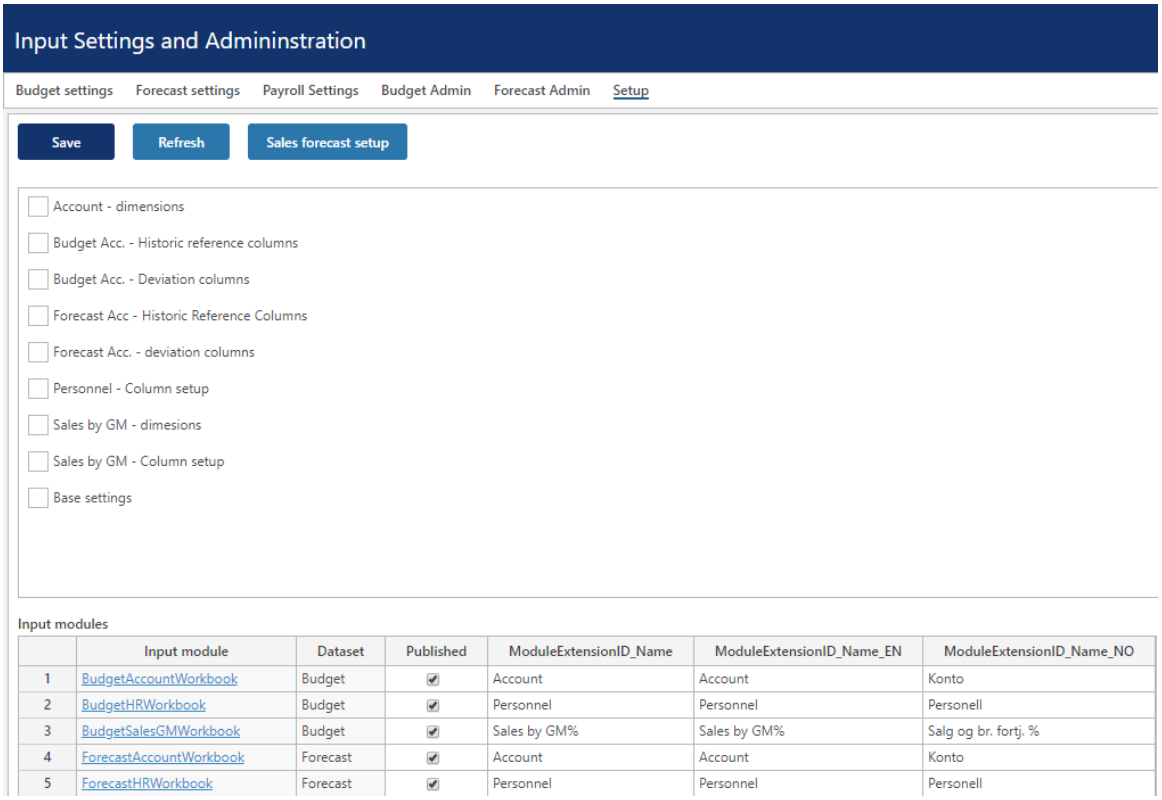
For rollover to new year, the following logic is applied:

- Base Mth. Salary is updated to reflect Raise this year.
- Raise this year is updated to reflect what was the raise next year prior to rollover.
- Raise next year is updated to reflect what was the raise next year +1 prior to rollover.
- Raise next year + 1 is fetched from the “Personnel – General Settings” table
- If long-term forecast is used, the FTE and Raise values for the long-term years is shifted to reflect the rollover to the new year. The new last year will retain the value for the last year prior to rollover.

# 4 Module configuration

## Publish and name module

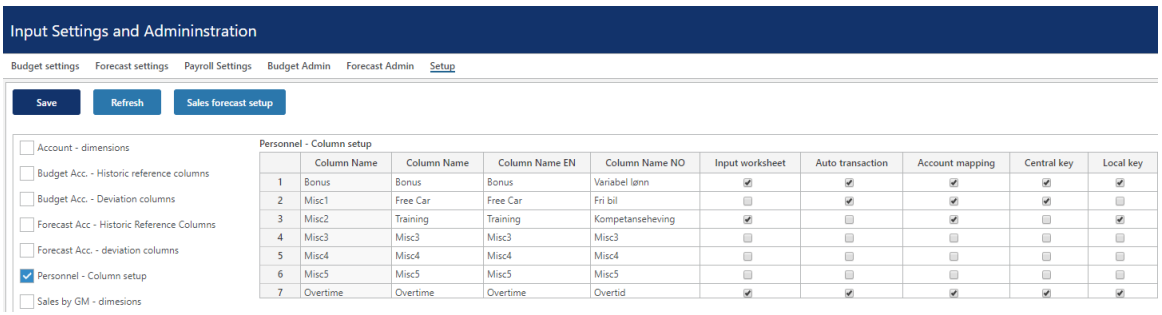
Select the “Input Settings and Administration” workbook and go to the “Setup” page:




| Column | Description |
|---|---|
| Input module | The name of the input module |
| Dataset | The dataset or process that the module is attached to (Budget \| Forecast) |
| Published | Indicates that the input module is Published or not (checked \| unchecked) |
| ModuleExtensionID_Name | The module's default name |
| ModuleExtensionID_Name_EN | The module's English name |
| ModuleExtensionID_Name_NO | The module's Norwegian Name |

## Select and name input columns

Select the "Input Settings and Administration" workbook and go to the "Setup" page:



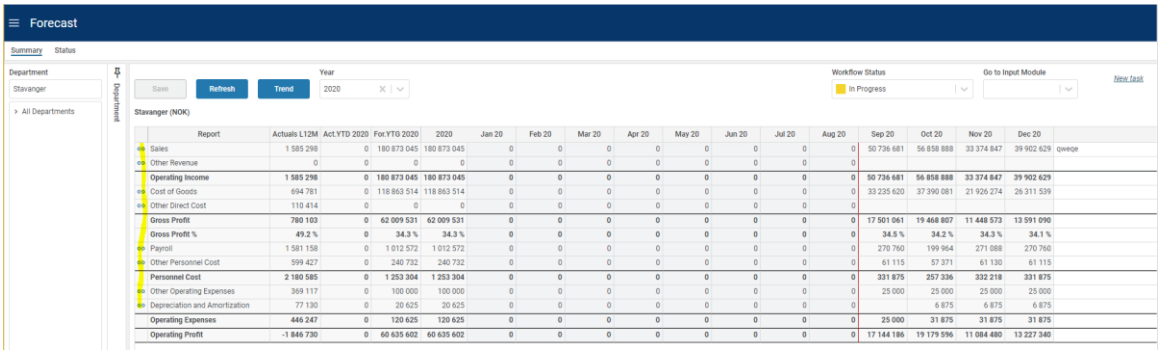

There is a pre-set number of columns to select and name.

| Column | Description |
|---|---|
| Column Name | The internal column id |
| Column Name | The column default name |
| Column Name EN | The column's English translation |
| Column Name NO | The column's Norwegian translation |
| Input worksheet | Indicates that the column is visible and editable in the input worksheet or not (checked \| unchecked) |
| Auto transaction | Indicates that the column is eligible for auto transactions or not (checked \| unchecked). For details on auto transactions, see Auto transactions (optional) |

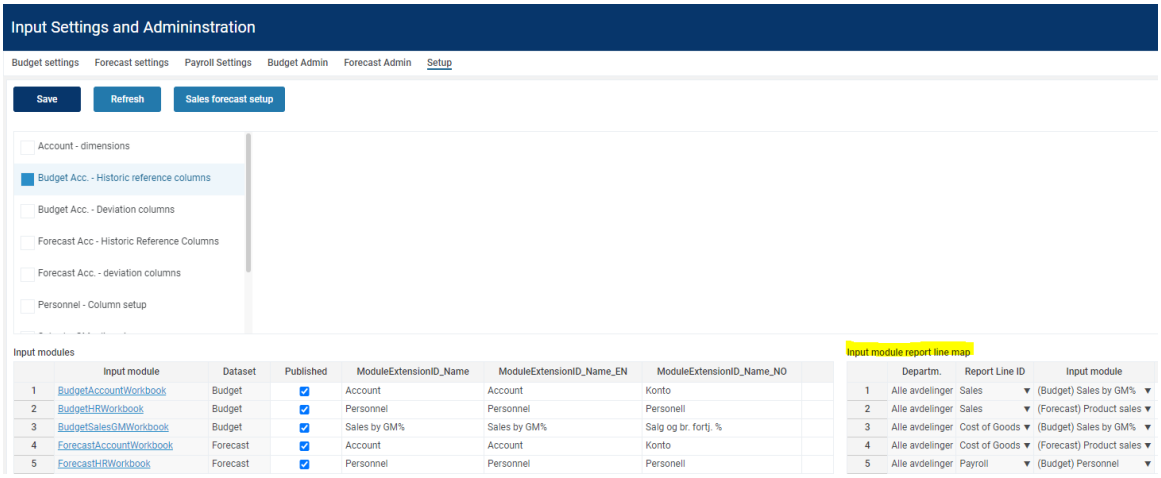
| | |
|---|---|
| Account mapping | Indicates that the column is eligible for account mapping or not (checked \| unchecked). Note that any column which input is to be included in the Profit & Loss plan, need to be mapped to an account, see Define input column to account mapping |
| Central key | Indicates that the column is eligible for central spread key or not (checked \| unchecked). For details on maintaining central spread keys, see Spread keys |
| Local key | Indicates that the column is eligible for the end user to set locally in the Personnel module or not (checked \| unchecked). |

## Attach module to input report

The module can be attached to the action link button of one or more report lines of the Forecast summary report:




To attach the module to a report line, go to the "Setup" page of the "Input settings and administration" workbook:

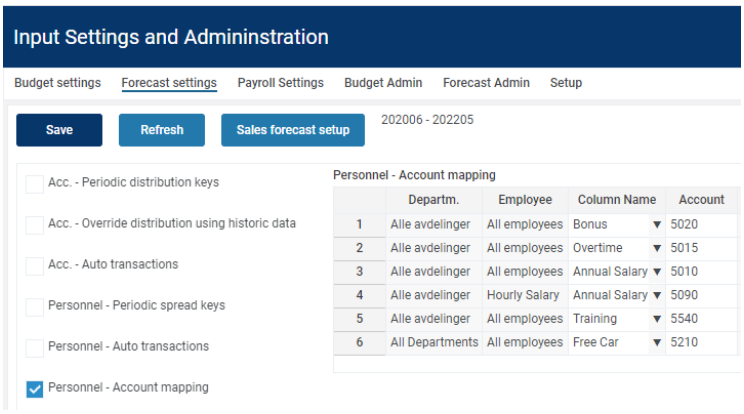



| Column | Description |
|---|---|
| Departm. | Source department. Ranked input. Mandatory.<br><br>Through the use ranked input (high level selection), different modules may attach to a given report line for different part of the department dimension (organization). |
| Report Line ID | Report line to which input module is to attach. Select from list. Mandatory. |
| Input module | Input module to attach. Select from list. Mandatory. |

## Define input column to account mapping

The Annual Salary must be mapped to an account for the P&L transactions to be generated.

The same applies to any additional input columns defined and that should generate P&L transactions.



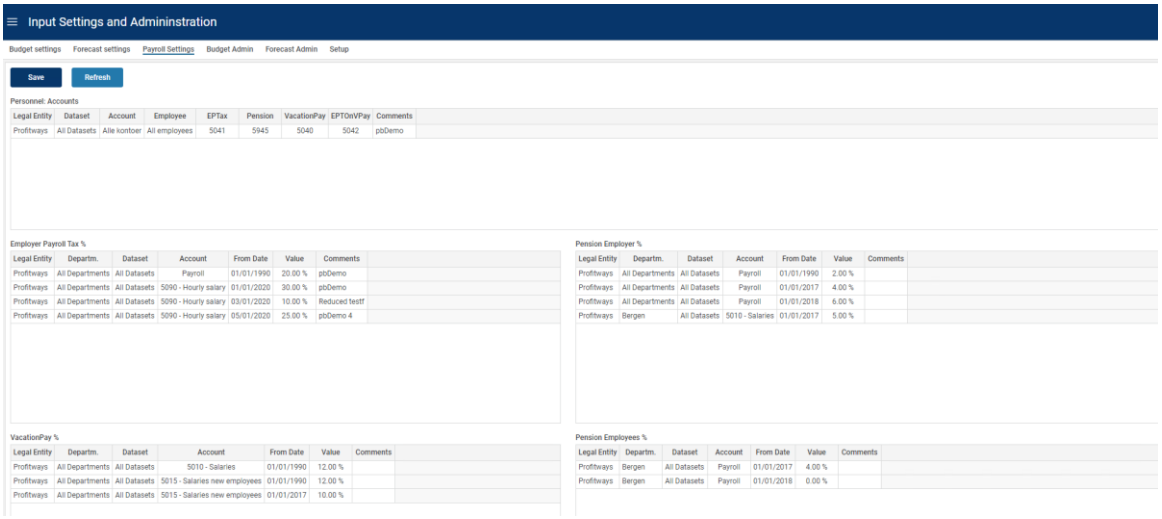

| Column | Description |
|---|---|
| Department | Source department. Ranked input. Mandatory. |
| Employee | Source employee. Ranked input. Mandatory. |
| Column Name | Input column for which the account mapping applies. The drop-down list will by default contain Sales and Cogs. If additional input columns are defined and they should produce P&L transactions, they will have to be set up with an “Account mapping”, check mark in the input column setup. Please refer to Select and name input columns for details. |
| Account | The target account, i.e. that account that the generated P&L transaction will be tied to. |

# 5 Settings

## Payroll settings

The “Payroll settings” define rules and rates for the calculation of social cost such as vacation pay, employer tax and so on.

“Payroll settings” are maintained in the “Input settings and administration” workbook in the “Payroll settings” page:




### 1.1.3 Personnel: Accounts

This table defines the rules for the target accounts to be used for the calculated social cost.

| Column | Description |
|---|---|
| Legal entity | Source legal entity. Ranked input. Mandatory. |
| Dataset | Source dataset. Ranked input. Mandatory. |
| Account | Source account. Ranked input. Mandatory. |
| Employee | Source employee. Ranked input. Mandatory. |
| EP Tax | Target account for calculated employer tax. Enter valid P&L account. |
| Pension | Target account for calculated pension cost. Enter valid P&L account. |
| Vacation Pay | Target account for calculated vacation pay. Enter valid P&L account. |
| EPTOnVPay | Target account for calculated employer tax on calculated vacation pay. Enter valid P&L account. |
| Comments | Optional comment |

### 1.1.4 Employer Payroll Tax %

This table defines the rates to be used when calculating employer payroll tax.

| Column | Description |
|---|---|
| Legal entity | Source legal entity. Ranked input. Mandatory. |
| Department | Source department. Ranked input. Mandatory. |
| Dataset | Source dataset. Ranked input. Mandatory. |
| Account | Source account. Ranked input. Mandatory. |
| From date | The date from which the rate applies. Mandatory. Enter date. |
| Value | The employer payroll tax %. Mandatory. Enter numeric value. |
| Comments | Optional comment |

Please refer to Personnel: Accounts for details on defining the target account.

### 1.1.5 Vacation Pay %

This table defines the rates to be used when calculating vacation pay.

| Column | Description |
|---|---|
| Legal entity | Source legal entity. Ranked input. Mandatory. |
| Department | Source department. Ranked input. Mandatory. |
| Dataset | Source dataset. Ranked input. Mandatory. |
| Account | Source account. Ranked input. Mandatory. |
| From date | The date from which the rate applies. Mandatory. Enter date. |
| Value | The vacation pay %. Mandatory. Enter numeric value. |
| Comments | Optional comment |

Please refer to Personnel: Accounts for details on defining the target account.

### 1.1.6 Pension Employer %

This table defines the rates to be used when calculating the employer's contribution to pension cost.

| Column | Description |
|---|---|
| Legal entity | Source legal entity. Ranked input. Mandatory. |
| Department | Source department. Ranked input. Mandatory. |
| Dataset | Source dataset. Ranked input. Mandatory. |
| Account | Source account. Ranked input. Mandatory. |
| From date | The date from which the rate applies. Mandatory. Enter date. |
| Value | The employer's contribution to pension %. Mandatory. Enter numeric value. |
| Comments | Optional comment |

Please refer to Personnel: Accounts for details on defining the target account.

### 1.1.7 Pension Employee %

This table defines the rates to be used when calculating the employee's contribution to pension cost.

| Column | Description |
|---|---|
| Legal entity | Source legal entity. Ranked input. Mandatory. |
| Department | Source department. Ranked input. Mandatory. |
| Dataset | Source dataset. Ranked input. Mandatory. |
| Account | Source account. Ranked input. Mandatory. |
| From date | The date from which the rate applies. Mandatory. Enter date. |
| Value | The employee's contribution to pension %. Mandatory. Enter numeric value. |
| Comments | Optional comment |

Please refer to Personnel: Accounts for details on defining the target account.

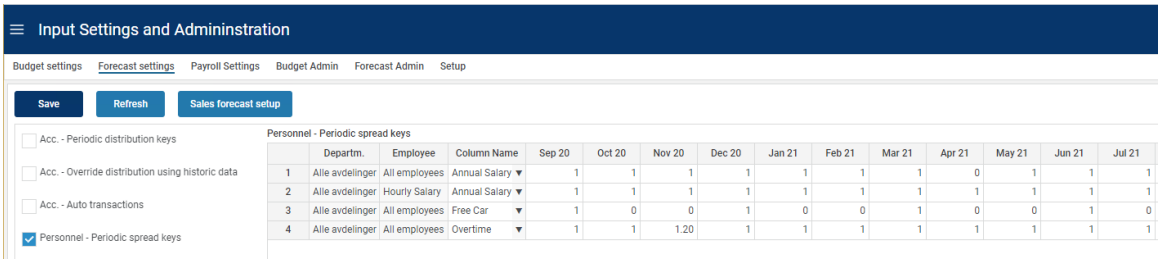
## Spread keys

Spread keys are specified by the combination of the department and employee dimensions.

The dimensional values are selected using the ranked input selector. For details on using the ranked input selector and making rank changes between rows, please refer to Common functionality for details.

As a general rule-of-thumb, it is advisable not to use too specific spread keys.

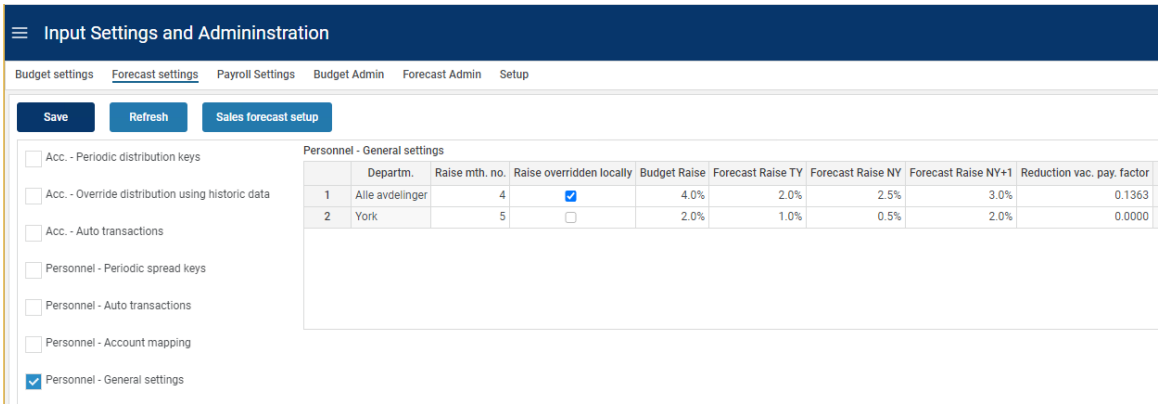
Spread keys are maintained in the "Input settings and administration" workbook in the "Budget settings" or "Forecast settings" page depending on the process in question:



| Column | Description |
|---|---|
| Department | Ranked input. Mandatory |
| Employee | Ranked input. Mandatory. |
| ColumnName | The column name for which the spread key applies, see |
| Monthly spread key weight (heading dynamic) | Numeric values. Mandatory.<br>When spreading an input month value over multiple months, that input month value is multiplied with the individual spread key values to calculate the actual value for individual months |
| Comments | Optional comment. Note that if a comment is added, the contributor will see the comment when viewing the distribution key of an input row. |

## General settings

General settings on raise month and actual pay raise rates are maintained in the “Input settings and administration” workbook in the “Budget settings” or “Forecast settings” page depending on the process in question:



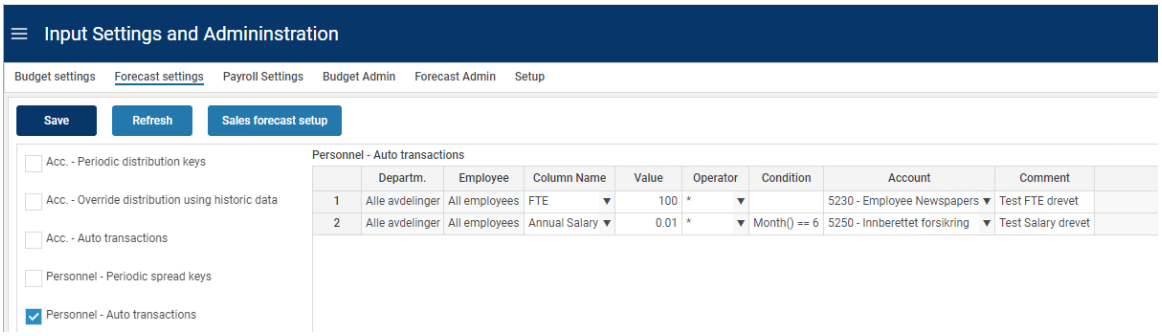

| Column | Description |
|---|---|
| Departm. | Ranked input. Mandatory |
| Raise mt. no. | The month number (e.g. 4= April) in which the annual pay raise occurs. |
| Raise overridden locally | Indicates whether the pay raise columns are editable for contributors (checked) or not (unchecked). |
| Budget raise | Relevant to the Budget process only. The annual pay raise for the budget year. |
| Forecast raise TY | Relevant to the Forecast process only. The annual pay raise for this year. |
| Forecast raise NY | Relevant to the Forecast process only. The annual pay raise for next year. |
| Forecast raise NY + 1 | Relevant to the Forecast process only. The annual pay raise beyond next year. |
| Reduction vac. pay. Factor | For situations in which the vacation does not reflect exactly one month, the “Reduction vac. Pay factor” in the “General Settings” may be used. The “Reduction vac. Pay factor” will be applied as a reduction factor to the salary for vacation pay months. |

## Auto transactions (optional)

Auto-transactions may be used to trigger additional transactions based on user input. For example, the input to a certain account should always generate an additional transaction to another account amounting to 10% of the input or source transaction.

The target department will always be the same as the input or source department.

The auto transactions are maintained in the “Input settings and administration” workbook and the “Budget settings” or “Forecast settings” page depending on the process in question:




| Column | Description |
|---|---|
| Department | Source department. Ranked input. Mandatory |
| Employee | Source employee. Ranked input. Mandatory. |
| Column Name | Source column name (column from input sheet). Mandatory. Select from list. |
| Value | The value and the operator define how the amount of the target transaction will be calculated. In the example above, the amount of the target transaction will be 10% o<br>Numeric value. Mandatory. |
| Operator | Select from list. Mandatory. |
| Condition | Optional. Special condition to apply when validating whether to execute the rule or not.<br><br>For example:<br>- Month() > 6 indicating that rule will be executed only for transactions with a transaction date with month number greater than 6 (June)<br>- CurrentPeriodValue() > 1000 indicating that rule will be executed if value currently processed is greater than 1000<br><br>Operators:<br>- Equality: ==<br>- Greater than or equal to: >= Greater than: ><br>- Less than or equal to: <= Less than: <<br>- Logical and: &&<br>- Logical or: \|\| |
| Target Account | Mandatory. The account that the target transaction will have. |
| Comment | Optional comment |

# 6 Data management

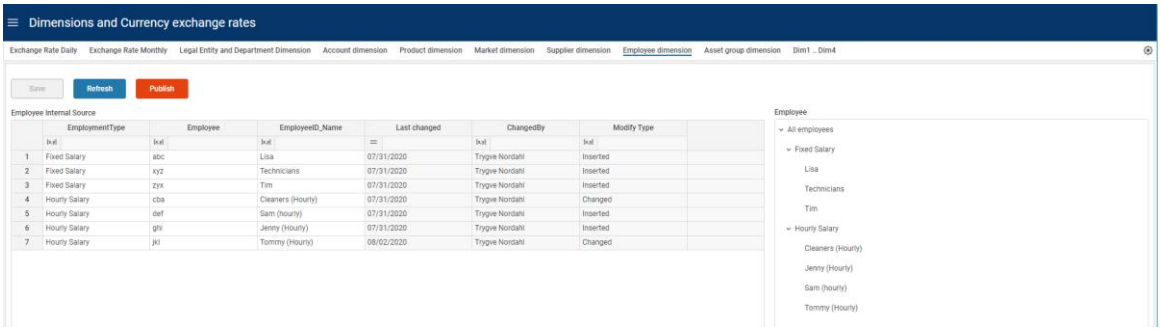
Data management comprises of dimension management and source fact data management.

The personnel module uses the department and employee dimensions.

The personnel source fact data contains the current FTE and monthly salary for relevant department/employee combinations.

## Employee dimension

The employee dimension is maintained in the Dimensions and Currency Exchange rates workbook:

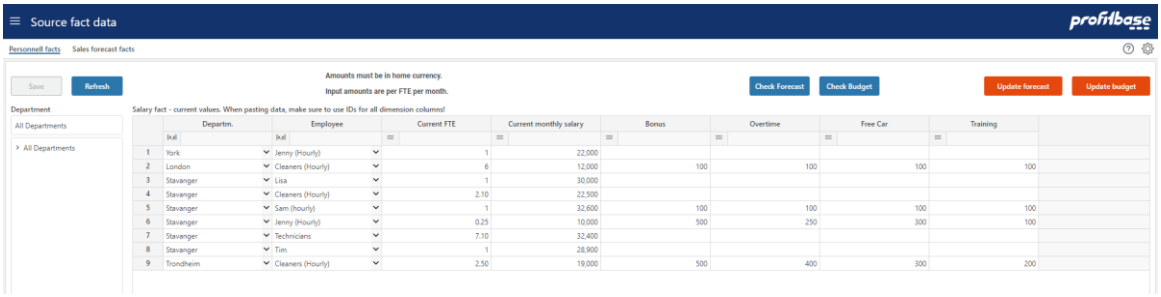



Maintain as appropriate, save the changes, and then click the “Publish” button to publish. The currently published dimension is rendered the tree view display in the right-most part of the screen.

Please refer to the document “Profitbase Planner - Dimensions and Currency exchange rates“ (external link) for further details.

## Fact source data

The fact source data contain current FTE, monthly salary and additional personnel cost data (subject to configuration) per department/employee combinations:

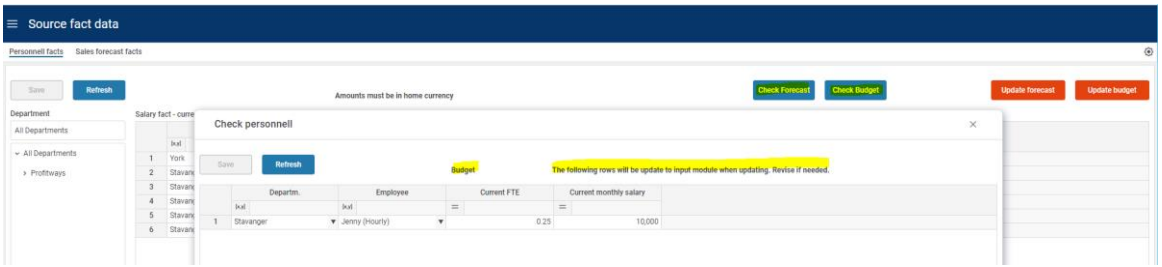



| Column | Description |
|---|---|
| Departm. | The department id. Mandatory. |
| Employee | The employee id. Mandatory. |
| Current FTE | The current FTE position of the employee at the given department. |
| Current monthly salary | The current monthly salary for a full time FTE for the employee at the given department. |
| Additional cost columns (subject to configuration) | Current data for additional columns used. In the example above, “Bonus”, “Overtime”, “Free Car” and “Training” |

Add new rows as needed or paste selection. When pasting data, make sure to paste dimension **ids**. A dropdown will evaluate the id against the corresponding dimension and render the dimension **description**. If no description is rendered, just the id, this indicates that the id does not exist in the dimension.

Dimension combinations found in the source and not in the input module will automatically be processed into the module on forecast rollover.

To check which combinations will be processed into the budget and forecast modules respectively, click the “Check Budget”/”Check Forecast” buttons. Revise data as appropriate and keep the source fact data current.




Modules can be updated manually by clicking the “Update forecast”/”Update budget” buttons: